

6/13/1986

OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS



State of Oregon
Department of
Environmental
Quality

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OREGON ENVIRONMENTAL QUALITY COMMISSION MEETING

June 13, 1986

Tillamook Bay Community College
2510 First Street (Highway 6)
Tillamook, Oregon

AGENDA

9:30 a.m. CONSENT ITEMS

These routine items are usually acted on without public discussion. If any item is of special interest to the Commission or sufficient need for public comment is indicated, the Chairman may hold any item over for discussion.

- A. Minutes of April 25, 1985, EQC meeting.
- B. Monthly Activity Report for March and April, 1986.
- C. Tax Credits.

9:40 a.m. PUBLIC FORUM

This is an opportunity for citizens to speak to the Commission on environmental issues and concerns not a part of this scheduled meeting. The Commission may discontinue this forum after a reasonable time if an exceptionally large number of speakers wish to appear.

INFORMATION ITEMS

- D. Informational Report: Proposed Delegation Agreement Between the Environmental Protection Agency and the Department of Environmental Quality for Phased Delegation of Construction Grants Program Management from the EPA to the DEQ.
- E. Informational Report: Slash Burning Smoke Management Plan Revision.

HEARING AUTHORIZATIONS

- F. Request for Authorization to Hold Public Hearings on Proposed Revisions to the State Air Quality Implementation Plan (OAR 340-20-047) to address Visibility Protection in Class I Areas.
- G. Request for Authorization to Hold Public Hearings to Consider Amendments to the Vehicle Program Operating Rules and Test Standards, OAR 340-24-300 through 24-350.
- H. Request for Authorization to Conduct Public Hearings on Proposed Amendments to the Water Quality Standards Regulations, OAR Chapter 340, Division 41: Anti-Degradation Policy, Mixing Zone Policy and Toxic Substances Standards.
- I. Request for Authorization to Conduct a Public Hearing on Proposed Revisions to "Spills and Other Incidents" Rules OAR 340-108-001 through 340-108-021; Proposed Revision to Hazardous Waste Management Schedule of Civil Penalties Rule OAR 340-12-068; and Proposed Adoption of Additional Oil and Hazardous Material Cleanup Rules OAR 340-108-030, -050, -060, and -070.

ACTION ITEMS

Public testimony will be accepted on the following, except items for which a public hearing has previously been held. Testimony will not be taken on items marked with an asterisk (*). However, the Commission may choose to question interested parties present at the meeting.

- J. Appeal of Hearing Officer's Order DEQ v. Amos Funrue, Case Number 05-AQ-FB-84-141.
- K. Request for a Variance From Gasoline Vapor Balance Requirements (OAR 340-22-120(1)(b)) for Mt. Hood Oil Company.
- L. Request for a Variance From Rules Prohibiting Open Burning of Solid Waste, OAR 340-61-040(2), for 20 disposal sites.
- *M. Proposed Adoption of Revisions to OAR Chapter 340, Division 30, Specific Air Pollution Control Rules for the Medford-Ashland Air Quality Maintenance Area Concerning Source Testing Requirements as an Amendment of the State Implementation Plan.
- *N. Proposed Adoption of Amendments to Rules Governing On-Site Sewage Disposal, OAR Chapter 340, Divisions 71, 72, and 73.
- *O. Proposed Adoption of a Rule Establishing a Maximum Repair Permit Fee for Linn County, OAR 340-71-140(2) and OAR 340-72-090.
- P. Request for Commission Approval of the Fiscal Year 1987 Construction Grants Management System and Priority List for Fiscal Year 1987.

WORK SESSION

The Commission reserves this time, if needed, for further consideration of any item on the agenda.

Because of the uncertain length of time needed, the Commission may 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 9:30 am to avoid missing any item of interest.

The Commission will not hold a breakfast meeting. They will have lunch at the Rendezvous Cabaret, 214 Pacific Avenue, Tillamook.

The next Commission meeting will be a special meeting in Portland on June 27, 1986 on the Metro Waste Reduction Plan. The next regular meeting will be July 25, 1986 in Salem.

Copies of the staff reports on the agenda items are available by contacting the Director's Office of the Department of Environmental Quality, PO Box 1760, Portland, Oregon 97207, phone 229-5395, or toll-free 1-800-452-4011. Please specify the agenda item letter when requesting.

THESE MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EQC
MINUTES OF THE ONE HUNDRED SEVENTY-SECOND MEETING
OF THE
OREGON ENVIRONMENTAL QUALITY COMMISSION

June 13, 1986

On Friday, June 13, 1986, the one hundred seventy-second meeting of the Oregon Environmental Quality Commission convened at the Tillamook Bay Community College, 2510 First Street, Tillamook, Oregon. Present were Commission Chairman James Petersen, Vice Chairman Arno Denecke, and Commission members Mary Bishop, Wallace Brill and Sonia Buist. Present on behalf of the Department were its Director, Fred Hansen, and several members of the Department staff.

Staff reports presented at this meeting which contain the Director's recommendations mentioned in these minutes, are on file in the Office of the Director of the Department of Environmental Quality, 522 SW Fifth Avenue, Portland, Oregon.

The Commission did not hold a breakfast meeting.

FORMAL MEETING

AGENDA ITEM A: Minutes of the April 25, 1986 EQC Meeting

It was MOVED by Commissioner Bishop, seconded by Commissioner Buist and passed unanimously that the minutes of the April 25, 1986 meeting be approved.

AGENDA ITEM B: Monthly Activity Report for March and April 1986

It was MOVED by Commissioner Bishop, seconded by Commissioner Brill and passed unanimously that the Monthly Activity Report be approved.

AGENDA ITEM C: Tax Credit Applications

Commissioner Brill asked about application T-1825 for Pacific States Galvanizing, Inc. His question was about the discrepancy in the review report which referred to the use of sulfuric acid and the application which referred to hydrochloric acid. Kern Cavanaugh, representing the company, explained that they used hydrochloric acid until it was disposed of because it could not be recycled back into the process, and were now using sulfuric acid.

Director's Recommendation

It is recommended that the Commission take the following action:

1. Issue tax credit certificates for pollution control facilities:

<u>Appl. No.</u>	<u>Applicant</u>	<u>Facility</u>
T-1801	Clear Pine Molding	Ductwork, cyclones, blowers and high pressure system
T-1817	Mark Weaver Ent. Inc.	Dust Collector
T-1822	John Rieger	Manure Control Facility
T-1823	Ore-Ida Foods, Inc.	Centrifuge, piping and associated control equipment
T-1824	Jim Durrer	Manure Control Facility
T-1825	Pacific States Galvanizing, Inc.	Neutralize and precipitate heavy metal solids
T-1826	Columbia Plywood Corp.	Wood waste handling system
T-1827	Precision Castparts Corp.	Bag filter dust collection system

2. Revoke Pollution Control Facility Certificates numbered 821, 823, 944 and 1340 issued to Champion Building Products. Reissue the same certificates to Davidson Industries.
3. Revoke Pollution Control Facility Certificate No. 1208 issued to Far West Farmer's Cooperative. Reissue the same certificate to JasPar Seed, Inc.

It was MOVED by Commissioner Denecke, seconded by Commissioner Bishop and passed unanimously that the Director's Recommendation be approved.

PUBLIC FORUM

Chairman Petersen took this opportunity to comment that the Commission was pleased to be visiting Tillamook. He explained the Commission tries to get around the state during the year to visit communities out of the Willamette Valley.

Sherry Miller, a Tillamook resident, appeared with concerns about dust emissions from a cement plant located on first street in Tillamook. She said the emissions of fine dust make it hard to breath, especially for the senior citizens in the neighborhood. She asked what could be done.

After Chairman Petersen determined Ms. Miller had not yet talked to anyone at the Department, he referred her to Tom Bispham, Administrator of the Air Quality Division, and Janet Gillaspie, Northwest Region Manager who were both in the audience. Mr. Bispham and Ms. Gillaspie discussed the problem with Ms. Miller during a break in the meeting. They will pursue her concerns.

AGENDA ITEM D: Informational Report: Proposed Delegation Agreement between the Environmental Protection Agency and the Department of Environmental Quality for phased delegation of Construction Grants Program Management from the EPA to DEQ.

The proposed Delegation Agreement provides for a phased transfer of management responsibilities for the wastewater facility construction grants portion of the Federal Clean Water Act from the EPA to the DEQ. The EPA would retain oversight authority for the program throughout the term of the Agreement.

Director's Recommendation

It is recommended that the Commission concur in the course of action outlined by the draft Delegation Agreement, which is to accept phased delegation of the management of the Construction Grants program from the EPA to the DEQ.

Commissioner Bishop asked who was responsible for paying staff salaries in this program. Mary Wahl of the Department's Water Quality Division, replied that staffing comes directly out of the grant. She said money currently available to run the program through FY 1988 was obligated. Director Hansen said the Federal Government provides that up to 4% of the grant may be used for administration.

Commissioner Buist asked what Step III grants were. Ms. Wahl said those grants were for construction rather than design of a project.

Regarding the statement on page 21 of the staff report about the Federal Government becoming involved where they have an "overriding interest" in a project, Commissioner Buist asked where that might occur. Ms. Wahl replied that she did not know of an instance where that had occurred. Director Hansen said that an innovative control technology would be one that EPA might want to watch closely. Ms. Wahl said that EPA would retain oversight and may step in at any time.

Chairman Petersen said that the whole idea of EPA retaining oversight was difficult to understand. The reason the state wants delegation is that the citizens of Oregon would rather deal with the State than the Federal government. As long as the state was efficiently administering the program, he continued, EPA would probably not step in.

Ms. Wahl said EPA was very interested in Oregon taking over the program as it is one of the last states in the nation to accept delegation. She said the cities of Oregon would gain in this process.

Commissioner Buist asked why the number of full time equivalent employees was increasing. Ms. Wahl replied that the workload was increasing causing a need for more staff.

It was MOVED by Commissioner Buist, seconded by Commissioner Bishop and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM E: Informational Report: Slash Burning Smoke Management Plan Revision.

This is an informational report on proposed changes to the smoke management rules and guidelines governing forest slash burning. These changes are the result of a year-long review, initiated at the Commission's direction, between the Department, the State Department of Forestry, federal land management agencies, the forestry industry, environmental groups and the general public. This is the first comprehensive review of the Smoke Management Plan since its adoption in 1972. The Department is responsible for approving a plan and the State Forester promulgates rules to carry out the plan. The proposed changes would generally update and improve smoke management regulations and would incorporate elements necessary for visibility protection in Class I areas.

Director's Recommendation

It is recommended that the Commission concur in the following course of action to be pursued by the Department.

1. Solicit public comment on the proposed revisions to the Smoke Management Plan and Directive, coincident with joint public hearings on the smoke management rules (Department of Forestry) and the Visibility Protection Plan (Department).

2. Report to the Commission at its September 11, 1986 meeting on the comments received and proposed final revisions to the Plan and Directive, requesting guidance for approval action by the Department.

Commissioner Buist asked what steps were currently being taken to encourage alternative technologies to deal with slash. Sean O'Connell of the Department's Field Burning Office, replied that the U.S. Forest Service in their experimental office in Seattle is researching ways to burn with less smoke and other ways to utilize slash. In this proposed plan revision, he said, there is a reference to experimental burning and it is hoped the State Department of Forestry would get more involved.

Neil Skill, State Department of Forestry, said they were looking at ways to burn more efficiently such as rapid ignition, and reduction of burning by prioritizing it so it does not take place at all unless absolutely necessary. He said the basic assumption of the Smoke Management Plan is that burning is advantageous to forests. It is known that smoke can be managed so it does not have a negative impact on people. Mr. Skill said that quick ignition is what is primarily used to reduce smoke impact.

Commissioner Buist asked what research was being done on alternative technologies. Mr. Skill replied that a number of ways have been tried to remove the slash, but have not been successful. The Department of Forestry does not do that type of research, but it does take place at several institutions. Projects for the high utilization of slash are being pursued by the Department of Natural Resources, and several power companies. Mr. Skill said that removal of slash has not been successful because of the economics involved when the wood products market is down. Removal may be more successful when that market increases, he continued.

Commissioner Buist asked what was meant by "performance based smoke standards." Mr. O'Connell replied that throughout the course of the summer field burning season, if there is a certain quantity of smoke accumulate in certain areas at certain levels then the restrictions on burning become tighter. For instance, he continued, in Eugene and Springfield 14 hours of smoke intrusions are allowed before stricter regulations go into effect. After that point, the mixing height is required to be higher. Chairman Petersen asked how this related to forestry smoke management. Mr. O'Connell said that no performance standards were in place now for Forestry and none were proposed. Currently there are a limited number of places where smoke is measured. The Department does not have instruments on the coast or in Bend and its ability to assert a smoke standard is limited. This is mainly because of lack of data, Mr. O'Connell said. Without the instruments to provide the data it would be difficult to design a standard.

Chairman Petersen asked if it made sense for two agencies to manage smoke. Mr. O'Connell said this question had come up several times over the years. State law divides the responsibilities between DEQ and the Department of Forestry. He said there were some advantages to Forestry managing slash burning as it is a different type of burning. Mr. O'Connell said that field burning was a tighter system and the burning does not last as long. He said there could be some savings and some improvements in effectiveness by consolidating meteorological forecasting. Both agencies get the same data on separate equipment and there is little interaction between forecasters.

Chairman Petersen said he was not convinced there could not be a better program without damaging either the grass seed industry or the forest products industry. He suggested there could be one unit to manage all the smoke from slash burning and field burning comprised of both members from Forestry and DEQ. He said he knew this was a politically sensitive area, but encouraged the Department to explore what direction would make sense. Chairman Petersen was not satisfied this proposed program was the best, but understood it was an improvement. He expressed sympathy with the industry, but did not see the teeth that should be in the program. Chairman Petersen said that living in Bend, he felt strongly about this as it seemed there was a conscious effort to send the smoke in the direction of Central Oregon.

Chairman Petersen said the Department has done as much as it could on woodstove smoke. That program is going to take 25 years to have an impact. He said it was important to find voluntary ways to get people to reduce smoke. Most of wood for heating is cut in the fall, he commented, and does not have a chance to dry out and thus causes more smoke. He asked if the Department of Forestry could encourage people to cut on state lands in the Spring.

Mr. Skill replied that encouraging people to cut firewood in the Spring could assist to some degree in eliminating slash, but the Department of Forestry had not made a deliberate effort to encourage this. He commented that firewood cutting on State lands was not significant compared with that done elsewhere.

Director Hansen said it did not make good sense for two different agencies to manage smoke. However, there were a lot of mechanical aspects, such as field registration, etc., that make best sense to be in the program area that has that responsibility. He said the real test is that on a particular day would the Department make the same determination on allowing burning as would Forestry. Director Hansen said the Department would be watching closely over the next three years to see how this program works.

Regarding the impact of smoke in Bend, Director Hansen said that issue would be dealt with by the visibility item. However, the only real way emissions are going to be substantially reduced is to remove the material from the forests. He said the technology is there with companies such as

Biomass, but the cost of utilization and transportation is prohibitive. He said the timber market has to come back to make this economically feasible. Director Hansen commented that he did not see the proposed smoke management plan revision as a timid step.

It was MOVED by Commissioner Buist, seconded by Commissioner Bishop and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM F: Request for authorization to hold public hearings on proposed revisions to the State Air Quality Implementation Plan (OAR 340-20-047) to address visibility protection in Class I areas.

In December 1980, the Environmental Protection Agency adopted its rules for the protection of visibility in the nation's national parks and wilderness areas. Subsequent legal challenges stalled EPA's program, leading to the Commission's April 1982 decision to postpone adoption of an Oregon visibility protection plan. Recent court decisions have required EPA to assure that each state's implementation plan includes revisions necessary to comply with the Clean Air Act requirements for Class I area protection.

To meet the requirements of the EPA rules within the time frame allowed under the court decision and to insure that Oregon's scenic resources are protected, the Commission adopted revisions to the State Implementation Plan committing to operation of a visibility monitoring network in September 1985. At the same time, revisions to the New Source Review Rule were adopted to include visibility impairment analysis for Class I areas.

The second phase of the visibility protection plan addressing control strategies, interstate visibility protection, procedures for plan review and coordination, and other issues must be adopted by the Department by December 1986.

The Department is requesting the Commission's approval to proceed with public hearings on the second phase of these rules—adoption of the Oregon Visibility Protection Plan. The Plan has been developed over the past eight months in cooperation with the Oregon Visibility Advisory Committee which includes the U. S. Forest Service, National Park Service, Oregon forest land managers, Oregon Seed Council and environmental groups.

In Appendix 1 to the staff report, Notice of Public Hearings, the time and places listed are, in part, in error. The hearings will be held the following dates.

August 5 in Portland
August 7 in Springfield
August 11 in Bend
August 13 in Medford
August 15 in Newport

Director's Recommendation

Based on the summation in the staff report, the Director recommends that the Commission authorize hearings to consider public testimony on the proposed Visibility Protection Plan State Implementation Plan (SIP) revision which control strategy, best available retrofit, program coordination, integral vistas and other elements under OAR 340-20-047, Section 5.2.

Commissioner Buist was interested in the cost benefit analysis and what data it was based on and also the health benefit analysis which was apparently based on an EPA-sponsored study. She asked what type of particulates did the study deal with. John Core of the Department's Air Quality Division, said that in preparation of the visibility protection program it was necessary to get a cost benefit analysis. The Department commissioned a study conducted by an engineering firm which took 9-10 months to complete. A number of EPA studies were looked at which were conducted to come up with the PM10 standard. EPA hired someone to do the cost analysis. The figures are based on nationally developed information on levels of particulate and the health effects related to those levels. Mr. Core said it was a composite figure.

Commissioner Buist commented that those studies were almost certainly related to urban particulates. Mr. Core replied they probably were, but it was the best information available. Commissioner Buist was interested in seeing the report, and Mr. Core agreed to send it to her.

Commissioner Buist asked what was meant by "best available retrofit technology." Mr. Core said that was specific language used in EPA regulations which means that in the event there was a stationary source impacting visibility in a Class I, area the Department may have to apply some type of control technology. He said Oregon does not have that problem and it is not an important part of this SIP, but is on the EPA checklist.

Commissioner Buist asked who reviews the program and who makes an assessment on how successful it is. Mr. Core said that review would be based on visibility monitoring data collected by DEQ and the Forest Service. The Department will share its info with the Forest Service and the Bureau of Land Management and review will be on a yearly basis beginning a year from next summer.

Chairman Petersen asked about the concerns of the task force members regarding no direct civil penalties against violators. Director Hansen said that Forestry would be seeking legislative authority for civil penalties for Forest Practices Act violations.

It was MOVED by Commissioner Bishop and seconded by Commissioner Buist 2nd passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM G: Request for authorization to hold public hearings to consider amendments to the Vehicle Program Operating Rules and Test Standards, OAR 340-24-300 through 24-350.

The Department is requesting authorization to conduct public hearings on the Vehicle Emission Inspection and Maintenance (I/M) rule amendments. Two amendments, basically housekeeping in nature, are proposed.

The first proposed amendment would summarize the over 40 different emission standards for 1972 and 1979 vehicles into simpler categories. This proposal was suggested by the inspection staff. No vehicles would have more stringent standards as a result of this proposal.

The second proposal would establish a catalyst emission test standard for heavy duty trucks. This standard is necessary since some manufacturers are equipping some models of heavy duty trucks with light duty engine packages that include catalysts.

These hearings also specifically provide an opportunity for formal public comment on all aspects of the I/M operating rules and standards. A total of three hearings have been set, including one evening hearing each in both the Portland and Medford areas.

Director's Recommendation

Based upon the summation in the staff report, it is recommended public hearings to gather testimony on the proposed changes to the I/M program test standards be authorized.

Commissioner Brill asked if these rules referred to diesel vehicles. Director Hansen said the Department does test diesel vehicles for hydrocarbon and visible emissions, but the heavy-duty trucks referred to in these rules are gas powered.

Chairman Petersen asked if vehicles that currently have more lenient standards would be penalized. Director Hansen referred Chairman Petersen to the exceptions list in the proposed rules which would assure that no vehicle would have to meet more stringent standards than they do now.

Chairman Petersen asked how the I/M program was going in Medford. Tom Bispham of the Department's Air Quality Division, replied the Department had been very pleased with the Medford program and there have been no adverse incidents at the testing station. He said the petition issue has not moved well from the petitioners standpoint. They have about 30,000 signatures with 62,000 needed to put the issue on the ballot.

Director Hansen commented that there are as many problems in the Portland program today, after 10 years of operation, as the Department is seeing in Medford, which says the program is going even more smoothly in Medford.

It was MOVED by Commissioner Bishop, seconded by Commissioner Brill and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM H: Request for authorization to conduct public hearings on proposed amendments to the Water Quality Standards Regulations, OAR Chapter 340, Division 41: Anti-Degradation Policy, Mixing Zone Policy and Toxic Substances Standards.

This item presents issue papers on the standards for anti-degradation, mixing zones and toxic substances. The issue papers discuss the current standards and propose amendments to clarify the intent and application of those standards.

Director's Recommendation

Based on the summation in the staff report, the Department requests authorization from the Commission to proceed to public hearing to take testimony on the proposed amendments for the anti-degradation policy, the mixing zone policy, and the toxic substances standards as presented in Attachment F to the staff report.

An addendum to the staff report was submitted to the Commission proposing the following language changes to the proposed rules:

Anti-degradation

1. Page A-6, F-1, add the following sentence at the end of paragraph 2:

Water quality, however, may not be degraded to less than is necessary to fully protect all designated beneficial uses.

2. Page A-7, F-1, change paragraph 4 to clarify special protection for outstanding waters of the state:

[In no event, however, may degradation of water quality interfere or become injurious to the beneficial uses of water]
Existing water quality shall be maintained and protected within surface waters of the following areas:...

Toxic Substances

3. Page A-27(b), F-7(b), add the following references for dioxin and the EPA drinking water standards:

February 15, 1984, v. 49 No. 32 p. 5831, 40 CFR Parts 141-143,, 1985.

It was MOVED by Commissioner Buist, seconded by Commissioner Bishop and passed unanimously that the Director's Recommendation be approved. Commissioner Brill was absent for the vote.

AGENDA ITEM I: Request for authorization to conduct a public hearing on proposed revisions to "Spills and Other Incidents" rules, OAR 340-108-001 through 340-108-021; Proposed revisions to Hazardous Waste Management Schedule of Civil Penalties rule, OAR 340-12-068; and proposed adoption of additional Oil and Hazardous Material Cleanup rules, OAR 340-108-030, -050, -060 and -070.

House Bill 2146 significantly strengthened the Department's authority over spills and releases of oil and hazardous materials. It requires the Commission to designate hazardous materials covered by the program (including such things as oil, federally listed hazardous substances, radioactive materials and wastes and communicable disease agents). It also requires the Commission to establish a quantity of spilled or released material which would require the reporting of the incident. Lastly, it gives the Department authority to direct cleanups undertaken by responsible parties or contract for cleanup and seek cost recovery where there is an uncooperative responsible party.

The Department proposes to hold a public hearing on June 3, 1986 to hear testimony on a draft set of rules to implement HB 2146. In addition to proposed rules covering the subjects above, are three proposed approaches to cleanup standards. The Department is asking people to express a preference on approach as well as comment on the particular cleanup standards contained within an approach.

Director's Recommendation

Based on the summation in the staff report, it is recommended that the Commission authorize a public hearing to take testimony on proposed revisions to existing spill rules in OAR 340, Division 108.

It was MOVED by Commissioner Buist, seconded by Commissioner Bishop and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM J: Appeal of Hearing Officer's Order, DEQ v. Amos Funrue, case number 05-AQ-FB-84-141.

This item is Amos Funrue's appeal of a Hearing Officer's decision upholding DEQ's assessment of a \$500 civil penalty against him.

Mr. Funrue appeared and showed the Commission on a relief map the site of the field and the direction of the wind on the day in question, which was blowing toward Mt. Hood. Mr. Funrue then read his testimony from a detailed outline, which is hereby made a part of the record.

Mr. Funrue said the specific charge was that he failed to actively extinguish all flames and major smoke sources when prohibition conditions were imposed by the Department. He said he was not guilty of this charge because he was applying water to flames and fighting a wildfire. He said he was not claiming that no acres were burned after 4:00 pm. Mr. Funrue said that at the time he was authorized to burn he was informed the fires out time was 4:00 pm until such time as it may be extended. In past years, he continued, the field had burned in less than 30 minutes. Mr. Funrue testified there were several wildfires caused by unpredictable wind conditions and the time required to control the wildfires was the direct cause of taking longer than the normal 30 minutes to burn the field. Mr. Funrue testified he had three water rigs at the field which were geared to containing a fire. He said extinguishment of a large field fire on a hot, dry, windy day requires fire department effort.

When DEQ investigator Randy Rees arrived at the field sometime after 4:00 pm, Mr. Funrue said he was out of Mr. Rees's sight because he was at the back of the field fighting a wildfire. Mr. Funrue claimed Mr. Rees's investigation was sloppy and unreliable as the address given for the fire location does not exist; the location given during the hearing for picture "F" is not possible; there were conflicting statements about Mr. Rees's arrival time at the field; and Mr. Rees was not present at the hearing in person and Mr. Funrue felt the telephone conference call was unsatisfactory.

Mr. Funrue said he did not agree with or accept the penalty imposed as the evidence did not establish there was any air pollution impact from his late burning.

Michael Huston, Assistant Attorney General, appeared representing the Department. Glen Klein, the Assistant Attorney General who represented the Department during the hearing on this case was unable to attend this meeting. Mr. Huston said there were three versions of the facts. The first is Mr. Funrue's, he continued, which was that he did indeed fail to extinguish the burning field because he was paying attention to wildfires. Mr. Huston said that significant to Mr. Funrue's case was that he and other farmers who testified during the hearing were under the impression they had a 30 minute grace period for mopping up. The second version, Mr. Huston continued, was that found by the Hearing Officer that Mr. Funrue was not actively extinguishing the fire and a significant portion of the field continued to burn after the fires out time; there was a wildfire; and there was no evidence to support the Department had caused the grace period impression.

The Department's position, Mr. Huston said, was that the record shows the fire was actively lighted after the fires out time. The significance of that fact is very dramatic which tends to make this violation a much more aggravated one and ends the debate about the wildfire and the 30 minute grace period, he said. If Mr. Funrue was actively lighting the fire after

the fires out time, Mr. Huston continued, they could not have been fighting a wildfire or relying on a grace period. Mr. Huston said the DEQ inspector observed flames and an increase in smoke after 4:40 pm and that testimony was supported at the hearing by photographs. Mr. Huston said the record also shows that at 4:40 pm on the day in question, Mr. Furrue's daughter told the inspector the lighting of the field had been completed 20 minutes previously, and Mr. Furrue said he had completed lighting the field about 4:30 pm.

Mr. Huston said it was the Department's judgment that the Hearing Officer's order be affirmed because it did find a clear violation of the rules and the \$500 civil penalty is within the Department's discretion. Mr. Huston said the Department believes the violation was far more serious than perceived by the Hearing Officer and as explained by Mr. Furrue. Mr. Huston said it was Mr. Furrue's intent to burn the field on that day and he believed he could do it in time.

Mr. Furrue reiterated he was fighting a wildfire before the field was completely lighted. He said he did not claim no acres were burned after 4:00 pm, nor that the field was not lighted after 4:00 pm. Mr. Furrue said he was not present when the lighters joined so he simply did not know what time that happened. Mr. Furrue agreed it was possible the field was lit after the fires out time.

Commissioner Buist said the Commission had heard before about the perception among growers of a 30 minute grace period. She asked exactly what the law was, and how it was conveyed to growers. Sean O'Connell of the Department's Field Burning Office, replied there was no grace period and commented that he is asked that question often by growers. Mr. O'Connell said the Department informs growers every summer by direct mailing that when fires out time is announced the field must be actively extinguished. This is also reinforced at yearly grower meetings. Mr. O'Connell said the rule states when prohibition conditions are implemented, the grower must actively extinguish the fire. On the particular day in question, Mr. O'Connell stated, there were smoke problems in many cities and weather conditions did change. Growers could burn that day from 1:00 pm to 4:00 pm, but weather conditions were deteriorating causing smoke problems.

Commissioner Buist said Mr. Furrue waited for awhile before he was given the permission to burn and in his experience the field would burn in 30 minutes. She asked if it would be reasonable to burn that field realizing there were only 44 minutes in which to get the burning accomplished. Mr. O'Connell said that how long it takes a particular field to burn depends on daily conditions such as humidity and temperature, but that 45 minutes to burn a field was marginal. Commissioner Buist asked why then was permission to burn given that close to the fires out time. Mr. O'Connell said it would not be efficient for the Department to assert its own judgment over farmers when it came to their individual fields. He said the burden was on the farmer, knowing their field and equipment, to determine if the burning can be accomplished in the time remaining.

Commissioner Buist asked what Mr. Funrue should have done when the wildfires started. Mr. Huston said the Department asserted that the wildfire consisted of one fence post fire which was not particularly dangerous.

Commissioner Buist asked what proportion of days when burning is allowed are extensions granted and did that information come over the radio. Mr. O'Connell said that typically burning is allowed and the fires out time is extended if conditions were good and that information is announced over the radio. He said extensions were made probably 60-70% of the days burning is allowed. However on this particular day, Mr. O'Connell said, it was discussed on the radio all day that conditions would be deteriorating. In view of that, he said, it would be unreasonable to expect an extension would be made.

Mr. O'Connell said that in general, in case of a wildfire, a farmer could stop lighting the field and take care of the wildfire and then burn a smaller area.

Mr. Huston said that no one argued that the continued lighting of the field had anything to do with the wildfire. Mr. Funrue contended the fighting of the wildfire prevented him from extinguishing the field burn.

Commissioner Denecke asked if Mr. Funrue's statements on page 4, line 19 of the Department's Response to Respondent's brief were true?

"Mr. Funrue testified that he thought he finished lighting the fire at 4:15-4:20 and that he finished burning about 4:50."

Mr. Funrue responded there was some truth in those statements but that was not what he intended to say. He said he intended it was to say possible, but he was not denying it.

Mr. Funrue wanted to point out that the fence post fire referred to in the transcript was actually several fence posts on fire that took 15-20 minutes to put out.

Commissioner Denecke MOVED that the penalty be affirmed because Mr. Funrue's best estimate was he continued to light the field 15-20 minutes after fires out time. Commissioner Bishop seconded the motion and it was passed with Commissioners Buist and Brill voting no.

Commissioner Buist explained she was voting no because the facts in the case were murky. Commissioner Brill said he would have liked to see the penalty lowered.

AGENDA ITEM K: Request for a variance from Gasoline Vapor Balance Requirements (OAR 340-22-120(1)(b)) for Mt. Hood Oil Company.

Mt. Hood Oil Company requested a seven year variance to exempt two of its customers from the Department's Volatile Organic Compound rules. These rules are triggered by the total volume of gasoline delivered by the bulk plant and the volume received by each customer.

Director's Recommendation

Based upon the findings in the summation in the staff report, it is recommended that the Commission grant a variance for the Mt. Hood Oil Company with the following conditions:

1. The Mt. Hood Oil Company be granted a variance from OAR 340-22-120(1)(b) until December 13, 1986.
2. Only two customers can receive deliveries of 10,000 or more gallons per month during the variance period and they are J.S. Matheny, 13928 N.E. Glisan, Portland, Oregon; and Jennings and Elston, 19751 S.E. Highway 212, Boring (Damascus), Oregon.
3. The Mt. Hood Oil Company is required to select the best option for achieving compliance and operate in compliance after December 13, 1986.

It was MOVED by Commissioner Bishop, seconded by Commissioner Buist and passed unanimously.

AGENDA ITEM L: Request for a variance from rules prohibiting open burning of solid waste, OAR 340-61-040(2), for 20 disposal sites.

At the January 1986 meeting, the Commission concurred with the Department and declined to adopt rules allowing open burning as solid waste disposal sites. Staff, however, indicated that the Department would return in support of variances for a limited number of permittees. Twenty local governments have requested variances to them to continue open burning.

Director's Recommendation

Based upon the findings in the summation, it is recommended that variances be granted for five years to allow continued open burning of solid waste at the 20 disposal sites listed in Attachment II to the staff report, with the following conditions:

1. Tires, asphaltic shingles and hazardous wastes shall not be disposed by open burning.
2. When EPA adopts new criteria, variances will be reviewed and may have to be revoked or modified.

It is further recommended that the City of Powers also be required to comply with the following additional conditions:

1. Controlled access (site fenced with a gate).
2. Attendant on duty while site is open and while burning solid waste.
3. Burning limited to two times per week and only when site is closed.
4. Ash burial at least twice per year.

It was MOVED by Commissioner Denecke, seconded by Commissioner Bishop and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM M: Proposed adoption of revisions to OAR Chapter 340, Division 30, Specific Air Pollution Control Rules for the Medford-Ashland Air Quality Maintenance Area concerning source testing requirements as an amendment of the State Implementation Plan.

Oregon Administrative Rules, Chapter 340, Division 30, Specific Air Pollution Control Rules for the Medford-Ashland Air Quality Maintenance Area, were adopted April 7, 1978 by the EQC. Parts of these rules address source testing for quantifying particulate matter emissions from large wood-waste boilers and from charcoal plants. These sources are required to conduct quarterly tests subsequent to an emission limit exceedance as demonstrated by the annual source test. The average of all tests is used to demonstrate compliance. Quarterly testing and this averaging aspect of the current requirement creates problems for the Department and industry, and do not help in the process to achieve compliance. A public hearing was conducted May 1, 1986 to receive testimony regarding a proposed rule revision to delete the quarterly testing requirement. Oral testimony from represented industry was in full support of the rule revision.

Director's Recommendation

Based on the summation in the staff report, it is recommended that the EQC adopt the revision to OAR Chapter 340, Division 30, and amend the State Implementation Plan regarding source testing the Medford-Ashland AQMA. The proposed amendments would omit from the testing regulation

the requirement to conduct quarterly source testing on large wood waste boilers and charcoal plants subsequent to an emission limit exceedance on an annual test. Compliance determination would be based on the annual test results.

It was MOVED by Commissioner Bishop, seconded by Commissioner Buist and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM N: Proposed adoption of amendments to rules governing on-site sewage disposal, OAR Chapter 340, Divisions 71, 72, and 73.

At the January 31, 1986 meeting, the Commission authorized public hearings on proposed amendments to the On-Site Sewage Disposal Rules. In addition to a number of proposed housekeeping amendments, staff identified eighteen issues as being significant.

After proper notice, public hearings were held in Bend, Medford, Newport and Portland during the latter part of February. In general, comments received on most of the proposed amendments were favorable. However, some of the significant issue received mixed testimony in both support and opposition. These issues include:

1. A proposed prohibition on the replacement of certain chemicals and explosives into on-site systems;
2. A proposed definition for "active sand dune;"
3. Introduction of a "strength of wastewater" factor to be used in determining the size of the treatment facility portion of a sewage disposal system.

Director's Recommendation

Based upon the summation in the staff report, it is recommended that the Commission adopt the proposed amendments to OAR Chapter 340, Divisions 71, 72 and 73 as presented in Exhibit A to the staff report.

Paul H. Oldenburg, Chasm Chemical Company, appeared and referred to a letter from Spears, Lubersky, Campbell, Bledsoe, Anderson and Young which was dated April 23, 1986 and hand-delivered to the Department. He said it was his understanding this information had not been given to the Commission until just the morning of this meeting. He felt the Department had not been fair in making sure the Commission got accurate information, and all the information. Mr. Oldenburg felt poorly treated by the Department, and asked to be treated fairly by the Commission. Mr. Oldenburg read the April 23, 1986 letter into the record.

Mr. Oldenburg testified he had not seen any real evidence of ground water pollution. He personally had spent 18 years developing his business and believed it is honest and a benefit to society. His company has a true market value of \$250,000 and supports three full-time and several parttime employees. The company honors its guarantees for as long as 10 years and have over 5000 customers in the greater Portland Metropolitan area. He asked if with all the systems his company treats, would not the DEQ have some evidence of their chemicals harming systems or the ground water. Mr. Oldenburg asked for testing before a prohibition is imposed. Also, as professionals in the field, Mr. Oldenburg said the DEQ was correct about some chemicals needing to be eliminated.

Horst Eberspaecher, submitted written testimony on behalf of Septiclear, Inc. He said they were waiting for evidence from DEQ to support the Department's claims of damages. His company has always had a full guarantee on treatments. They also sell products through retail stores which guarantee them. There have been no complaints against Septiclear.

Commissioner Denecke indicated Mr. Eberspaecher came to Salem to talk with him about these rules.

Doug Marshall, Tillamook County Sanitarian requested the Commission postpone action on the rules. He had only had the staff report for a short time and needed more time to adequately review the rules.

Sherman Olson of the Department's On-Site Sewage Disposal Section, said that during the testimony period, the attorney for Chasm Chemical requested a 90 day extension to the record close date, however the request was not received within the required 15 days after the notice was published. If it had been received in time, an extension would have been granted for a period of time. The staff had originally intended to bring this rule package to the Commission at its April meeting, he continued, but postponed until this meeting. With this unanticipated delay, Chasm was allowed to provide additional information by April 23 and a letter was hand-delivered to the Department on that date. Mr. Olson said the letter was reviewed by staff and Department counsel and it was found no new issues were raised from those raised at the hearings.

Regarding complaints about the use of these products, Mr. Olson said the comments he had received had been verbal and typically come from septic tank pumpers. He said there had been no written complaints and the Department had not gone out to look at systems that have been chemically treated.

Mary Halliburton, of the Department's On-Site Sewage Disposal Section, said the statements regarding the lack of information on the impact of acids in septic tanks and cesspools in Oregon are correct. She said it was an oversight not to include the April 23 letter in the Commission's meeting packet. She said the Department felt the concerns expressed in the letter

were conveyed in other testimony. Ms. Halliburton said the issue was that these companies need to be licensed by DEQ, but the Department does not approve of the method used to clear septic tanks. She said it was a policy issue of whether or not the Department should license these businesses and condone the practice.

Chairman Petersen said the Department could have sent the Commission the letter, but did he not want to give the perception the whole record does not get to the Commission. He said this was the first time this had ever occurred since he had been on the Commission and it was his experience the Commission receives everything in the record. He was convinced the omission of the letter was inadvertant.

Mr. Olson said the major contention of the letter is that acid treatments do not cause ground water degradation and there is no evidence it does. He said he had not reviewed any literature that acid treatments cause groundwater pollution. The complaints on treatments to systems generally deal with damage to the system.

Commissioner Buist asked if any other states had similar rules as the one proposed. Mr. Olson replied that most states do not have rules. However, the two states cited in the staff report have authority to adopt such rules and also have the ability to regulate the sale of the products in question.

Commissioner Bishop asked if it was possible to have a septic tank with no access. Mr. Olson said that the rules require tanks to have a manhole, but it does not have to be at ground level.

Chairman Petersen said he did not want to unnecessarily prolong the process in adopting these rules, but the Commission was not comfortable with this issue. He suggested action be postponed until the Commission's next meeting to resolve the organic/inorganic issue. He said there was not sufficient evidence available to support prohibition of the organic substances and felt it would be unfair to do so. He suggested that some type of program be established to obtain data and asked both Septiclear and Chasm to cooperate with the Department.

Chairman Petersen MOVED that action on this item be postponed until the Commission's next regular meeting. The motion was seconded by Commissioner Buist and passed unanimously.

AGENDA ITEM 0: Proposed adoption of a rule establishing a maximum repair permit fee for Linn County, OAR 340-71-140(2) and OAR 340-72-090.

Linn County has requested authority to adopt a repair permit fee equal to the average amount the County has determined it costs to provide this service.

Because the proposed fee exceeds the current fee established by the Commission, approval to charge a high fee must be done by adoption of a rule.

At the Commission's meeting on April 25, 1986, authorization to conduct a public hearing on the issue was given. After proper notice, a public hearing was held in Albany on May 16, 1986. No adverse comment was received.

Director's Recommendation

Based upon the summation in the staff report, it is recommended the Commission adopt the proposed rule amendments establishing a maximum repair permit fee for Linn County.

It was MOVED by Commissioner Buist, seconded by Commissioner Bishop and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM P: Request for Commission approval of the Fiscal Year 1987 Construction Grants Management System and Priority List for Fiscal Year 1987.

The proposed amendment to the Construction Grants Management System allows the Director to set aside 20 percent of the state's annual allotment for use in a state revolving loan program, if such a program is authorized by the Clean Water Act, and if the state elects to develop such a program.

Director's Recommendation

Based on the summation in the staff report, the Director recommends that the Commission adopt the FY87 Construction Grants Priority List as presented in Attachment H to the staff report and the proposed amendment to OAR 340-53-025 (Appendix F to the staff report), authorizing the Director to set aside 20 percent of the state's construction grants allotment to establish a State Revolving Fund.

It was MOVED by Commissioner Denecke, seconded by Commissioner Buist and passed unanimously that the Director's Recommendation be approved.

Chairman Petersen took this opportunity to congratulate Dick Nichols on his appointment to the position of Administrator of the Department's Water Quality Division.

There being no further business, the meeting was adjourned.

The Commission had lunch with local officials and then Commissioners Bishop, Brill, Denecke toured a dairy farm to observe manure handling facilities.

Respectfully submitted,

Carol Splettstaszer
EQC Assistant

THESE MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EQC

MINUTES OF THE ONE HUNDRED SEVENTY-FIRST MEETING

OF THE

OREGON ENVIRONMENTAL QUALITY COMMISSION

April 25, 1986

On Friday, April 25, 1986, the one hundred seventy-first meeting of the Oregon Environmental Quality Commission convened in the Second Floor Auditorium of the Portland Building, 1120 SW Fifth Avenue, Portland, Oregon. Present were Commission Chairman James Petersen, Vice Chairman Arno Denecke and Commission members Mary Bishop, Wallace Brill and Sonia Buist. Present on behalf of the Department were its Director, Fred Hansen, and several members of the Department staff.

Staff reports presented at this meeting which contain the Director's recommendations mentioned in these minutes, are on file in the Office of the Director of the Department of Environmental Quality, 522 SW Fifth Avenue, Portland, Oregon.

BREAKFAST MEETING

All Commission members were present at the breakfast meeting.

1. Harold Sawyer, the Department's Inter/Intra Program Coordinator, presented the Commission with a the following information regarding Mid-Multnomah County sewer assessments:

MID-MULTNOMAH COUNTY SEWER ASSESSMENTS

	Date of Estimate	LOT SIZE		
		5000 Sq. Ft.	7000 Sq. Ft.	10,000 Sq. Ft.
ARGAY TERRACE LID #1				
Engineers Estimate	6/83	2824	3586	4729
Final Cost Estimate	4/86	2118	2690	3547
121st SACRAMENTO LID				
Engineers Estimate	8/85	2293	2927	3877
Final Cost Estimate	4/86	1937	2473	3276
MID-MULTNOMAH COUNTY SEWER IMPLEMENTATION PLAN ESTIMATE	9/85	2250	3150	4500

NOTES:

Engineers Estimate is the cost estimate provided to property owners at the time of LID formation and is based on completed detailed engineering design.

Final Cost Estimate is the latest cost estimate based on actual bid costs plus costs of changes during construction as of the time that construction is essentially complete.

Information provided by City of Portland

2. Tax Credit Program. Maggie Conley, the Department's Tax Credit Program Coordinator, presented the findings of the Tax Credit Advisory Committee which was formed to review the continuation of the Tax Credit Program beyond its 1988 sunset date. Committee members included representatives from the Department of Revenue, Economic Development Division, Associated Oregon Industries, Oregon Environmental Council and each DEQ division.

Ms. Conley gave the Commission a handout which listed the following suggestions of the Committee.

- Retain tax credits for programs where DEQ's standards are more stringent than other states or where DEQ enforces more stringently than other states.
- Retain tax credits for new programs and for monitoring and prevention. Prevention of future pollution is as important as elimination of current problems.
- Eliminate or make optional, preliminary certification. This would cut down on much of what is considered "needless" paperwork by programs with plan review authority. Unfortunately, it would eliminate the opportunity for "up front" review of projects in programs with no plan review authority (e.g., noise; recycling).
- Put a monetary ceiling on pollution control tax credits certified.
- Only certify programs DEQ encourages but does not require, such as:
 - Small businesses that recycle hazardous or solid waste
 - Retrofitting woodstoves
 - Controlling pollution beyond minimum requirements

Ms. Conley said the Department had not necessarily accepted any of the above recommendations.

Industry representatives, Ms. Conley continued, do not feel a change in the program is necessary and would like to see the program continue beyond the 1988 sunset date. Other representatives on the Committee felt it was necessary to get back to the original purpose of the program, which was to provide an incentive for pollution control, instead of an economic development incentive, she said. The Committee also expressed the need to retain the program in areas where DEQ enforces more, and to retain the program for any new pollution control efforts the Department may undertake in the future.

Chairman Petersen said he had mixed feelings about the tax credit program. On the one hand, he said he did not believe in using the tax code for incentives, but on the other hand he would like to see tax credits for things such as retrofitting woodstoves to encourage that action.

Commissioner Brill asked if the cost of borrowing money would be eligible for tax credits. Ms. Conley replied that the Department has requested an Attorney General's opinion on that issue and would get back to the Commission when that opinion was received.

Director Hansen said the Department would not oppose or advocate any change in the tax credit program at the Legislature and he personally felt that government does not function well with entitlement programs.

Ms. Conley said that Associated Oregon Industries would probably go to the Legislature to extend the sunset date, but that any other change in the program would probably be initiated by the Department.

The Commission expressed support for the option of continuing the tax credit program for programs that DEQ encourages but does not require.

3. Tillamook Meeting, June 13, 1986. Director Hansen said the Commission's June meeting in Tillamook would offer an excellent opportunity to see a success story in the area of confined animal feeding and holding operations at dairy farms. He asked the Commission if they would like to tour a dairy operation while in Tillamook. The Commission agreed to a tour Friday afternoon following the meeting.
4. Discussion of Court Order on Lava Diversion Project. Michael Huston, Assistant Attorney General, told the Commission he was still reviewing the recent Court of Appeals Decision on the Lava Diversion Project. Basically, Mr. Huston said, the Court said the Department could not deny the project based on land use requirements. However, the agency has the authority to condition 401 Certifications with any appropriate requirements of state law.

5. Discussion of Possible Landfill Tour. Stan Biles, Assistant to the Director, suggested that the Commission tour the St. Johns Landfill and recycling facilities in the Portland area to better familiarize themselves with the garbage problem. The Commission agreed to a tour after their special meeting on June 27.

FORMAL MEETING

AGENDA ITEM A: Minutes of the March 14, 1986 EOC Meeting

Chairman Petersen made the following correction to the minutes on page 1, the first paragraph under Formal Meeting.

He discovered the [turn was actually farther south than he had anticipated.] 276 degree radial was actually farther south than he had anticipated when abreast of Hayden Island.

It was MOVED by Commissioner Bishop, seconded by Commissioner Brill and passed unanimously that the March 14, 1986 minutes be approved as amended.

AGENDA ITEM B: Monthly Activity Report for February, 1986.

Commissioner Denecke said this was the first time he had noticed so many aircraft items on the report of materials being disposed of at the Chem Security hazardous waste disposal facility at Arlington. He asked if they were coming primarily from Boeing. Michael Downs, Administrator of the Department's Hazardous and Solid Waste Division, reported back at the lunch meeting that the items were indeed from Boeing.

AGENDA ITEM C: Tax Credit Applications

Commissioner Bishop, noting there were an unusually large number of tax credit applications, MOVED that the Director's Recommendation be approved. The motion was seconded by Commissioner Buist and passed unanimously.

Director Hansen explained that the large number of applications was due to a deadline date of December 31, 1985 for certain facilities.

AGENDA ITEM D: Request for Authorization to Conduct a Public Hearing on the Proposed Adoption of a Rule Establishing the Maximum Repair Permit Fee for Linn County.

Linn County has requested authority to adopt a repair permit fee equal to the average amount the County has determined it costs to provide this service. Because the proposed fee exceeds the current fee established by the Commission, approval to charge a higher fee must be done by rule. The first step in the rulemaking process is to request Commission authorization to proceed.

Director's Recommendation

Based upon the summation in the staff report, it is recommended the Commission authorize a public hearing to take testimony on the proposed rule amendments establishing a repair permit fee for Linn County. It is further recommended that the Commission authorize the Director to appoint a Department staff member to serve as Hearings Officer in this matter.

Bob Wilson, Linn County Environmental Health Department, appeared expressing support for the Director's Recommendation.

It was MOVED by Commissioner Buist, seconded by Commissioner Bishop and passed unanimously that the Director's Recommendation be approved.

PUBLIC FORUM

No one wished to appear.

AGENDA ITEM E: Consideration of Hearing Authorization Requests by the Environmental Quality Commission

At the Commission's March 14, 1986 meeting, Commissioner Denecke raised the issue of the need or desirability for continued formal Commission approval of rulemaking hearing authorization requests. The Department was asked to review the matter and report back at this meeting. Commission authorization of rulemaking hearings is not required by statute or rule. The Department believes the current practice assures opportunity for the Commission to be informed and provide important input prior to hearing and is therefore recommending that the current practice be continued.

Director's Recommendation

It is recommended that the current practice of specific Commission approval of rulemaking hearing authorization requests be continued.

It is also recommended that the Commission instruct the Department to review the present procedural rules, and propose amendments if appropriate.

Commissioner Denecke was satisfied the practice served a useful purpose and said he was happy to have it continue.

Chairman Petersen noted the hearing authorization process gives the Commission an opportunity to review issues before rules are proposed for adoption. He agreed it was a good idea to continue the practice and expressed his support for the Director's Recommendation.

Director Hansen said it was important to note that this was one way in which the Department worked with the Commission to see that all issues are considered before rule adoption.

It was MOVED by Commissioner Buist seconded by Commissioner Denecke and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM F: Informational Report: Review of FY 87 State/EPA Agreement and Opportunity for Public Comment

The State/EPA Agreement is the contractual document which outlines what work the state will perform during Fiscal Year 87 supported partially by federal dollars.

Director's Recommendation

It is recommended that the Commission:

1. Provide opportunity for public comment at today's meeting on the draft State/EPA agreement; and
2. Provide staff its comments on the policy implications of the draft agreement.

John Charles, Oregon Environmental Council, testified he wanted the Department to expand their efforts in the area of nonpoint source water pollution control and did not see much in the State/EPA Agreement regarding nonpoint sources. He said that Oregon's assessment of its water quality problems began in the 1970's and 1985 data indicates little or no change in the problems identified earlier. Few areas of the state avoid nonpoint pollution to some degree, he continued. Mr. Charles said the Department had the option of either taking a minimum of \$100,000 from the Federal Environmental Protection Agency to use for nonpoint pollution, or up to 1% of the construction grant funds. In the last two years DEQ has chosen to take the minimum. Mr. Charles said that last year the alternative of 1% of the construction grant funds would have brought the state \$260,000. Mr. Charles suggested it would be wise to get the maximum amount of money for water quality planning in the nonpoint source program with a little less money for construction grants.

Director Hansen said it was the Department's intent to take the maximum money from EPA to deal with nonpoint sources and that had been so noted in the construction grants staff report. He said the problem was not with intent but with a budget note contained in the President's budget which limits the amount of 205J money available. He said the Department's only concern now was with the federal requirement.

Mr. Charles was pleased with Director Hansen's statement, and asked the Department to let him know if he could help.

Chairman Petersen noted that he saw the focus changing from point sources to nonpoint sources and was very interested in getting a handle on the nonpoint source problem.

The Commission accepted the Informational Report.

AGENDA ITEM G: Proposed Adoption of Rules to Establish Chapter 340, Division 120, Siting and Permitting Requirements for Hazardous Waste and PCB Treatment and Disposal Facilities, and to Amend Division 110, Management of PCB.

During the 1985 Session, the Oregon Legislature enacted Senate Bill 138 which requires the Commission to adopt rules to regulate the siting of hazardous waste and polychlorinated byphenyl (PCB) treatment and disposal facilities.. At the Commission's March 14 meeting, they authorized the Department to conduct public hearings on proposed rules. Testimony was received from 23 people at the public hearings and 35 people submitted written testimony.

The proposed rules as presented in Division 120 establish additional siting and permitting requirements. The proposed rules as presented in Division 110 replace the existing rules for managing PCB.

The Department is entering a new area with these rules. Future developments may require the Department to come back before the Commission with rule modifications. It must be ensured that these rules do not act as a roadblock to needed facilities but it must also be ensured that these rules go far enough in protecting the public health and safety of the environment.

Chairman Petersen noted that this was a different approach to regulation in the very important area of hazardous waste and toxic waste. As such, before anyone in industry can site a facility to dispose and treat hazardous waste and PCB, the Commission must come up with rules of the game. He said the statute was unique in terms of the policy decisions made it it. The Legislature stated they did not want any more of this waste in Oregon than can be helped, and specified criteria on how large these sites can be. Recognizing, he continued, that there are agreements with other states on the acceptance of hazardous waste for disposal in Oregon.

Chairman Petersen said the advisory committee did a very good job in wrestling with these issues and have helped to develop the proposed rules.

Commissioner Bishop asked why portable facilities were exempted on time rather than on quantity. Bob Danko, of the Department's Hazardous and Solid Waste Division, said the portable facilities were exempted on time so that a temporary facility did not become a longer-term facility. He said the Department did not want a quasi-permanent facility to be able to take advantage of this exemption. Commissioner Bishop asked why a limit was not put on the amount that could be treated within the time limit. Mr. Danko replied that the Department was not comfortable putting a quantity in the rule, as the Department's experience in this area so far had been limited. He said this issue had been dealt with among staff and the advisory committee and neither could come up with a good number to use.

Mr. Danko said two or three portable facilities have visited Oregon to clean PCB out of transformers. He said this should not be discouraged as it eliminated the transportation of PCBs and so far has worked very well with no problems. In response to Commissioner Bishop, Mr. Danko said portable facilities need Resource Conservation and Recovery Act (RCRA) licenses and must meet the technical permitting requirements to ensure the emissions are environmentally safe. Director Hansen said that the proposed rules deal only with siting. Facilities would also have to meet all other environmental protection requirements.

Judge Jack Beatty, Chair of the Advisory Committee, testified that the Committee concluded that the staff did a good job with the rules and they were as understandable as possible given the statute which had to be implemented and the technical requirements necessary to deal with the problem.

Commissioner Brill asked if the Committee had given any thought to the formation of hydrochloric acid when PCBs were destroyed. Judge Beatty replied that the Advisory Committee was not technically qualified to answer those questions, however they did read literature dealing with incineration and thought it would be fair to state that incineration offers the safest way of dealing with PCBs.

Chairman Petersen asked Judge Beatty if he was convinced the rules did not tread on constitutional prohibitions. Judge Beatty replied that the Committee was aware of the Commerce Clause and also the need to adopt the rules as ordered by the Legislature. It was his lay opinion that the rules were workable and if they are challenged they have a reasonable chance at passing muster under the Commerce Clause. Judge Beatty said that by the time a challenge would get through the Court, the Federal Government would probably have taken some action to clarify the situation.

Chairman Petersen asked for an example of what happens to the PCBs which are filtered out by portable plants. Richard Reiter, of the Department's Hazardous and Solid Waste Division, replied the portable plants use a chemical destruction process in which the PCB molecules are destructed. He said there was a residue left over which is managed as a hazardous waste and is taken to the Chem-Security hazardous waste disposal facility at Arlington. What goes back to the transformer is an oil free of PCBs. In response to Chairman Petersen, Mr. Reiter said the chemical process used by portable plants is effective for concentrations of PCB less than 2500 parts per million. The chemical process has not been perfected for larger concentrations. Commissioner Denecke asked if there was much bulk left over. Mr. Reiter said that if a particularly large transformer is treated there may be a 55 gallon drum of residue.

Referring to proposed rule 340-120-015(3) which states:

"The local government with land use jurisdiction should act on a land use compatibility request within 180 days after a complete request was submitted by the applicant...."

Commissioner Bishop asked what would happen if a local government's findings were different from the Department's. Mr. Danko replied that because this would be considered a Class I permit under the Land Conservation and Development Commission's rules, the Department is ultimately responsible for determining land use compatibility with statewide goals. He said that local governments cover much more in dealing with land use than the Department does in issuing a permit, but the Department is ultimately responsible.

Referring to proposed rule 340-120-001(3) which states:

"Facilities described in (2) (a) of this section that receive less than 50% of waste from off the site may be located inside urban growth boundaries as defined by ORS 197.295 and therefore do not have to meet 340-120-010(d) (A) (i) and 340-120-015(1) (a)."

Chairman Petersen asked how the percentages in this rule were measured. Mr. Danko replied that the rules would require an applicant to look into the future and show where the waste could be coming from. At that time the applicant will have to demonstrate that less or more than 50% is coming from off-site. Because the Department has not gone through this process before it had not yet been determined if a month or a year period is appropriate. Chairman Petersen said it was important to avoid argument on these rules and when an arbitrary percentage is used it could lead to problems later on. He asked if the Department would be willing to commit to a time. Mr. Danko replied that the Department would have no problem with annually. Mr. Reiter said that as far as the 50% goes, the Department would be looking at design capacity.

Chairman Petersen asked what the difference was in the 50% referred to in 340-120-001(2) and the 10% referred to in 340-120-001(5). Mr. Danko said the major difference was that the 50% in (2) refers to off-site facilities and the effect is that if the majority of the waste comes from on-site the facility is allowed to be within the Urban Growth Boundary. The 10% in (5) refers to on-site facilities which according to RCRA definition 100% of the wastes must be generated at the site. Mr. Danko said, the Department did not feel it was appropriate to get that strict with a siting rule.

Chairman Petersen asked how these percentages were measured. Mr. Reiter replied that in the case of (5) it would be 10% of the input to the unit.

Director Hansen said there were certainly other ways to write the rule and the issue of on-site/off-site is significant. It is EPA's definition that on-site means contiguous property. Mr. Danko said there have been instances where a company with an incinerator has disposed of small amounts of waste from neighboring companies as a courtesy, and environmentally that was a good solution. He said the Department would like to have a mechanism to allow that practice to continue.

Chairman Petersen asked why the difference in on-site and off-site facilities. Mr. Danko said staff and the Advisory Committee struggled with this issue for months and evolved to a position where they had to balance the risk of transportation of wastes against the public health, safety and protection of the environment considerations at an on-site facility, and so needed to be sure that the technical standards were enough to provide protection. Then beyond that, he continued, they had to create siting rules to deal with added margins of safety and transportation of wastes. The staff feels that the RCRA standards provide adequate leverage for the Department to ensure protection of the public health, safety and the environment with or without these rules. Mr. Danko said that when treatment is not allowed on-site the waste must be transported and the Department did not want to be in the position of telling industries they could not treat their own wastes and must transport to an off-site facility. Also, off-site facilities would treat more quantities and more varieties of waste than on-site facilities, he said.

Chairman Petersen asked why on-site facilities should be regulated at all. Mr. Danko referred to the table of proposed hazardous waste and PCB treatment and disposal permit application requirements on page 5 of the staff report. He said the public expected that all facilities treating hazardous waste would meet these requirements.

Director Hansen said that part of the RCRA standards are aimed at waste minimization. Industries are beginning to treat their own waste by trying to produce less, recycling it, or providing treatment on site. Congress is moving in the direction of forcing treatment back on-site.

Chairman Petersen agreed. He said it was important to make clear that on-site treatment was a policy decision and not that the risks associated with off-site treatment (i.e. transportation) are any different than on-site. Chairman Petersen said this was contradictory to large commercial facilities who need sufficient volume to make their operations profitable. Director Hansen said that only the larger companies will be able to make the type of investment necessary for an on-site facility. There will still be large numbers of businesses whose only option is off-site disposal.

Referring to 340-120-010(2)(a)(A)(iii) which reads:

"Its operation will significantly lower treatment or disposal costs to Oregon companies, excluding transportation costs within states that are parties to the Northwest Interstate Compact on Low-Level Radioactive Waste Management as set forth in ORS 469.930."

Chairman Petersen asked why the transportation costs were excluded. Mr. Danko said the Department was afraid of a leap-frogging effect meaning if transportation costs were included there may be a tendency for applicants to site facilities just because they are close and not necessarily because they are needed.

Chairman Petersen asked if all the items in the need criteria in 340-120-010(2) (a) must be proved. Mr. Reiter replied that the language was directly out of the statute. It was necessary to allow the option for an applicant to show need, but if a similar facility exists, the Department wants the option to say the proposed facility is not needed. Chairman Petersen said that point needed to be clarified.

Director Hansen said the language in determining need was aimed at a showing which must be made by the applicant. One of the clear directions from the Legislature was to limit the number of facilities. What the Department was trying to accomplish with this language was to limit facilities if the capacity is already present somewhere else.

Commissioner Bishop commented she found the rules extremely difficult to follow. Mr. Danko said that was the biggest challenge in writing the rules. They were attempting to make the rule conform in format with other Department rules and tried to make them readable. Mr. Danko said he would keep working on making the rules more readable.

Under 340-120-010(2) (b), Capacity, Chairman Petersen asked where and how much. Mr. Danko said the purpose of that language was to balance the need to limit the number of facilities. If an incinerator was built it should be big enough to incinerate all the waste in the state.

Chairman Petersen proposed the following amendment to 340-120-010(2) (b) (A):

The facility shall not be sized less than what is needed, in conjunction with existing facilities[,] in the compact states to treat or dispose of all hazardous waste or PCB generated....

Mr. Reiter said the Department would support such an amendment and felt it was consistent with what the Legislature wanted.

Chairman Petersen asked what would happen if noncompact states shipped all their wastes to the Chem-Security hazardous waste disposal facility at Arlington and filled it up. Mr. Danko said that the Department hoped the cost of transportation would eliminate that problem. Mr. Reiter said if that happened it may mean that Oregon generators would have to ship their wastes out of the state. He continued that the Department has not seen that happen because of the economics of transportation from outside the compact states.

Chairman Petersen asked if California had an incineration facility. Mr. Reiter replied they did not, but were looking at a rotary kiln that could handle solids as well as liquids. However they have not received approvals under California law. Mr. Danko said there was also a company in Los Angeles that was looking at incineration. Mr. Reiter, in response to Chairman Petersen, said it was not likely that California would take the position of not allowing an incinerator and tell generators to ship to Oregon. Director Hansen said the regulatory atmosphere in California makes it very difficult to obtain permits. Mr. Danko said that Nevada or Utah were also looking at putting in an incinerator to serve California as the regulatory atmosphere was better in those states.

Chairman Petersen asked if the chances were greater that generators would use disposal instead of incineration. Mr. Reiter replied that within the next five years EPA must look at all the waste generated. As a result, he said, there would be a move away from disposal of wastes that can be incinerated. Director Hansen said that land disposal would be prohibited over time.

Chairman Petersen emphasized he was not being critical of the Advisory Committee, but he had some problems with the statute. It was his feeling that 340-120-010(2) (b) (D) was not called for, and violated legislative intent.

340-120-010(2) (b) (D)

If all of the criteria of 340-120-010(2) are met, the Commission shall give preference to a proposed facility which is sized more closely to what is needed to treat or dispose of hazardous waste or PCB generated in Oregon.

Mr. Danko said this section was not specifically in the statute, but was an effort to limit to Oregon wastes. Director Hansen said this language was an attempt to go as far as constitutionally permissible on preference.

Chairman Petersen asked about the property line setback in 340-120-010(2) (e). Mr. Danko said the setback would provide an extra layer of protection. The Department feels its technical standards are sufficient protection, but the property line setback would provide an extra protection for neighbors of a facility. In response to Commissioner Denecke, Mr. Danko said that if the rule were adopted Chem Security would be allowed eight years in which to get an additional setback. Mr. Reiter said Chem Security at Arlington presently has about a 100 foot setback.

Chairman Petersen's next question was about 340-120-020, Community Participation. He agreed that facilities allowed by these rules would have a significant impact on a community and involvement of those communities in the process is very important. He expressed concern about to what extent the Department would be bound by the advice of a local committee. Mr. Danko said the committee would be advisory to the Department. They would not have the time or the technical ability to deal with compliance and enforcement. It is intended the committee would address the broader issues of siting, public participation and local concerns.

Chairman Petersen asked if the advisory committee would be involved in the operation of the facility. Mr. Danko said the committee could provide an important public information vehicle so citizens could have their concerns addressed in an organized manner. It is not intended the committee would inspect a facility, only that they would provide public information.

Commissioner Bishop said it was important for citizens to have a grasp of the situation and a way to voice their concerns.

Director Hansen said the Department did not want to become apologists for a facility. It is the Department's responsibility to be a regulator. If there are conflicts between the community and the operator of a facility, the Department should not become involved. This is where the advisory committee could mediate. As a regulator, the Department needs to assure that regulations are complied with and not to justify the existence of a facility.

Returning to the discussion of off-site and on-site facilities, Director Hansen said the Department was trying to make a distinction between the two. Originally the Department suggested using the word "incidental" for the 10% and then received testimony that that was not precise. Director Hansen said he understood Chairman Petersen's concerns but was not sure with what to replace the distinction of off-site and on-site. In response to Chairman Petersen, Director Hansen said the distinction should be kept to encourage on-site as a more sound environmental way of treatment and as a way to achieve accountability from the manufacturer for their waste. He said the legislation was principally aimed at large commercial off-site facilities, but provided for any type of facilities. In writing the rules, the Department was trying to make that distinction, which it believes is sound.

Mr. Reiter said there was also some liability under Superfund. The Department wants to preserve the opportunity for a generator to treat their own waste. If a company chooses to use the Arlington disposal facility, and Chem Security did not operate that facility well in the future, the generators involved would be in a joint liability.

Chairman Petersen asked if more incentive would be provided if on-site were exempted. Director Hansen referred to the table on page 5 of the staff report, indicating that the issues that an on-site facility must comply with are very limited. Chairman Petersen said he would be in favor of exempting on-site facilities.

After postponing action on this item until the end of the meeting to allow staff time to review proposed amendments, Mr. Danko returned and said it was the staff feeling that even if on-site were exempted, it would still need to be defined, therefore there was nothing to be gained by exempting on-site. If an off-site facility were to be allowed inside an urban growth boundary it would still have to be addressed.

Chairman Petersen said he was persuaded that this was new ground, nothing was locked in concrete, and some time may be needed to see how the rules work. He said he was delighted with the rapport and mutual respect between staff, the Advisory Committee and the regulated community.

The following amendments were proposed:

340-120-001(3)

Facilities described in (2)(a) of this section that receive less than 50% of waste on a weekly basis from off the site may be located inside urban growth boundaries as defined by ORS 197.295 and therefore do not have to meet 340-120-010(d)(A)(i) and 340-120-015(1)(a).

340-120-001(5)

For the purposes of this Division, a facility can receive, with the Department's approval, as much as 10% of waste on a weekly basis from off the site and be an on-site facility.

340-120-010(2)(b)(A)

The facility shall not be sized less than what is needed, in conjunction with existing facilities[,], in the compact states to treat or dispose of all hazardous waste or PCB generated, or reasonably projected to be generated over the next 10 years, in Oregon.

340-120-010(2)(b)(B)

The facility shall not be sized greater than needed to treat or dispose of all hazardous waste or PCB generated...

340-120-010(2)(b)(C)

If the facility is sized to treat or dispose of more hazardous waste[s] or PCB generated...

340-120-015(3)

....The Department is ultimately responsible for determining compliance with state land use goals for the purpose of issuing a permit.

Referencing Chairman Petersen's proposal to delete 340-120-010(2)(b)(D), Director Hansen said in the final analysis what should be the result of that section would be a burden for the applicant to size down a facility to meet the requirement rather than sizing up to meet profitability of the operation. Unless there are unacceptable proposals, he continued, this provision would not come into play because there are too many other factors. Representatives from Chem Security who were in the audience said they would prefer this provision did not exist, but it made no difference to them now.

It was MOVED by Commissioner Denecke, seconded by Commissioner Buist and passed unanimously that the Director's Recommendation, as amended be approved.

Chairman Petersen expressed his thanks to all who worked on this item.

AGENDA ITEM H: Proposal to Declare a Threat to Drinking Water in a Specifically Defined Area of Mid-Multnomah County Pursuant to ORS 454.275 et. seq.--Proposed Final Order

On March 14 and 17, 1986, the Commission and nine hearings officers received oral argument from persons who petitioned to present argument on the Threat to Drinking Water findings. Written argument was received through March 28, 1986. Transcripts of oral arguments and all written argument received were forwarded to the Commission for review.

The Department has reviewed the oral and written arguments presented and has concluded that nothing has been presented which would cause earlier findings to be modified.

The Department has prepared proposed Findings and Order and recommends that the Commission proceed to adoption at this time.

Director's Recommendation

It is recommended that the Commission adopt final Findings and Order in the matter of the proposal to declare a threat to drinking water in a specifically defined area in Mid-Multnomah County pursuant to ORS 454.275 et. seq. as proposed in the attachment to the staff report.

It is further recommended that the Commission direct the Department to file the Findings and Order with the governing bodies of the local governments in the affected area.

Senator Frank Roberts appeared urging the Commission to take whatever action necessary to ensure that financing provisions will be improved. Senator Roberts said the currently proposed financing plan was unacceptable and the threat was not only from the cash required of residents, but to the equity they have in their homes. He urged more consideration be given to proposals to reduce the financial impact to homeowners and wanted assurances reasonable citizens can depend on. Chairman Petersen thanked Senator Roberts for providing reasonable leadership in this area and bringing these issues to the Commission's attention.

Chairman Petersen said again this was the most difficult decision he had had to face as a Commissioner. However, he continued, in reviewing the most recent testimony he found there were no new arguments. His preception of the problem was balancing protecting the groundwater for future generations against the financing problems. It is hard to ask people to pay for something now that will benefit future generations, but the problem must be addressed and taken care of, Chairman Petersen said. He said the plan had been exhaustively reviewed and the financing plan is the fairest ever to be proposed for the citizens of Oregon. He urged the Legislature to do more in this area.

Chairman Petersen emphasized that if it had not been for all the fine testimony received from people in the area and legislators, then some of the provisions, such as the safety-net, might not have occurred. He said the Commission had gone as far as it could go, the plan was not perfect, but he did not want to postpone action because of the danger of losing federal grant money. Chairman Petersen said he was inclined to accept the Director's Recommendation and pass the Final Order.

It was MOVED by Commissioner Denecke, seconded by Commissioner Buist and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM I: Proposal to Adopt a Temporary Rule to Amend the Existing Cesspool Rules--OAR 340-71-335 and OAR 340-73-080.

Until the Commission makes a decision on the Threat to Drinking Water proceeding, current Commission rules allow cesspool and seepage pit sewage disposal systems to be installed in Mid-Multnomah County provided sewers are not available, the lot is too small to accommodate a standard on-site system and an equivalent sewage load to an existing cesspool or seepage pit is eliminated.

Once a decision is made on the Threat to Drinking Water proceeding, installation of new cesspools will be prohibited and seepage pits can only be used to replace a failing cesspool or seepage pit.

When the present rules were adopted, it was anticipated that a revised rule would be enacted to be compatible with the course of action established by the decision on the Threat to Drinking Water proceeding.

The Department is recommending that the Commission find that failure to act will seriously prejudice the public interest and adopt a temporary rule to extend the current rule provisions pending adoption of a permanent rule for Mid-County.

The Department is also recommending that the Commission authorize a rulemaking hearing on more extensive amendments to the rule to be compatible with the mid-Multnomah County Sewer Implementation Plan.

Director's Recommendation

Based on the findings in the summation in the staff report, it is recommended that the Commission adopt the rule amendments in Attachment A to the staff report as a temporary rule.

It is further recommended that the Commission authorize the Department to proceed to rulemaking hearing with the more extensive rule amendments proposed in Attachment B to the staff report.

Bill Whitfield appeared representing Multnomah County. He presented the following proposed amendment to 340-71-335(2)(b)(E):

The system for collection of additional funds for each cesspool installation (System Development Charge) enacted by the jurisdictions in the affected area prior to October 1, 1982, shall be maintained[.] except for development qualifying under OAR 340-71-335(2)(b)(D).

Mr. Whitfield said this would eliminate the need for a systems development charge when required to install dry sewers. He felt the charge would be overly punitive to development in cases where dry sewers must be installed.

Harold Sawyer, the Department's Inter/Intra Program Coordinator, agreed with the amendment.

It was MOVED by Commissioner Bishop, seconded by Commissioner Buist and passed unanimously that the Director's Recommendation, including the amendment proposed by Mr. Whitfield be adopted. The Commission in this motion also adopted the following findings:

Findings

Failure to act to modify the existing cesspool rules to permit continued construction of cesspools under controlled conditions to serve as interim facilities pending the construction of sewers will seriously prejudice the public interest by curtailing economic development in the area, and by jeopardizing the financing and implementation of the Mid-Multnomah County Sewer Implementation Plan, September 1985, which will, upon implementation, achieve the desired ultimate restoration of groundwater quality.

AGENDA ITEM J: Proposed Adoption of Amendments to the State Implementation Plan Regarding Stack Heights and Dispersion Techniques, Deleting Rules OAR 340-20-340 and 340-20-345, Adding Replacement Rule 340-20-037.

A recent court suit has caused the Environmental Protection Agency (EPA) to revise its stack height and dispersion technique rule. EPA has requested Oregon to revise its stack height rules accordingly in 1986. These revisions do not affect any existing stacks in Oregon.

The only substantive testimony on the proposed rule amendments was from the Oregon Environmental Council who requested the state rule be more stringent in two areas. The Department feels the added stringency would not be cost-effective and may even restrict use of techniques which can lessen ground level concentrations of air pollutants.

Therefore, it is the Department's recommendation that the Commission adopt EPA's amended federal rule by reference into Oregon Administrative Rules, deleting Oregon's present stack height rule, as the most expedient and simplistic approach to meeting EPA requirements.

Director's Recommendation

Based on the summation in the staff report, it is recommended that the Commission adopt the federal stack height rule by reference in OAR 340-20-037 and repeal the present Oregon stack height rule OAR 340-20-340 and 20-345, as amendments to the State Implementation Plan.

There was no discussion on this item.

It was MOVED by Commissioner Bishop, seconded by Commissioner Buist and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM K: Proposed Adoption of the Consolidated and Updated
State of Oregon Clean Air Act Implementation Plan, OAR
340-20-047.

The Oregon State Implementation Plan (SIP) was first adopted in 1972 in response to requirements of the Clean Air Act of 1970. The Department is proposing to replace the existing SIP with a consolidated and updated document. This action is housekeeping in nature. No new state regulations are created; no existing state regulations are repealed or relaxed.

Concerns were raised during the public hearing process that the SIP may be inadequate because the Conflict of Interest Rules do not apply to the State Board of Forestry. The Environmental Protection Agency, however, has indicated that the rules do meet Clean Air Act requirements; therefore, the Department is proposing the Commission adopt the consolidated and updated SIP as originally proposed.

John Charles, Oregon Environmental Council, commented that the issue of the Conflict of Interest Rules not applying to the Board of Forestry was an interesting policy issue and he felt the letter from George Abel, Chief of the EPA Air Programs Branch, was advisory only and not the official EPA position. He said the statute was clear that the Board of Forestry does issue permits and are part of the SIP as acknowledged by EPA. He thought it was to the public advantage that the Environmental Quality Commission abides by the Conflict of Interest Rules, noting that no one has ever suggested that the Commission members have a conflict of interest. Mr. Charles said the Board of Forestry violated the intent of the Clean Air Act Amendments of 1977 in that more than a majority of the Board represent private interests. He said that has a bearing on how the Smoke Management Plan comes out. Mr. Charles recognized the Commission could not remedy this situation, but said it could recommend to the Governor that he remedy it, or request EPA to use their authority to correct the problem.

Chairman Petersen commented that apparently not everyone in EPA agreed with Mr. Charles on this matter. It appeared, Chairman Petersen said, that Mr. Charles was suggesting that if the Commission comments to EPA then the rules would be amended.

Chairman Petersen said he was concerned about the quality of the Smoke Management Plan. He wanted to be sure there is a coordinated Smoke Management Plan that will benefit both the citizens and industry. The conflict of interest concerns are not within the province of the Commission, Chairman Petersen continued. He asked for a briefing on the current negotiations with the Board of Forestry on the Smoke Management Plan.

Tom Bispham, Administrator of the Department's Air Quality Division, said he had not talked directly to the State Forester but has talked to the Assistant State Forester. Apparently Forestry felt they used a poor choice of words in their July 10, 1985 letter to John Charles. The original Smoke Management Plan was signed by the DEQ Director, the State Forester and

representatives of a number of other agencies. Mr. Bispham understood that what Forestry meant to say in their letter was that the Smoke Management Plan did not require the signatures of the others, but does require the signatures of the DEQ Director and the State Forester. Mr. Charles had maintained that the letter from Forestry stated they did not need DEQ sign-off on the plan which made the imbalance even worse since DEQ did not have partnership in the plan.

Mr. Bispham said the Department was in the process of updating both the Smoke Management Plan and the Visibility Plan. The Department was meeting with Forestry the next week to discuss both plans and to discuss how visibility should be incorporated in the Smoke Management Plan. At the Commission's June 13 meeting,, both those plans will come before the Commission for hearing authorization. Hearings will be held throughout the state and proposed rules will be prepared for the Commission's consideration at their September meeting.

Chairman Petersen said he was happy with the progress of the negotiations. Mr. Bispham commented that it has taken a long time but the Department was also generally pleased with the progress. Director Hansen also expressed pleasure with the progress and said the jurisdictional issue was most appropriately wrestled with by the Legislature.

It was MOVED by Commissioner Bishop, seconded by Commissioner Brill and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM L: Proposed Adoption of Amendments to Hazardous Waste Management Civil Penalty Schedule, OAR 340-12-068.

The Department is proposing to amend the schedule of minimum penalties for hazardous waste violations. The existing schedule, which was adopted in 1982 does not consider violations of more recently adopted rules pertaining to management facilities. By default these violations have a \$100 minimum penalty.

Additionally, the Department proposed to incorporate into rule a civil penalty schedule for destruction of wildlife caused by hazardous waste which was enacted by the 1985 Legislature in SB 873.

Director's Recommendation

Based upon the summation in the staff report, it is recommended that the Commission adopt the amendments to OAR 340-12-068 as proposed in Attachment III to the staff report.

Commissioner Brill asked who had the authority to mitigate penalties below the minimum. Chairman Petersen replied that the Commission had that authority, but the Department did not.

Commissioner Denecke asked why the minimum needed to be raised if there was authority to assess above the minimum in circumstances where aggravating factors are proved. Michael Huston, Assistant Attorney General, said it had been the Department's position that a range of penalties is established by rule and where within that range assessment is made depends on aggravating and mitigating circumstances. He said there were almost always some of those factors to be considered.

Chairman Petersen asked for comment on a letter the Commission had received from Attorney Michael Swaim regarding an alleged conflict between OAR 340-12-068 and its statutory authority--ORS 466.880(1). Mr. Huston said this was an old issue for the Commission. The statute says a violator shall incur a penalty. A number of parties have argued that there is an obligation to impose a penalty. Mr. Huston said his office had consistently advised otherwise. He said there was prosecutorial discretion on behalf of the Commission.

It was MOVED by Commissioner Denecke, seconded by Commissioner Bishop and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM M: Informational Report: Development of Landfill Site--Site Selection Criteria.

The intent of this report is to inform the Commission that the Department's landfill siting criteria have been completed, and to provide a listing and brief description of each of the site evaluation and final decision criteria. A third category of criteria, the pass-fail criteria, was reviewed by the Commission at their March 14 meeting.

The report contains information on the public and peer review process that was a major part of the criteria development program, and identifies the three categories of information upon which the Department will base its recommendation to the EQC of a site or sites.

Those categories are:

1. A numerical score which rates the environmental and technical merits of the site, based upon the final decision criteria.
2. Preliminary estimates of the cost of site acquisition, landfill construction and operation and impact mitigation, and
3. A finding of whether or not the site meets the minimum requirements specified in Senate Bill 662.

Director's Recommendation

It is recommended that the Commission review the final landfill Siting Criteria report and that it concur in the following course of action to be pursued by the Department.

1. The finalized criteria will be provided to the site selection consultant, and will be used in the site identification and evaluation process.

2. The Department will return to the Commission at their July 25 meeting to present a list of the top 12 to 18 preferred and appropriate sites, and to discuss the process that led to their selection.
3. The Department will return to the Commission at their October 24 meeting to present the top 2 to 4 finalist sites, and to discuss the process that led to their selection. Also, at this meeting, the Department will discuss the detailed procedures which will be followed to further evaluate the 2 to 4 finalist sites.

Discussion of this item took place during the Commission's lunch meeting where they indicated acceptance of the report.

AGENDA ITEM N: Yard Debris as a Principal Recyclable Material in the Portland, Washington, Multnomah, Clackamas and West Linn Wastesheds.

The Department proposes to delay making a recommendation on listing yard debris as a principal recyclable material in the Portland metropolitan wastesheds until the July 25 Commission meeting. The additional time will allow the Department to work with local governments to determine acceptable collection methods, to more specifically define locations within a wasteshed where collection systems would not be required, and to work on market development strategies for yard debris compost products.

The Commission indicated acceptance of this report.

There being no further business, the formal meeting was adjourned.

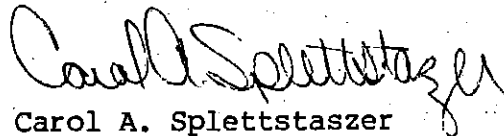
LUNCH MEETING

Landfill Siting Criteria Review

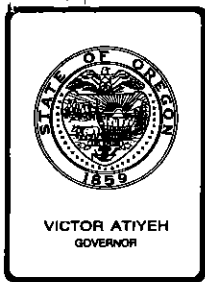
The final landfill siting criteria document was reviewed by the Commission during its luncheon meeting. Steve Greenwood of the Department's Hazardous and Solid Waste Division pointed out that there were three categories of criteria and that they had been designed to correspond with the three stages of the site selection process. The Pass-Fail Criteria will be used during the initial site identification process, and were reviewed by the Commission at its March meeting. The site evaluation criteria, that will be used to identify the three most suitable sites, and final decision criteria, that will be used to evaluate and compare those three sites, were the focus of this meeting. Mr. Greenwood pointed out that the criteria will be extremely important since they will provide the ground rules for the selection process, and since selecting a good site is a key factor in the Department's plans to develop a state of the art landfill. Mr. Greenwood also stressed the major role that public involvement had played in the criteria development process.

The Commission members had questions about how the criterion weighting (numerical values from 1 to 10 indicating level of importance) were determined, and about what constituted a state of the art landfill. Mr. Greenwood reported that the criteria consultant (Brown and Caldwell) developed the preliminary weighting primarily on the basis of mitigation difficulty. Those criteria that address potential problems that are more difficult to mitigate (i.e., ground water contamination) were assigned higher weightings. Kent Mathiot of the Department's Hazardous and Solid Waste Division, noted that many of the preliminary weightings were modified on the basis of public comment and the peer review process. Mr. Mathiot also described some of the factors, such as site planning, leachate and gas control systems, odor control, and site screening, that are a part of a state of the art landfill.

Respectfully submitted,



Carol A. Spletstaszer
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MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. B, June 13, 1986, EQC Meeting
March and April 1986 Program Activity Report

Discussion

Attached is the March and April 1986 Program Activity Report.

ORS 468.325 provides for Commission approval or disapproval of plans and specifications for construction of air contaminant sources.

Water Quality and Solid Waste facility plans and specifications approvals or disapprovals and issuance, denials, modifications and revocations of air, water and solid waste permits are prescribed by statutes to be functions of the Department, subject to appeal to the Commission.

The purposes of this report are:

1. To provide information to the Commission regarding the status of reported activities and an historical record of project plan and permit actions;
2. To obtain confirming approval from the Commission on actions taken by the Department relative to air contaminant source plans and specifications; and
3. To provide logs of civil penalties assessed and status of DEQ/EQC contested cases.

Recommendation

It is the Director's recommendation that the Commission take notice of the reported program activities and contested cases, giving confirming approval to the air contaminant source plans and specifications.

Michael Horin
for
Fred Hansen

SChew:r
MD26
229-6484
Attachment

DEPARTMENT OF ENVIRONMENTAL QUALITY

Monthly Activity Report

March and April 1986

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DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality, Water Quality,
 Hazardous and Solid Waste Division
 (Reporting Unit)

March 1986
 (Month and Year)

SUMMARY OF PLAN ACTIONS

	Plans Received		Plans Approved		Plans Disapproved		Plans Pending
	Month	FY	Month	FY	Month	FY	
<u>Air</u>							
Direct Sources	7	55	4	51	0	0	18
Small Gasoline Storage Tanks Vapor Controls	-	-	-	-	-	-	-
Total	7	55	4	51	0	0	18
<u>Water</u>							
Municipal	23	126	16	130	1	4	35
Industrial	8	67	5	64	0	0	8
Total	31	193	21	194	1	4	43
<u>Solid Waste</u>							
Gen. Refuse	2	28	2	18	-	4	30
Demolition	-	3	-	-	1	1	3
Industrial	1	22	1	15	-	-	19
Sludge	-	1	-	-	1	1	-
Total	3	54	3	33	2	6	52
<u>Hazardous Wastes</u>							
	-	5	-	5	-	-	-
<u>GRAND TOTAL</u>	41	307	28	283	3	10	113

DEPARTMENT OF ENVIRONMENTAL QUALITY
 AIR QUALITY DIVISION
 MONTHLY ACTIVITY REPORT
 DIRECT SOURCES
 PLAN ACTIONS COMPLETED

COUNTY	NUMBER	SOURCE	PROCESS DESCRIPTION	DATE OF ACTION	ACTION
02 DESCHUTES	070	ARMY CORPS OF ENGINEERS	INCINERATOR	03/01/86	APPROVE
02 DOUGLAS	132	BOHEMIA INC., DRAIN PLYWD	VENEER DRYER UPGRADE	02/24/86	APPROVE
02 DESCHUTES	135	BEND AGGREGATE & PAVING	UPGRADE SCRUBBER	02/12/86	APPROVE
02 MULTNOMAH	138	PRECISION CAST PARTS	BAGHOUSE INSTALLED	03/13/86	APPROVE

TOTAL NUMBER QUICK LOOK REPORT LINES 4

10
2

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division
(Reporting Unit)

March 1986
(Month and Year)

SUMMARY OF AIR PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sources Under Permits	Sources Req'r'g Permits
	Month	FY	Month	FY			
<u>Direct Sources</u>							
New	1	18	8	30	7		
Existing	1	13	2	11	11		
Renewals	25	107	21	121	98		
Modifications	<u>0</u>	<u>5</u>	<u>2</u>	<u>34</u>	<u>7</u>		
Total	27	143	33	196	123	1313	1331
<u>Indirect Sources</u>							
New	0	12	0	18	0		
Existing	0	0	0	0	0		
Renewals	0	0	0	0	0		
Modifications	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>		
Total	<u>0</u>	<u>12</u>	<u>0</u>	<u>18</u>	<u>0</u>	<u>250</u>	<u>250</u>
<u>GRAND TOTALS</u>	27	155	33	214	123	1563	1581

Number of
Pending Permits

Comments

31	To be reviewed by Northwest Region
29	To be reviewed by Willamette Valley Region
5	To be reviewed by Southwest Region
4	To be reviewed by Central Region
4	To be reviewed by Eastern Region
10	To be reviewed by Program Operations Section
27	Awaiting Public Notice
<u>13</u>	Awaiting end of 30-day Public Notice Period
123	

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MONTHLY ACTIVITY REPORT
DIRECT SOURCES
PERMITS ISSUED

COUNTY	SOURCE	PERMIT NUMBER	APPL. RECEIVED	STATUS	DATE ACHIEVED	TYPE APPL.	PSEL
CLACKAMAS	CARSON OIL CO INC	03 2724	11/22/85	PERMIT ISSUED	02/25/86	NEW	N
DOUGLAS	MURPHY PLYWOOD CO.	10 0022	08/16/85	PERMIT ISSUED	02/25/86	RNW	Y
JACKSON	CORNETT LUMBER CO	15 0007	08/05/85	PERMIT ISSUED	02/25/86	RNW	Y
JOSEPHINE	WESCO LUMBER INC	17 0004	10/11/85	PERMIT ISSUED	02/25/86	RNW	Y
KLAMATH	GREGORY FOREST PRODUCTS	18 0023	12/20/85	PERMIT ISSUED	02/25/86	MOD	Y
MULTNOMAH	OWENS-CORNING FIBERGLAS	26 1815	03/04/82	PERMIT ISSUED	02/25/86	RNW	Y
MULTNOMAH	LATTICE WKS OF OREGON INC	26 3130	07/25/85	PERMIT ISSUED	02/25/86	EXT	N
WASCO	MARTIN MARIETTA ALUMINUM	33 0001	09/04/84	PERMIT ISSUED	02/25/86	RNW	Y
PORT.SOURCE	OREGON ST HWY DIV	37 0335	03/06/85	PERMIT ISSUED	02/25/86	NEW	Y
PORT.SOURCE	SEUBERT EXCAVATORS INC	37 0348	11/15/85	PERMIT ISSUED	02/25/86	NEW	Y
PORT.SOURCE	SEUBERT EXCAVATORS INC	37 0350	11/15/85	PERMIT ISSUED	02/25/86	NEW	Y
KLAMATH	CASCADE STUDS INC	18 0073	11/01/85	PERMIT ISSUED	03/04/86	MOD	Y
PORT.SOURCE	MOBILE CRUSHING CO., INC.	37 0261	12/18/85	PERMIT ISSUED	03/06/86	RNW	Y
COLUMBIA	DEER ISLAND SAND & GRAVEL	05 2577	01/23/86	PERMIT ISSUED	03/10/86	RNW	N
COLUMBIA	NATAL SHAKE & RIDGE	05 2589	06/25/85	PERMIT ISSUED	03/10/86	NEW	N
DOUGLAS	BEAVER STATE READYMIX INC	10 0098	11/22/85	PERMIT ISSUED	03/10/86	RNW	N
WASHINGTON	DURHAM TREATMENT PLANT	34 2623	07/31/85	PERMIT ISSUED	03/10/86	RNW	Y
YAMHILL	ROWELL & WICKERSHAM CONTR	36 5330	03/15/85	PERMIT ISSUED	03/10/86	RNW	Y
JOSEPHINE	ROUGH & READY LUMBER CO.	17 0018	04/30/85	PERMIT ISSUED	03/13/86	RNW	Y
UMATILLA	MORRISON-KNUDSEN CO INC.	30 0053	05/06/85	PERMIT ISSUED	03/13/86	RNW	Y
YAMHILL	BURCH CONCRETE & SUPP	36 5032	09/24/85	PERMIT ISSUED	03/14/86	RNW	N
CURRY	SOUTH COAST LUMBER CO	08 0008	01/28/85	PERMIT ISSUED	03/17/86	RNW	
DESCHUTES	REDMOND TALLOW CO IN	09 0032	02/07/86	PERMIT ISSUED	03/17/86	RNW	
JACKSON	OREGON CUTSTOCK & MOULDNG	15 0047	10/11/85	PERMIT ISSUED	03/17/86	RNW	
POLK	FRANKLIN SWEED INC	27 4021	01/07/86	PERMIT ISSUED	03/17/86	RNW	N
UNION	BOISE CASCADE CORP	31 0011	05/20/85	PERMIT ISSUED	03/17/86	RNW	
YAMHILL	MID VALLEY WORKSHOP	36 0035	06/18/85	PERMIT ISSUED	03/17/86	RNW	N
YAMHILL	YAMHILL FARM & SUPP	36 9003	01/13/86	PERMIT ISSUED	03/17/86	RNW	N
CLACKAMAS	HANDSCHY INDUSTRIES INC.	03 2721	10/21/85	PERMIT ISSUED	03/24/86	NEW	
DESCHUTES	PIONEER CUT STOCK INC	P 09 0083	01/27/86	PERMIT ISSUED	03/24/86	NEW	
WASHINGTON	MARK INC DBA TDS OF OREGN	34 2697	05/08/85	PERMIT ISSUED	03/24/86	NEW	
PORT.SOURCE	PRODUCTION CRUSHERS	37 0135	01/27/86	PERMIT ISSUED	03/24/86	RNW	N
PORT.SOURCE	GARY WILMES SAND & GRAVEL	37 0352	01/13/86	PERMIT ISSUED	03/24/86	EXT	

TOTAL NUMBER QUICK LOOK REPORT LINES 33

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division
(Reporting Unit)

March 1986
(Month and Year)

PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*

Indirect Sources

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality
(Reporting Unit)

March 1986
(Month and Year)

PLAN ACTIONS COMPLETED 22

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*

MUNICIPAL WASTE SOURCES 17

Douglas	Drain Storage Pond 10 mg	3-7-86	Provisional Approval
Clatsop	Gearhart Deli/Store Septic Tank/Bottomless Sand Filter 2010 gpd	3/11/86	Provisional Approval
Tillamook	Twin Rock S.D. Holding Tank (F.E.B.) 20,000 gallons	3-13-86	Rejected
Clackamas	David A. VanDoozer dba Riverside RV Resort & Spa Recirculating Gravel Filter 4870 gpd	3-10-86	Provisional Approval
Curry	Rogue Landing Recirculating Gravel Filter 5250 gpd	3-14-86	Provisional Approval
Multnomah	Portland S.E. Relieving Interceptor, Phase 3 90 mgd	3-25-86	Provisional Approval
Umatilla	Vista Estates, MH Park Repair of Drainfield 14,500 gpd	3-31-86	Provisional Approval
Lincoln	Yachats Quiet water, Phase IV	3-28-86	Provisional Approval
Jackson	Medford Medford Shopping Center	3-28-86	Provisional Approval
Douglas	Glendale Pacific Avenue Sewer Ext.	3-28-86	Provisional Approval

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality
(Reporting Unit)

March 1986
(Month and Year)

PLAN ACTIONS COMPLETED 22

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*

MUNICIPAL WASTE SOURCES (Continued)

Josephine	Grants Pass Country View MH Park	3-28-86	Provisional Approval
Clackamas	Wilsonville Charbonneau, 4th Addition (Single family, east)	3-28-86	Provisional Approval
Clackamas	Lake Oswego Village On the Lake (revised) Collection System including two lift stations	3-28-86	Provisional Approval
Clackamas	Canby Elligson Addition	3-28-85	Provisional Approval
Clackamas	Tri-City (West Linn) Mar Court West	3-28-86	Provisional Approval
Clackamas	Tri-City (Gladstone) Martin Addition Subdivision	3/31/86	Provisional Approval
Jackson	Ashland Mill Pond PUD	4-4-86	Provisional Approval

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DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality Division
(Reporting Unit)

March 1986
(Month and Year)

PLAN ACTIONS COMPLETED 22

* County	* Name of Source/Project	* Date	* Action	*
*	* /Site and Type of Same	* of Action*		*
*	*	*	*	*

INDUSTRIAL WASTE SOURCES 5

Tillamook	Widmer Farms, Inc. Manure Control Facility Tillamook	3-11-86	Approved
Tillamook	Andrew S. Fletcher Manure Control Facility Tillamook	3-11-86	Approved
Tillamook	Larry Zweifel Manure Control Facility Tillamook	3-11-86	Approved
Union	Boise Cascade Waste Water Recycle System Elgin	3-11-86	Approved
Yamhill	Willamina Lumber Closed Loop Heat Exchange Log Conditioning System Willamina	3-18-86	Approved

SUMMARY OF ACTIONS TAKEN
ON WATER PERMIT APPLICATIONS IN MAR 86

7 APR 86

SOURCE CATEGORY & PERMIT SUBTYPE	NUMBER OF APPLICATIONS FILED						NUMBER OF PERMITS ISSUED						APPLICATIONS PENDING PERMIT ISSUANCE (1)			CURRENT TOTAL OF ACTIVE PERMITS		
	MONTH			FISCAL YEAR			MONTH			FISCAL YEAR			NPDES	WPCF	GEN	NPDES	WPCF	GEN
	NPDES	WPCF	GEN	NPDES	WPCF	GEN	NPDES	WPCF	GEN	NPDES	WPCF	GEN						
DOMESTIC																		
NEW	1	3	0	4	16	0	1	4	0	2	13	0	5	11	0			
RW	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0			
RWO	2	3	0	16	9	0	4	0	0	9	6	0	26	12	0			
MW	1	0	0	2	0	0	1	0	0	3	0	0	2	1	0			
MWO	1	0	0	10	2	0	0	1	0	5	1	0	7	1	0			
TOTAL	5	6	0	32	27	0	6	5	0	19	20	0	41	25	0	232	157	28
INDUSTRIAL																		
NEW	1	1	2	4	10	17	1	1	0	3	9	13	4	9	2			
RW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
RWO	0	4	0	16	18	1	7	3	0	26	14	0	20	14	0			
MW	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0			
MWO	1	1	2	9	3	4	0	0	2	9	1	7	6	2	3			
TOTAL	2	6	4	29	31	22	8	4	2	38	24	20	31	25	5	171	138	339
AGRICULTURAL																		
NEW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
RW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
RWO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
MW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
MWO	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0			
TOTAL	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	2	11	58
GRAND TOTAL	7	12	4	61	59	22	14	9	2	57	45	20	72	50	5	405	306	425

1) DOES NOT INCLUDE APPLICATIONS WITHDRAWN BY THE APPLICANT, APPLICATIONS WHERE IT WAS DETERMINED A PERMIT WAS NOT NEEDED, AND APPLICATIONS WHERE THE PERMIT WAS DENIED BY DEQ.

IT DOES INCLUDE APPLICATIONS PENDING FROM PREVIOUS MONTHS AND THOSE FILED AFTER 31-MAR-86.

NEW - NEW APPLICATION
 RW - RENEWAL WITH EFFLUENT LIMIT CHANGES
 RWO - RENEWAL WITHOUT EFFLUENT LIMIT CHANGES
 MW - MODIFICATION WITH INCREASE IN EFFLUENT LIMITS
 MWO - MODIFICATION WITHOUT INCREASE IN EFFLUENT LIMITS

PERMIT CAT	PERMIT NUMBER	SUB- TYPE	SOURCE ID	LEGAL NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
<u>General: Cooling Water</u>								
IND	100	GEN01	MWO	14719	CASCADE CONSTRUCTION COMPANY, INC.	PORTLAND	MULTNOMAH/NWR	12-MAR-86 31-DEC-90
IND	100	GEN01	MWO	21332	RSG FOREST PRODUCTS, INC.	ESTACADA	CLACKAMAS/NWR	19-MAR-86 31-DEC-90
<u>NPDES</u>								
IND	100153	NPDES	NEW	26014	EAST COUNTY AGGREGATE'S INC.	EAGLE CREEK	CLACKAMAS/NWR	14-MAR-86 28-FEB-91
DOM	100157	NPDES	RWO	94805	WESTFIR, CITY OF	WESTFIR	LANE/WVR	19-MAR-86 28-FEB-91
DOM	100158	NPDES	NEW	94225	WESTPORT SEWER SERVICE DISTRICT	WESTPORT	CLATSOP/NWR	19-MAR-86 31-DEC-90
DOM	100159	NPDES	RWO	90735	UNIFIED SEWERAGE AGENCY OF WASHINGTON COUNTY	TIGARD	WASHINGTON/NWR	25-MAR-86 28-FEB-91
DOM	100160	NPDES	RWO	63925	TRI-CITY SERVICE DISTRICT	OREGON CITY	CLACKAMAS/NWR	25-MAR-86 31-DEC-90
DOM	3800	NPDES	MW	58827	MT. HOOD MEADOWS OREG., LTD.	GOVERNMENT CAMP	HOOD RIVER/CR	31-MAR-86 31-JAN-89
DOM	100161	NPDES	RWO	68260	PENDLETON, CITY OF	PENDLETON	UMATILLA/ER	31-MAR-86 31-JAN-91
IND	100162	NPDES	RWO	68471	PENNWALT CORPORATION	PORTLAND	MULTNOMAH/NWR	31-MAR-86 31-MAR-91
IND	100163	NPDES	RWO	53166	MARTIN-MARIETTA CORPORATION	THE DALLES	WASCO/CR	31-MAR-86 31-MAR-91
IND	100164	NPDES	RWO	74860	REYNOLDS METALS COMPANY	TROUTDALE	MULTNOMAH/NWR	31-MAR-86 31-MAR-91
IND	100166	NPDES	RWO	64250	OREGON INSTITUTE OF TECHNOLOGY	KLAMATH FALLS	KLAMATH/CR	31-MAR-86 31-MAR-91
IND	100167	NPDES	RWO	55850	MERLE WEST MEDICAL CENTER	KLAMATH FALLS	KLAMATH/CR	31-MAR-86 31-MAR-91
IND	100168	NPDES	RWO	43230	JELD-WEN, INC.	KLAMATH FALLS	KLAMATH/CR	31-MAR-86 28-FEB-91
IND	100170	NPDES	RWO	64905	OREGON STEEL MILLS, INC.	PORTLAND	MULTNOMAH/NWR	31-MAR-86 28-FEB-91

CAT	PERMIT NUMBER	TYPE	SUB-TYPE	SOURCE ID	LEGAL NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
<hr/>									
<u>WPCF</u>									
DOM	100152	WPCF	NEW	100107	DOUGLAS COUNTY PARKS DEPARTMENT	AZALEA	DOUGLAS/SWR	13-MAR-86	31-JAN-91
DOM	100155	WPCF	NEW	28830	FALLS CITY	FALLS CITY	POLK/WVR	19-MAR-86	31-JAN-91
DOM	100156	WPCF	NEW	100057	SHAW, KEITH & PEARSON, JOHN R. C.	PORTLAND	MULTNOMAH/NWR	19-MAR-86	31-JAN-91
DOM	3603	WPCF	MWO	46990	WINDSOR CORPORATION	LEWISBURG	BENTON/WVR	31-MAR-86	31-DEC-87
IND	100165	WPCF	RWO	19493	CONRAD WOOD PRESERVING CO.	HAUSER	COOS/SWR	31-MAR-86	31-JAN-91
DOM	100169	WPCF	NEW	100029	COVE ORCHARD SEWER SERVICE DISTRICT		YAMHILL/WVR	31-MAR-86	31-JAN-91
IND	100171	WPCF	RWO	90622	NORTHWESTERN POTATO, INC.	METOLIUS	JEFFERSON/CR	31-MAR-86	31-JAN-91
IND	100172	WPCF	RWO	96194	WEYERHAEUSER COMPANY	NORTH BEND	COOS/SWR	31-MAR-86	31-JAN-91
IND	100173	WPCF	NEW	100054	OREGON STATE UNIVERSITY, FISHERIES & WILDLIFE DEPT.	CORVALLIS	BENTON/WVR	31-MAR-86	31-JAN-91

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

March 1986
(Month and Year)

SUMMARY OF SOLID AND HAZARDOUS WASTE PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sites Under Permits	Sites Reqr'g Permits
	Month	FY	Month	FY			
<u>General Refuse</u>							
New	1	4	-	4	1		
Closures	-	4	-	3	6		
Renewals	2	35	1	24	42		
Modifications	1	10	2	65	1		
Total	4	53	3	96	50	182	182
<u>Demolition</u>							
New	-	-	-	-	-		
Closures	-	1	-	-	3		
Renewals	1	2	-	1	2		
Modifications	-	1	-	2	-		
Total	1	4	-	3	5	14	14
<u>Industrial</u>							
New	1	14	-	8	10		
Closures	-	1	-	5	1		
Renewals	3	25	-	8	27		
Modifications	-	6	-	3	4		
Total	4	46	-	24	42	105	105
<u>Sludge Disposal</u>							
New	-	1	-	-	1		
Closures	-	-	-	-	-		
Renewals	-	1	-	-	1		
Modifications	-	-	-	-	-		
Total	-	2	-	-	2	16	16
<u>Hazardous Waste</u>							
New	-	1	-	-	9		
Authorizations	40	530	40	530	-		
Renewals	-	-	-	-	1		
Modifications	-	-	-	-	-		
Total	40	531	40	530	10	14	19
<u>GRAND TOTALS</u>	49	634	43	653	109	331	336

MAR.5S (11/84) (SE5285.B)

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

March 1986
(Month and Year)

PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	*
Douglas	Roseburg Landfill Existing facility	3/10/86	Permit renewed	*
Marion	Ogden Projects of Marion, Inc. New incinerator/energy recovery facility	3/17/86	Permit amended	*
Grant	Prairie City Landfill Existing landfill	3/25/86	Permit amended	*

DATE	WASTE TYPE	SOURCE	DISPOSE NOW	DISPOSE ANNUALLY
13-MAR-86	BETZ 721 INHIBITOR	ELECTRIC SERVICES	0	0.27 CUBIC YARDS
13-MAR-86	BETZ 419 DEPOSIT CONTROL	ELECTRIC SERVICES	0	0.27 CUBIC YARDS
2 Request(s) approved for generators in Montana				
05-MAR-86	PCB LIQUID	HAZARDOUS WASTE DISPOSAL SITE	0	2.43 CUBIC YARDS
05-MAR-86	WHEAT IMPREGNATED WITH RODENTICIDE	LAND & WILDLIFE CONSERVATION	0	0.54 CUBIC YARDS
07-MAR-86	CONTAMINATED SOIL & DEBRIS/UST PROGRAM WASTE	AIRCRAFT PARTS	0	2,000.00 CUBIC YARDS
07-MAR-86	FERROUS SULFIDE SLUDGE	AIRCRAFT PARTS	0	90.00 CUBIC YARDS
07-MAR-86	CHLORINATED SOLVENT/UST PROGRAM WASTE	AIRCRAFT PARTS	0	2,000.00 CUBIC YARDS
07-MAR-86	NONCHLORINATED SOLVENT/UST PROGRAM WASTE	AIRCRAFT PARTS	0	2,000.00 CUBIC YARDS
07-MAR-86	HEAVY METAL CONTAMINATED SOLID	AIRCRAFT PARTS	0	250.00 CUBIC YARDS
10-MAR-86	DDT LIQUID LAB PACK	OTHER GOVERNMENT AGENCY	0	0.54 CUBIC YARDS
10-MAR-86	STRYCHNINE TREATED GRAIN BAIT	LAND & WILDLIFE CONSERVATION	0	3.51 CUBIC YARDS
13-MAR-86	LEAD CONTAMINATED SOIL	STORAGE BATTERIES	0	75.00 CUBIC YARDS
13-MAR-86	FLOOR DRY CONTAMINATED WITH BATTERY ACID	HAND SAWS & SAW BLADES	0	0.27 CUBIC YARDS
13-MAR-86	DDT	OTHER GOVERNMENT AGENCY	0	4.59 CUBIC YARDS

12 Request(s) approved for generators in Oregon

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04-MAR-86	STABILIZED BOEING UST WASTE	HAZARDOUS WASTE DISPOSAL SITE	0	2,000.00 CUBIC YARDS
04-MAR-86	STABILIZED BOEING UST WASTE	HAZARDOUS WASTE DISPOSAL SITE	0	2,000.00 CUBIC YARDS

DATE	WASTE TYPE	SOURCE	DISPOSE NOW	DISPOSE ANNUALLY
05-MAR-86	EPOXY RESIN & AMINE BLEND	PLASTICS MATERIALS, SYNTHETICS	0	2.67 CUBIC YARDS
05-MAR-86	PCB FLOURESCENT BALLASTS	COLLEGES & UNIVERSITIES	0	5.00 CUBIC YARDS
05-MAR-86	SOLIDIFIED SOILS CONTAMINATED WITH LEAD	ALKALIES & CHLORINE	0	8.10 CUBIC YARDS
05-MAR-86	INSULATION, PLASTIC BAGS, CONTAMINATED WITH CHLOROFORM AND CARBON TETRACHLORIDE	ALKALIES & CHLORINE	0	2.70 CUBIC YARDS
05-MAR-86	EMPTY DRUMS CONTAMINATED WITH COAL TAR DISTILLATE	PRIMARY PRODUCTION OF ALUMINUM	0	54.00 CUBIC YARDS
05-MAR-86	EMPTY DRUMS CONTAMINATED WITH 1, 1, 1-TRICHLOROETHANE	PRIMARY PRODUCTION OF ALUMINUM	0	13.50 CUBIC YARDS
05-MAR-86	PCB CONTAMINATED SOLIDS	BOTTLED & CANNED SOFT DRINKS	0	8.10 CUBIC YARDS
05-MAR-86	WASTE SOLVENT INK/DIRT	SANITARY FOOD CONTAINERS	0	1.08 CUBIC YARDS
10-MAR-86	CYANIDE CONTAMINATED LAB PACK	PLATING & ANODIZING	0	2.70 CUBIC YARDS
10-MAR-86	COPPER CONTAMINATED SOIL	RCRA SPILL CLEANUP	0	3,000.00 CUBIC YARDS
13-MAR-86	HEAVY METAL CONTAMINATED SOLID	AIRCRAFT	0	250.0 CUBIC YARDS
13-MAR-86	JET FUEL SPILL CLEANUP	DEPARTMENT OF DEFENSE	0	2.00 CUBIC YARDS
13-MAR-86	CONSOLIDATION OF LEAD CONTAMINATED SLUDGE	HAZARDOUS WASTE DISPOSAL SITE	0	648.00 CUBIC YARDS
13-MAR-86	SODIUM HYDROXIDE CONTAMINATED CONCRETE	DEPARTMENT OF DEFENSE	0	3.00 CUBIC YARDS
13-MAR-86	IGNITABLE WASTES	DEPARTMENT OF DEFENSE	0	2.43 CUBIC YARDS
13-MAR-86	EMPTY DRUMS LAST CONTAINING COMBUSTIBLE LIQUIDS	PRIMARY PRODUCTION OF ALUMINUM	0	13.50 CUBIC YARDS
13-MAR-86	PCB FLUORESCENT LIGHT BALLAST	ELEMENTARY & SECONDARY SCHOOLS	0	1.62 CUBIC YARDS
13-MAR-86	PCB TRANSFORMERS	PULP MILLS	0	9.70 CUBIC YARDS
17-MAR-86	ASPHALT/SAND	HAZARDOUS WASTE DISPOSAL SITE	0	100.00 CUBIC YARDS

21 Request(s) approved for generators in Washington

DATE	WASTE TYPE	SOURCE	DISPOSE NOW	DISPOSE ANNUALLY
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35 Requests granted - Grand Total

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program
(Reporting Unit)

March, 1986
(Month and Year)

SUMMARY OF NOISE CONTROL ACTIONS

Source Category	New Actions Initiated		Final Actions Completed		Actions Pending	
	Mo	FY	Mo	FY	Mo	Last Mo
Industrial/ Commercial	13	91	10	79	193	190
Airports			2	9	1	1

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program			March, 1986	
(Reporting Unit)			(Month and Year)	
<u>FINAL NOISE CONTROL ACTIONS COMPLETED</u>				
County	Name of Source and Location	Date	Action	
Clackamas	Ast Hay Company, Canby	03/86	In Compliance	
Clackamas	Unique Plastics Company, Portland	03/86	In Compliance	
Multnomah	Hoe & Company, Inc., Portland	03/86	No Violation	
Multnomah	US Army Reserve, Sears Hall Training Center, Portland	03/86	In Compliance	
Washington	Van Dyke Fixture Company, Hillsboro	03/86	No Violation	
Marion	Chelsea's Salem	03/86	In Compliance	
Marion	Gerlinger Castings, Salem	03/86	In Compliance	
Marion	West Foods, Inc., Salem	03/86	No Violation	
Yamhill	Benny Huey's Tavern Sheridan	03/86	In Compliance	
Douglas	Brimhall Sand Blasting, Winston	03/86	In Compliance	
Jackson	Timberland Logging Heliport	03/86	Boundary Approval	
Columbia	St. Helens Hospital Heliport	03/86	Exception Granted	

CIVIL PENALTY ASSESSMENTS

DEPARTMENT OF ENVIRONMENTAL QUALITY
1986

CIVIL PENALTIES ASSESSED DURING MONTH OF MARCH, 1986:

<u>Name and Location of Violation</u>	<u>Case No. & Type of Violation</u>	<u>Date Issued</u>	<u>Amount</u>	<u>Status</u>
Riedel International, Inc. Oregon City, Oregon	WQ-NWR-86-15 Discharged turbid waste water to public waters, in violation of permit.	3/12/86	\$1,000	Paid 3/26/86.

March, 1986
DEQ/EQC Contested Case Log

<u>ACTIONS</u>	<u>LAST MONTH</u>	<u>PRESENT</u>
1 Preliminary Issues	1	0
2 Discovery	0	0
3 Settlement Action	1	3
4 Hearing to be scheduled	0	0
5 Hearing scheduled	4	3
6 HO's Decision Due	1	2
7 Briefing	3	3
8 Inactive	<u>5</u>	<u>5</u>
SUBTOTAL of cases before hearings officer.	15	16
9 HO's Decision Out/Option for EQC Appeal	2	0
10 Appealed to EQC	2	1
11 EQC Appeal Complete/Option for Court Review	0	0
12 Court Review Option Taken	2	2
13 Case Closed	<u>2</u>	<u>2</u>
TOTAL Cases	23	21

15-AQ-NWR-81-178 15th Hearing Section case in 1981 involving Air Quality Division violation in Northwest Region jurisdiction in 1981; 178th enforcement action in the Department in 1981.

\$ Civil Penalty Amount
 ACDP Air Contaminant Discharge Permit
 AGl Attorney General l
 AQ Air Quality Division
 AQOB Air Quality, Open Burning
 CR Central Region
 DEC Date Date of either a proposed decision of hearings officer or a decision by Commission
 ER Eastern Region
 FB Field Burning
 Hrng Rfrl Date when Enforcement Section requests Hearing Section schedule a hearing
 Hrngs Hearings Section
 NP Noise Pollution
 NPDES National Pollutant Discharge Elimination System wastewater discharge permit.
 NWR Northwest Region
 OSS On-Site Sewage Section
 P Litigation over permit or its conditions
 Prtys All parties involved
 Rem Order Remedial Action Order
 Resp Code Source of next expected activity in case
 SS Subsurface Sewage (now OSS)
 SW Solid Waste Division
 SWR Southwest Region
 T Litigation over tax credit matter
 Transcr Transcript being made of case
Underlining New status or new case since last month's contested case log
 WQ Water Quality Division
 WVR Willamette Valley Region

March 1986

DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrl	Hrng Date	Resp Code	Case Type & No.	Case Status
WAH CHANG	04/78	04/78		Prtys	16-P-WQ-WVR-78-2849-J NPDES Permit Modification	Current permit in force. Hearing deferred.
WAH CHANG	04/78	04/78		Prtys	03-P-WQ-WVR-78-2012-J NPDES Permit Modification	Current permit in force. Hearing deferred.
HAYWORTH FARMS, INC., and HAYWORTH, John W.	01/14/83	02/28/83	04/04/84	Resp	50-AQ-FB-82-09 FB Civil Penalty of \$1,000	Appealed to Court of Appeals.
McINNIS ENT.	06/17/83	06/21/83		Prtys	52-SS/SW-NWR-83-47 SS/SW Civil Penalty of \$500	Hearing deferred pending conclusion of court action.
McINNIS ENTERPRISES, LTD., et al.	09/20/83	09/22/83		Prtys	56-WQ-NWR-83-79 WQ Civil Penalty of \$14,500	Hearing deferred pending conclusion of court action.
24 McINNIS ENTERPRISES, LTD., et al.	10/25/83	10/26/83		Prtys	59-SS-NWR-83-33290P-5 SS license revocation	Hearing deferred pending conclusion of court action.
CLEARWATER IND., Inc.	10/11/83	10/17/83	01/13/86	<u>Dept</u>	58-SS-NWR-83-82 SS Civil Penalty of \$1000	Briefing.
CLEARWATER IND., Inc.	01/13/84	01/18/84	01/13/86	<u>Dept</u>	02-SS-NWR-83-103 SS Civil Penalty of \$500	Briefing.

March 1986

DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrl	Hrng Date	Resp Code	Case Type & No.	Case Status
VANDERVELDE, Roy	06/12/84	06/12/84	08/22/85	Dept	20-WQ-WVR-84-01 WQ Civil Penalty of \$2,500	Appeal to EQC filed more than 30 days after hearing officer's decision was issued.
CLEARWATER Industries, Inc.	10/11/84	10/11/84	01/13/86	Hrng	24-SS-NWR-84-P Sewage Disposal Service License Denial	<u>Request for permit withdrawn.</u> Order of dismissal to be issued.
LAVA DIVERSION PROJECT	12/14/84	12/27/84		Prtys	25-WQ-CR-FERC-5205 Hydroelectric plant certification	EQC certification denial appealed to Court of Appeals.
UNITED CHROME PRODUCTS, INC.		02/19/85		Hrgs	02-HW-WQ-WVR-84-158 \$6,000-civil-penalty	<u>Order affirming \$5,000 penalty issued 2/18/85. No appeal. Case closed.</u>
FUNRUE, Amos	03/15/85	03/19/85	06/20/85	<u>Dept</u>	05-AQ-FB-84-141 Civil Penalty of \$500	<u>Department to file its brief on appeal.</u>
DANT & RUSSELL, INC.	05/31/85	05/31/85	03/21/86	Prtys	15-HW-NWR-85-60 Hazardous waste disposal Civil Penalty of \$2,500	<u>Hearing deferred for settlement action.</u>
ALPHAUSER, GLENN-E.	07/08/85	07/16/85	09/20/85	Hrgs	17-SW-NWR-85-77 Unauthorized-Waste Disposal	<u>No appeal. Case closed.</u>

March 1986

DEQ/EQC Contested Case Log

<u>Pet/Resp Name</u>	<u>Hrng Rqst</u>	<u>Hrng Rfrl</u>	<u>Hrng Date</u>	<u>Resp Code</u>	<u>Case Type & No.</u>	<u>Case Status</u>
MERIT OIL & REFINING CO.		07/24/85	<u>05/13/86</u> <u>Tenative</u>	Prtys	20-WQ-NWR-85-61 WQ Civil Penalty of \$1,200	<u>Hearing scheduled.</u>
E.J. BARTELLS CO.	10/04/85	10/08/85	02/27/86	Prtys	21-AQ/WQ/SW-NWR-85-78 \$10,000 Civil Penalty	<u>Hearing deferred for settlement action.</u>
AMCOAT, INC.	10/15/85	10/23/85	04/04/86	Prtys	22-HW/WQ-NWR-85-85 \$5,000 civil penalty	<u>Hearing deferred for settlement action.</u>
BRAZIER FOREST PRODUCTS	11/22/85	12/12/85	02/10/86	<u>Hrgs</u>	23-HSW-85 Declaratory Ruling	<u>Ruling due.</u>
NULF, DOUG	01/10/86	01/13/86	<u>04/28/86</u>	Prtys	01-AQFB-85-02 \$500 Civil Penalty	<u>Hearing scheduled.</u>
DOERFLER, RICHARD	01/24/86	01/31/86	04/11/86	Prtys	02-AQFB-85-03 \$300 Civil Penalty	Hearing scheduled.

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DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality, Water Quality,
Hazardous and Solid Waste Division
(Reporting Unit)

April 1986
(Month and Year)

SUMMARY OF PLAN ACTIONS

	Plans Received		Plans Approved		Plans Disapproved		Plans Pending
	<u>Month</u>	<u>FY</u>	<u>Month</u>	<u>FY</u>	<u>Month</u>	<u>FY</u>	
<u>Air</u>							
Direct Sources	3	58	5	56	0	0	14
Small Gasoline Storage Tanks Vapor Controls	-	-	-	-	-	-	-
Total	3	58	5	56	0	0	14
<u>Water</u>							
Municipal	10	136	17	147	1	4	30
Industrial	7	74	8	72	0	0	7
Total	17	210	25	219	1	4	37
<u>Solid Waste</u>							
Gen. Refuse	1	29	2	20	1	5	29
Demolition	1	4	1	1	-	1	3
Industrial	2	24	3	18	-	-	18
Sludge	1	2	1	1	-	1	-
Total	5	59	7	40	1	7	50
<u>Hazardous Wastes</u>							
	-	5	-	5	-	-	-
<u>GRAND TOTAL</u>	25	332	37	320	2	11	101

SB5285.A
MAR.2 (1/83)

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
MONTHLY ACTIVITY REPORT
DIRECT SOURCES
PLAN ACTIONS COMPLETED

COUNTY	NUMBER	SOURCE	PROCESS DESCRIPTION	DATE OF ACTION	ACTION
CLATSOP	125	CROWN ZELLERBACH COMPANY	ELECTROSTATIC PRECIPITATOR	03/25/86	APPROVED
WASHINGTON	137	ELECTRO SCIENTIFIC IND	VENTURI SCRUBBER INSTAL	03/25/86	APPROVED
MULTNOMAH	139	OWENS-ILLINOIS	GAS-FIRED FURNACE (21-D)	04/10/86	APPROVED
LINN	144	WILLAMETTE INDUSTRIES	CYCLONE ON DRY TRIM	04/24/86	APPROVED
MULTNOMAH	145	ESCO CORPORATION PLANT 1	PAINT BASKET INCINERATOR	05/01/86	APPROVED
TOTAL NUMBER QUICK LOOK REPORT LINES			5		

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division
(Reporting Unit)

April 1986
(Month and Year)

SUMMARY OF AIR PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sources Under Permits	Sources Req'g Permits
	Month	FY	Month	FY			
<u>Direct Sources</u>							
New	2	20	0	30	8		
Existing	0	13	0	11	13		
Renewals	15	122	20	141	86		
Modifications	<u>8</u>	<u>13</u>	<u>0</u>	<u>34</u>	<u>15</u>		
Total	25	168	20	216	122	1313	1334
<u>Indirect Sources</u>							
New	0	12	0	18	0		
Existing	0	0	0	0	0		
Renewals	0	0	0	0	0		
Modifications	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>		
Total	<u>0</u>	<u>12</u>	<u>0</u>	<u>18</u>	<u>0</u>	<u>250</u>	<u>250</u>
<u>GRAND TOTALS</u>	25	180	20	234	122	1563	1584

Number of
Pending Permits

Comments

25	To be reviewed by Northwest Region
14	To be reviewed by Willamette Valley Region
7	To be reviewed by Southwest Region
1	To be reviewed by Central Region
2	To be reviewed by Eastern Region
11	To be reviewed by Program Operations Section
36	Awaiting Public Notice
<u>26</u>	Awaiting end of 30-day Public Notice Period
122	

DEPARTMENT OF ENVIRONMENTAL QUALITY
 AIR QUALITY DIVISION
 MONTHLY ACTIVITY REPORT
 DIRECT SOURCES
 PERMITS ISSUED

COUNTY	SOURCE	PERMIT NUMBER	APPL. RECEIVED	STATUS	DATE ACHIEVED	TYPE	PSEL
CLACKAMAS	AVISON LUMBER COMPANY	03	1772 05/22/84	PERMIT ISSUED	03/28/86	RNW	Y
COOS	MOORE MILL & LUMBER CO.	06	0026 11/27/85	PERMIT ISSUED	03/28/86	RNW	Y
DOUGLAS	SUPERIOR LUMBER CO	10	0048 05/01/85	PERMIT ISSUED	03/28/86	RNW	Y
BENTON	ALSEA QUARRIES	02	0003 11/25/85	PERMIT ISSUED	04/16/86	RNW	
CLACKAMAS	WESTERN PACIFIC CNST MTL S	03	2469 12/11/84	PERMIT ISSUED	04/16/86	RNW	
DESCHUTES	DESCHUTES READY MIX S & G	09	0052 02/12/85	PERMIT ISSUED	04/16/86	RNW	N
DOUGLAS	DOUGLAS CO FOREST PROD	10	0012 01/30/85	PERMIT ISSUED	04/16/86	RNW	N
LINN	MORSE BROS INC	22	7136 12/26/85	PERMIT ISSUED	04/16/86	RNW	N
MARION	SILVERTON SAND & GRAVEL	24	6345 02/19/86	PERMIT ISSUED	04/16/86	RNW	
MULTNOMAH	LINNTON PLYWOOD	26	2073 06/13/84	PERMIT ISSUED	04/16/86	RNW	
UMATILLA	PIONEER ASPHALT, INC.	30	0067 12/16/85	PERMIT ISSUED	04/16/86	RNW	Y
PORT.SOURCE	OCEANLAKE SAND & GRAVEL	37	0005 03/19/86	PERMIT ISSUED	04/16/86	RNW	
PORT.SOURCE	PACIFIC ROCK PRODUCTS INC	37	0076 02/25/86	PERMIT ISSUED	04/16/86	RNW	
PORT.SOURCE	C. C. MEISEL CO.	37	0132 03/12/86	PERMIT ISSUED	04/16/86	RNW	
CLACKAMAS	PROTO TOOL COMPANY	03	2632 09/03/85	PERMIT ISSUED	04/18/86	RNW	N
LINN	LINN TIMBER, INC.	22	2526 09/04/85	PERMIT ISSUED	04/18/86	RNW	Y
TILLAMOCK	PUBLISHERS PAPER CO	29	0007 04/24/85	PERMIT ISSUED	04/18/86	RNW	
WALLOWA	BOISE CASCADE CORP	32	0001 01/10/85	PERMIT ISSUED	04/18/86	RNW	Y
PORT.SOURCE	MORSE BROS INC	37	0137 03/27/86	PERMIT ISSUED	04/18/86	RNW	
PORT.SOURCE	MORSE BROS INC	37	0138 03/27/86	PERMIT ISSUED	04/18/86	RNW	
TOTAL NUMBER QUICK LOOK REPORT LINES							20

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division
(Reporting Unit)

April 1986
(Month and Year)

PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*

Indirect Sources

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality
(Reporting Unit)

April 1986
(Month and Year)

PLAN ACTIONS COMPLETED 25

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*

MUNICIPAL WASTE SOURCES 17

Wallowa	Duane Wiggins Bottomless Sand Filter	4-15-86	Final comments for permit conditions to Region.
Clatsop	National Park Service Fort Clatsop National Memorial On-site repair 3,500 gpd	4-21-86	Final comments for permit conditions to Region.
Harney	BLM Frenchglen Fireguard Station 840 gpd on-site repair	5-7-86	Comments to CRO for permit.
Multnomah	Portland Cherry Park Interceptor	5-9-86	Provisional Approval
Multnomah	Portland Cherry Park Pump Station	5-9-86	Provisional Approval
Multnomah	Portland N.E. 122nd Interceptor	5-9-86	Provisional Approval
Jackson	Rogue River Parkview Phase III	5-1-86	Provisional Approval
Jackson	Eagle Point Phase I Upgrade Chlorination & irrigation	4-11-86	Provisional Approval
Jackson	BCVSA Peace/Maverick Lane (Project No. 83-9)	4-28-86	Provisional Approval
Clackamas	Oak Lodge Sanitary District Flamingo Mobile Manor Annex	4-28-86	Provisional Approval
Josephine	Grants Pass Rogue Terrace PUD Phase II	4-28-86	Provisional Approval

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality
(Reporting Unit)

April 1986
(Month and Year)

PLAN ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*

MUNICIPAL WASTE SOURCES (Continued)

Polk	Dallas Greenway Two Mobile Home Park	4-28-86	Provisional Approval
Josephine	Harbeck - Fruitdale S.D. KAGI Sanitary Stubs	4-28-86	Provisional Approval
Coos	Coquille STP Sewer Main Replacement	4-28-86	Provisional Approval
Benton	Alsea County Service District Sanitary Sewers	4-14-86	Provisional Approval
Benton	Alsea County Service District Recirculating Gravel Filter and drainfields 30,000 gpd	4-14-86	Provisional Approval
Lincoln	Depoe Bay Wastewater Emergency By-Pass Facilities	4-11-86	Provisional Approval

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality Division April 1986
 (Reporting Unit) (Month and Year)

PLAN ACTIONS COMPLETED 25

* County	* Name of Source/Project	* Date	* Action	*
*	* /Site and Type of Same	* of Action*		*
*	*	*	*	*

INDUSTRIAL WASTE SOURCES 8

Clackamas	Portland General Electric Co PCB Capacitor Replacement Clackamas	4-1-86	Approved
Tillamook	Jack Bennett Manure Control Facility Tillamook	4-1-86	Approved
Washington	Tektronix, Inc. Gas Chromatography Analyzer, Beaverton	4-9-86	Approved
Lane	Murphy Company Steam Vat Condensate Recycle, Florence	4-9-86	Approved
Tillamook	Marwyn Naegeli Manure Control Facility Tillamook	4-10-86	Approved
Tillamook	Neil Tannler Manure Control Facility Tillamook	4-11-86	Approved
Tillamook	Willam Holt Manure Control Facility Tillamook	4-11-86	Approved
Tillamook	Victor Shreve Manure Control Facility Tillamook	4-11-86	Approved

SUMMARY OF ACTIONS TAKEN
ON WATER PERMIT APPLICATIONS IN APR 86

8 MAY 86

SOURCE CATEGORY & PERMIT SUBTYPE	NUMBER OF APPLICATIONS FILED						NUMBER OF PERMITS ISSUED						APPLICATIONS PENDING PERMIT ISSUANCE (1)			CURRENT TOTAL OF ACTIVE PERMITS		
	MONTH			FISCAL YEAR			MONTH			FISCAL YEAR			NPDES	WPCF	GEN	NPDES	WPCF	GEN
	NPDES	WPCF	GEN	NPDES	WPCF	GEN	NPDES	WPCF	GEN	NPDES	WPCF	GEN						
DOMESTIC																		
NEW	0	2	0	4	18	0	0	0	0	2	13	0	5	13	0			
RW	0	1	0	0	1	0	0	0	0	0	0	0	1	1	0			
RWO	4	3	0	20	12	0	0	0	0	10	6	0	29	15	0			
MW	0	0	0	3	0	0	0	0	0	3	0	0	3	0	0			
MWO	2	0	0	12	2	0	0	1	0	5	2	0	8	0	0			
TOTAL	6	6	0	39	33	0	0	1	0	20	21	0	46	29	0	231	157	28
INDUSTRIAL																		
NEW	0	0	2	4	10	20	0	0	1	3	10	5	4	9	3			
RW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
RWO	3	2	0	19	20	1	1	0	0	27	15	0	21	15	0			
MW	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0			
MWO	0	1	0	9	4	4	0	0	2	10	1	20	5	2	0			
TOTAL	3	3	2	32	34	25	1	0	3	40	26	25	31	26	3	171	138	340
AGRICULTURAL																		
NEW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
RW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
RWO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
MW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
MWO	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0			
TOTAL	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	2	11	58
GRAND TOTAL	9	9	2	71	68	25	1	1	3	60	48	25	77	55	3	404	306	426

1) DOES NOT INCLUDE APPLICATIONS WITHDRAWN BY THE APPLICANT, APPLICATIONS WHERE IT WAS DETERMINED A PERMIT WAS NOT NEEDED, AND APPLICATIONS WHERE THE PERMIT WAS DENIED BY DEQ.

IT DOES INCLUDE APPLICATIONS PENDING FROM PREVIOUS MONTHS AND THOSE FILED AFTER 30-APR-86.

NEW - NEW APPLICATION
 RW - RENEWAL WITH EFFLUENT LIMIT CHANGES
 RWO - RENEWAL WITHOUT EFFLUENT LIMIT CHANGES
 MW - MODIFICATION WITH INCREASE IN EFFLUENT LIMITS
 MWO - MODIFICATION WITHOUT INCREASE IN EFFLUENT LIMITS

CAT	PERMIT NUMBER	SUB- TYPE	SOURCE ID	LEGAL NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
<u>General: Cooling Water</u>								
IND	100	GEN01	MWO	100125	MALEY INVESTMENT CO., INC.	CONDON	GILLIAM/ER	15-APR-86 31-DEC-90
<u>General: Boiler Blowdown</u>								
IND	500	GEN05	NEW	9520	BOISE CASCADE CORPORATION	LA GRANDE	UNION/ER	19-APR-86 31-JUL-86
<u>General: Placer Mining</u>								
IND	600	GEN06	MWO	100088	HEREFORD MINING, INC.	HEREFORD	BAKER/ER	25-APR-86 31-JUL-86
<u>NPDES</u>								
IND	100174	NPDES	RWO	959	AGRIPAC, INC.	SALEM	MARION/WVR	25-APR-86 30-APR-91
<u>WPCF</u>								
DOM	3649	WPCF	MWO	76940	ROUND LAKE UTILITIES, INC.	KLAMATH/CR	22-APR-86	31-JAN-88

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

April 1986
(Month and Year)

SUMMARY OF SOLID AND HAZARDOUS WASTE PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sites Under Permits	Sites Reqr'g Permits
	Month	FY	Month	FY			
<u>General Refuse</u>							
New	-	4	-	4	1		
Closures	1	5	-	3	7		
Renewals	1	36	1	25	42		
Modifications	-	10	-	65	1		
Total	2	55	1	97	51	182	182
<u>Demolition</u>							
New	1	1	1	1	-		
Closures	-	1	1	1	2		
Renewals	-	2	-	1	2		
Modifications	-	1	-	2	-		
Total	1	5	2	5	4	14	14
<u>Industrial</u>							
New	1	15	-	8	11		
Closures	-	1	-	5	1		
Renewals	-	25	-	8	27		
Modifications	3	9	3	6	4		
Total	4	50	3	27	43	105	105
<u>Sludge Disposal</u>							
New	1	2	1	1	1		
Closures	-	-	-	-	-		
Renewals	-	1	-	-	1		
Modifications	-	-	-	-	-		
Total	1	3	1	1	2	16	16
<u>Hazardous Waste</u>							
New	-	1	-	-	9		
Authorizations	60	590	60	590	-		
Renewals	-	-	-	-	1		
Modifications	-	-	-	-	-		
Total	60	591	60	590	10	14	19
<u>GRAND TOTALS</u>	68	704	67	720	110	331	336

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

April 1986
(Month and Year)

PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	*
Curry	Gold Beach Plywood, Inc. Jerry's Flat Landfill Closed woodwaste site	4/1/86	Closure permit amended	*
Douglas	International Paper Co. Gardiner Landfill Existing facility	4/1/86	Permit amended	*
Douglas	International Paper Co. Horse Barn Landfill Existing facility	4/1/86	Closure permit amended	*
Clackamas	City of Canby New demolition site	4/4/86	Letter authorization issued	*
Umatilla	Pilot Rock Landfill Existing facility	4/10/86	Renewal application withdrawn (closure application filed)	*
Josephine	Axtell's Landfill Closed demolition site	4/17/86	Closure permit issued	*
Clatsop	Seacoast Nursery Construction, Inc. New sludge disposal site	4/18/86	Letter authorization issued	*

DATE	WASTE TYPE	SOURCE	DISPOSE NOW	DISPOSE ANNUALLY
02-APR-86	LAB PACKS - VARIOUS CHEMICALS	OTHER CHEMICAL PREPARATIONS	0	0.81 CUBIC YARDS
02-APR-86	LAB PACK - VARIOUS CHEMICALS	OTHER CHEMICAL PREPARATIONS	0	1.08 CUBIC YARDS
07-APR-86	LAB PACKS - FLAMMABLE	OTHER CHEMICAL PREPARATIONS	0	3.24 CUBIC YARDS
07-APR-86	LAB PACKS - VARIOUS CHEMICALS	OTHER CHEMICAL PREPARATIONS	0	0.54 CUBIC YARDS
07-APR-86	LAB PACKS - SOLIDS	OTHER CHEMICAL PREPARATIONS	0	1.35 CUBIC YARDS
07-APR-86	LAB PACKS - ALUMINUM NITRATE	OTHER CHEMICAL PREPARATIONS	0	0.81 CUBIC YARDS
07-APR-86	LAB PACKS - VARIOUS CHEMICALS	OTHER CHEMICAL PREPARATIONS	0	1.62 CUBIC YARDS

7 Request(s) approved for generators in Alberta

01-APR-86	SPENT MAGNESIUM BATTERIES	DEPARTMENT OF DEFENSE	0	20.00 CUBIC YARDS
01-APR-86	SPENT MAGNESIUM BATTERIES	DEPARTMENT OF DEFENSE	0	40.00 CUBIC YARDS
01-APR-86	SPENT MAGNESIUM BATTERIES	DEPARTMENT OF DEFENSE	0	20.00 CUBIC YARDS

3 Request(s) approved for generators in Alaska

29-APR-86	LAB PACK - WASTE PESTICIDES	NONCOMMERCIAL RESEARCH ORG.	0	0.27 CUBIC YARDS
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1 Request(s) approved for generators in British Columbia

01-APR-86	PAINT BOOTH SLUDGE	MISCELLANEOUS PLASTIC PRODUCTS	0	9.70 CUBIC YARDS
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DATE	WASTE TYPE	SOURCE	DISPOSE NOW	DISPOSE ANNUALLY
01-APR-86	PRE-DIP P-3 (HYDROGEN PEROXIDE SOLUTION)	SWITCHGEAR & -BOARD APPARATUS	0	4.85 CUBIC YARDS
01-APR-86	FERRIC CHLORIDE SOLUTION	SWITCHGEAR & -BOARD APPARATUS	0	9.70 CUBIC YARDS
01-APR-86	CATAPOSIT 44 (SULFURIC ACID SOLUTION)	SWITCHGEAR & -BOARD APPARATUS	0	7.28 CUBIC YARDS
02-APR-86	WASTE FROM REMOVAL OF UNDERGROUND STORAGE TANK	HAZARDOUS WASTE DISPOSAL SITE	0	100.00 CUBIC YARDS
02-APR-86	LAB PACK - OXIDIZERS	COLLEGES & UNIVERSITIES	0	0.54 CUBIC YARDS
02-APR-86	LAB PACK - CORROSIVE	COLLEGES & UNIVERSITIES	0	0.81 CUBIC YARDS
02-APR-86	LAB PACK - CORROSIVE	COLLEGES & UNIVERSITIES	0	0.54 CUBIC YARDS
02-APR-86	LEAD CONTAMINATED DEBRIS	AUTO MEASURING & CNTRLNG INST.	0	275.4 CUBIC YARDS
02-APR-86	PCB EQUIPMENT	LIBRARIES & INFORMATION CENTER	0	0.54 CUBIC YARDS
07-APR-86	LAB PACKS - COMBUSTIBLE	COLLEGES & UNIVERSITIES	0	0.54 CUBIC YARDS
07-APR-86	LAB PACKS - POISONS	COLLEGES & UNIVERSITIES	0	1.08 CUBIC YARDS
07-APR-86	LAB PACKS	MEDICAL & SURGICAL HOSPITALS	0	0.81 CUBIC YARDS
14-APR-86	PENTACHLOROPHENOL CONTAMINATED WOOD	WOOD PRESERVING	0	4.05 CUBIC YARDS
14-APR-86	ACID CLEANER 880	OTHER ELECTRONIC COMPONENTS	0	1,000.00 CUBIC YARDS
14-APR-86	LAB PACK - FLAMMABLE	COLLEGES & UNIVERSITIES	0	0.81 CUBIC YARDS
14-APR-86	CCA DOOR PIT RESIDUE WITH HEAVY METALS	WOOD PRESERVING	0	135.00 CUBIC YARDS
14-APR-86	COPPER/NICKEL/CHROME/SULFURIC ACID	PLATING & ANODIZING	0	14.55 CUBIC YARDS
29-APR-86	LAB PACK - FLAMMABLE	CALCULATING & ACCOUNTING MACH.	0	0.27 CUBIC YARDS
29-APR-86	PLATING SLUDGE ACIDIC/COPPER	PLATING & ANODIZING	0	2.70 CUBIC YARDS
29-APR-86	E B C SLAG	PRIMARY SMELT NONFERROUS METAL	0	50.00 CUBIC YARDS

DATE	WASTE TYPE	SOURCE	DISPOSE NOW	DISPOSE ANNUALLY
29-APR-86	PCB CONTAMINATED SOLID	NON-RCRA SPILL CLEANUP	0	14.00 CUBIC YARDS
29-APR-86	PESTICIDE SPILL	RCRA SPILL CLEANUP	0	12.61 CUBIC YARDS
23 Request(s) approved for generators in Oregon				
02-APR-86	PARA FORMALDEHYDE - DIRT DEBRIS	OTHER CHEMICAL PREPARATIONS	0	13.5 CUBIC YARDS
02-APR-86	SPENT 1,1,1 TRICHLOROETHANE STILL BOTTOMS	HAZARDOUS WASTE DISPOSAL SITE	0	29.11 CUBIC YARDS
02-APR-86	SPENT METHYLENE CHLORIDE STILL BOTTOMS	HAZARDOUS WASTE DISPOSAL SITE	0	19.40 CUBIC YARDS
02-APR-86	DIRT-SAND, GRAVEL CONTAMINATED WITH COPPER	NON-SUPERFUND SITE CLEANUP	0	20.00 CUBIC YARDS
07-APR-86	CHROMIUM HYDROXIDE SLUDGE	PLATING & ANODIZING	0	2,000 CUBIC YARDS
07-APR-86	ALKALINE SOLIDS	HAZARDOUS WASTE DISPOSAL SITE	0	108.00 CUBIC YARDS
07-APR-86	PHOTOGRAPHIC WASTE LIQUID	PHOTOFINISHING LABORATORIES	0	0.81 CUBIC YARDS
07-APR-86	LAB PACKS - POISONS	RESEARCH & DEVELOPMENT LABS	0	1.09 CUBIC YARDS
14-APR-86	WASTE PCB	LAND & WILDLIFE CONSERVATION	0	0.27 CUBIC YARDS
29-APR-86	PLASTICS WITH FLUOROCARBON RESINS	DEPARTMENT OF DEFENSE	0	10 DRUMS
29-APR-86	COAL TAR PITCH	PRIMARY PRODUCTION OF ALUMINUM	0	2.70 CUBIC YARDS
29-APR-86	NORTH LAGOON REMOVAL DEBRIS CONT WITH CHROMIUM & LEAD	AIRCRAFT PARTS	0	2,500.00 CUBIC YARDS
29-APR-86	CORROSIVE SLUDGE WITH HEAVY METALS	GENERAL AUTOMOTIVE REPAIR SHOP	0	29.11 CUBIC YARDS
29-APR-86	PCB CONTAMINATED SOIL	NON-RCRA SPILL CLEANUP	0	75.00 CUBIC YARDS

14 Request(s) approved for generators in Washington

DATE	WASTE TYPE	SOURCE	DISPOSE NOW	DISPOSE ANNUALLY
29-APR-86	PCB TRANSFORMERS DRAINED & FLUSHED	PETROLEUM REFINING (& ASPHALT)	0	150.00 CUBIC YARDS
29-APR-86	PCB CONTAMINATED WOOD & FIBERGLASS CLEANUP	NON-RCRA SPILL CLEANUP	0	100.00 CUBIC YARDS
29-APR-86	PCB CONTAMINATED SOLIDS	NON-RCRA SPILL CLEANUP	0	1.46 CUBIC YARDS

3 Request(s) approved for generators in Wyoming

51 Requests granted - Grand Total

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program
(Reporting Unit)

April, 1986
(Month and Year)

SUMMARY OF NOISE CONTROL ACTIONS

Source Category	New Actions Initiated		Final Actions Completed		Actions Pending	
	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>Last Mo</u>
Industrial/ Commercial	12	103	16	95	189	193
Airports			0	9	1	1

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program

April, 1986

(Reporting Unit)

(Month and Year)

FINAL NOISE CONTROL ACTIONS COMPLETED

County	Name of Source and Location	Date	Action
Clackamas	U. S. Hyrdo Fab, Eagle Creek	04/86	Source Closed
Multnomah	H. Blackburn Firewood Cutting, Portland	04/86	In Compliance
Multnomah	Crestview Convalescent, Inc., Portland	04/86	In Compliance
Multnomah	Dillingham Ship Repair, Portland	04/86	In Compliance
Multnomah	Gunderson, Inc., Portland	04/86	No Violation
Multnomah	Les Schwab Tire Center, Portland	04/86	In Compliance
Multnomah	One Stop Deli & Market, Portland	04/86	In Compliance
Multnomah	Red Lion Tavern, Portland	04/86	In Compliance
Multnomah	Ross Island Sand & Gravel, West Marine Drive, Portland	04/86	No Violation
Multnomah	West Coast Training, Inc., Hayden Island, Portland	04/86	In Compliance
Washington	Miller Sanitary Service, Portland	04/86	No Violation
Washington	Stadleman Industries, Inc., Forest Grove	04/86	In Compliance
Marion	Gil Ward Boat Company, Keizer	04/86	In Compliance
Lane	Stapleton Timber Products, Springfield	04/86	In Compliance
Coos	Ocean Proteins, Inc., Charleston	04/86	In Compliance
Jackson	Biomass One, Louisiana-Pacific, White City	04/86	In Compliance

CIVIL PENALTY ASSESSMENTS
 DEPARTMENT OF ENVIRONMENTAL QUALITY
 1986

CIVIL PENALTIES ASSESSED DURING MONTH OF APRIL, 1986:

<u>Name and Location of Violation</u>	<u>Case No. & Type of Violation</u>	<u>Date Issued</u>	<u>Amount</u>	<u>Status</u>
Beavercreek Auto Salvage, Inc. Beavercreek, Oregon	AQOB-NWR-86-24 Open burned commercial waste including prohibited materials.	4/7/86	\$300	In default.
Jerry Martin and Thomas Coleman Linn County	AQOB-WWR-86-26 Open burned commercial wastes (electrical transformers drained of PCB fluid).	4/11/86	\$1,000	In default.
Murphy Plywood Company Sutherlin, Oregon	AQ-SWR-86-33 Various violations of air contaminant discharge permit.	4/22/86	\$3,000	Awaiting response to notice.

GB5677

April, 1986
DEQ/EQC Contested Case Log

<u>ACTIONS</u>	<u>LAST MONTH</u>	<u>PRESENT</u>
1 Preliminary Issues	0	0
2 Discovery	0	0
3 Settlement Action	3	2
4 Hearing to be scheduled	0	0
5 Hearing scheduled	3	3
6 HO's Decision Due	2	5
7 Briefing	3	1
8 Inactive	<u>5</u>	<u>2</u>
SUBTOTAL of cases before hearings officer.	16	13
9 HO's Decision Out/Option for EQC Appeal	0	1
10 Appealed to EQC	1	1
11 EQC Appeal Complete/Option for Court Review	0	0
12 Court Review Option Taken	2	2
13 Case Closed	<u>2</u>	<u>2</u>
 TOTAL Cases	 21	 19

15-AQ-NWR-81-178 15th Hearing Section case in 1981 involving Air Quality Division violation in Northwest Region jurisdiction in 1981; 178th enforcement action in the Department in 1981.

\$ Civil Penalty Amount

ACDP Air Contaminant Discharge Permit

AGL Attorney General 1

AQ Air Quality Division

AQOB Air Quality, Open Burning

CR Central Region

DEC Date Date of either a proposed decision of hearings officer or a decision by Commission

ER Eastern Region

FB Field Burning

Hrng Rfrl Date when Enforcement Section requests Hearing Section schedule a hearing

Hrngrs Hearings Section

NP Noise Pollution

NPDES National Pollutant Discharge Elimination System wastewater discharge permit.

NWR Northwest Region

OSS On-Site Sewage Section

P Litigation over permit or its conditions

Prtys All parties involved

Rem Order Remedial Action Order

Resp Code Source of next expected activity in case

SS Subsurface Sewage (now OSS)

SW Solid Waste Division

SWR Southwest Region

T Litigation over tax credit matter

Transcr Transcript being made of case

Underlining New status or new case since last month's contested case log

WQ Water Quality Division

WVR Willamette Valley Region

April 1986

DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrl	Hrng Date	Resp Code	Case Type & No.	Case Status
WAH CHANG	04/78	04/78		Prtys	16-P-WQ-WVR-78-2849-J NPDES Permit Modification	Current permit in force. Hearing deferred.
WAH CHANG	04/78	04/78		Prtys	03-P-WQ-WVR-78-2012-J NPDES Permit Modification	Current permit in force. Hearing deferred.
HAYWORTH FARMS, INC., and HAYWORTH, John W.	01/14/83	02/28/83	04/04/84	Resp	50-AQ-FB-82-09 FB Civil Penalty of \$1,000	Appealed to Court of Appeals.
McINNIS ENT.	06/17/83	06/21/83	<u>06/24/86</u>	Prtys	52-SS/SW-NWR-83-47 SS/SW Civil Penalty of \$500	<u>Hearing scheduled.</u>
McINNIS ENTERPRISES, LTD., et al.	09/20/83	09/22/83	<u>06/24/86</u>	Prtys	56-WQ-NWR-83-79 WQ Civil Penalty of \$14,500	<u>Hearing scheduled.</u>
McINNIS ENTERPRISES, LTD., et al.	10/25/83	10/26/83	<u>06/24/86</u>	Prtys	59-SS-NWR-83-33290P-5 SS license revocation	<u>Hearing scheduled.</u>
CLEARWATER IND., Inc.	10/11/83	10/17/83	01/13/86	<u>Hrgs</u>	58-SS-NWR-83-82 SS Civil Penalty of \$1000	<u>Decision due.</u>
CLEARWATER IND., Inc.	01/13/84	01/18/84	01/13/86	<u>Hrgs</u>	02-SS-NWR-83-103 SS Civil Penalty of \$500	<u>Decision due.</u>

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April 1986

DEQ/EOC Contested Case Log

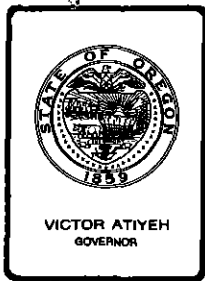
Pet/Resp Name	Hrng Rqst	Hrng Rfrl	Hrng Date	Resp Code	Case Type & No.	Case Status
VANDERVELDE, Roy	06/12/84	06/12/84	08/22/85	Dept	20-WQ-WVR-84-01 WQ Civil Penalty of \$2,500	<u>Order of dismissal issued April 24, 1986.</u>
CLEARWATER Industries, Inc.	10/11/84	10/11/84	01/13/86	Hrng	24-SS-NWR-84-P Sewage Disposal Service License Denial	Request for permit withdrawn. Order of dismissal to be issued.
LAVA DIVERSION PROJECT	12/14/84	12/27/84		Prtys	25-WQ-CR-FERC-5205 Hydroelectric plant certification	<u>Court of Appeals reversed and remanded for agency action.</u>
FUNRUE, Amos	03/15/85	03/19/85	06/20/85	Dept	05-AQ-FB-84-141 Civil Penalty of \$500	<u>EOC to hear appeal at June 13, 1986 meeting.</u>
DANT & RUSSELL, INC.	05/31/85	05/31/85	03/21/86	Prtys	15-HW-NWR-85-60 Hazardous waste disposal Civil Penalty of \$2,500	Hearing deferred for settlement action.
MERIT OIL & REFINING CO.		07/24/85	05/13/86	Prtys	20-WQ-NWR-85-61 WQ Civil Penalty of \$1,200	<u>Hearing deferred for settlement action.</u>
E.J. BARTELLS CO.	10/04/85	10/08/85	02/27/86	Prtys	21-AQ/WQ/SW-NWR-85-78 \$10,000 Civil Penalty	<u>Settlement Agreement and Final Order signed by EOC 3-14-86. Case closed.</u>

April 1986

DEQ/EQC Contested Case Log

<u>Pet/Resp Name</u>	<u>Hrng Rgst</u>	<u>Hrng Rfrl</u>	<u>Hrng Date</u>	<u>Resp Code</u>	<u>Case Type & No.</u>	<u>Case Status</u>
AMCOAT, INC.	10/15/85	10/23/85	04/04/86	Prtys	22-HW/WQ-NWR-85-85 \$5,000 civil penalty	<u>Stipulation and Final Order signed by EQC 4-25-86. Case closed.</u>
BRAZIER FOREST PRODUCTS	11/22/85	12/12/85	02/10/86	Hrgs	23-HSW-85 Declaratory Ruling	Ruling due.
NULF, DOUG	01/10/86	01/13/86	04/28/86	Prtys	01-AQFB-85-02 \$500 Civil Penalty	<u>Decision due.</u>
DOERFLER, RICHARD	01/24/86	01/31/86	04/11/86	Prtys	02-AQFB-85-03 \$300 Civil Penalty	<u>Decision due.</u>

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Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207

522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item C, June 13, 1986, EQC Meeting

TAX CREDIT APPLICATIONS

Director's Recommendations

It is recommended that the Commission take the following action:

1. Issue tax credit certificates for pollution control facilities:

<u>Appl. No.</u>	<u>Applicant</u>	<u>Facility</u>
T-1801	Clear Pine Mouldings	Duct work, cyclones, blowers and high pressure system
T-1817	Mark Weaver Enterprises, Inc.	Dust Collector
T-1822	John Rieger	Manure Control Facility
T-1823	Ore-Ida Foods, Inc.	Centrifuge, piping and associated control equipment
T-1824	Jim Durrer	Manure Control Facility
T-1825	Pacific States Galvanizing, Inc.	Neutralize and precipitate heavy metal solids
T-1826	Columbia Plywood Corp.	Wood waste handling system

T-1827 Precision Castparts Corp. Bag Filter Dust
Collection System

2. Revoke Pollution Control Facility Certificates numbered 821, 823, 944 and 1340 issued to Champion Building Products. Reissue the same certificates to Davidson Industries.
3. Revoke Pollution Control Facility Certificate No. 1208 issued to Far West Farmer's Cooperative. Reissue the same certificate to JasPar Seed, Inc.


for
Fred Hansen

S. Chew:r
(503) 229-6484
May 20, 1986
MR1007

EQC Agenda Item C
June 13, 1986
Page 3

Proposed June 13, 1986 Totals:

Air Quality	\$219,146.72
Water Quality	222,264.50
Hazardous/Solid Waste	120,211.68
Noise	<u>-0-</u>
	\$561,622.90

1986 Calendar Year Totals not including Tax Credits Certified at this
EQC Meeting:

Air Quality	\$2,634,453.80
Water Quality	2,664,469.20
Hazardous/Solid Waste	1,130,323.20
Noise	<u>18,387.00</u>
	\$6,447,633.20

SChew
229-6484
21 May 86

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Clear Pine Mouldings, Inc.
PO Box 309
Prineville, OR 97754

The applicant owns and operates a moulding and millwork facility on McKay Road near Prineville, Oregon.

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

2. Description of Facility

The facility described in this application consists of necessary ductwork, two (2) additional cyclones, additional blower(s), high pressure system and relocation of some existing equipment.

Claimed Facility Cost: \$198,488.50 of which \$95,950.50 is eligible (Accountant's Certification was provided)

3. Procedural Requirements

The facility was completed after December 31, 1983, so it is governed by ORS 468.150 through 468.190 in effect on January 1, 1984.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed June 14, 1984 prior to construction June 29, 1984.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on September 10, 1984 and the application for final certification was found to be complete on April 29, 1986 within 2 years of substantial completion of the facility.

4. Evaluation of Application

Portions of the claimed facility are eligible for final certification because the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.

This reduction was accomplished by redesign of the existing wood residue transport and emission control systems. The claimed facility consisting of three independent systems was installed to interface new and existing process equipment and to reduce particulate loading to existing cyclones which exhibited excessive opacity.

The first system utilized a relocated cyclone and an additional blower to collect material from a new rip saw, existing rip saw and an existing hog. Material collected by this system is blown to a target box located in the center of a new truck bin by an added high pressure blower. Material collected by the system is fed to the high pressure blower by added screw conveyors. All material collected is utilized as hogged fuel or is sold. This system is ineligible for tax credit as each element including the sawdust collection system is considered process equipment. The applicant reports the cost of this portion of the claimed facility is approximately \$90,533.

The second system connects a relocated AEM sander and new sanders to an existing baghouse. This second system is partially eligible for tax credit. Ineligible portions are those portions of ducting which are required to connect the existing process oriented sander and to collect and duct emissions from the new sanders out of the building. This ineligible portion of the claimed facility is estimated to be approximately \$12,025 (50 percent of \$24,050 which was the reported approximate cost of this portion of the claimed facility).

The third system consisting of two new 11 foot diameter cyclones, blower and ductwork interconnecting the resaw area, no. 1 and no. 2 cutlines and the press associated with both cutlines was required to reduce or eliminate opacity problems in other existing cyclones. This portion of the claimed facility is entirely eligible to receive tax credit.

The eligible facility cost is equal to the difference between the claimed facility cost and the total ineligible portions of the claimed facility cost described above for the first and second system. Since the total ineligible portion of the claimed facility cost is \$102,558.00 (\$90,533.00 + \$12,025.00) the eligible portion of the claimed facility cost is \$95,950.50 calculated as follows:

\$198,488.50 (claimed cost) - \$102,558.00 (ineligible costs) =
\$95,950.50 (eligible costs)

Since there is no return on the investment in the eligible portion of the claimed facility cost, 100 percent of the eligible facility cost is allocable to pollution control.

5. Summation

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

6. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$95,950.50 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1801.

W. Fuller:s
AS2911
(503) 229-5749
May 28, 1986

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

1. Applicant

Merk Weaver Enterprises, Inc.
General Chain Bar Co.
PO Box 1120
Roseburg, OR 97470

The applicant owns and operates a chainsaw bar manufacturing plant located at 2852 Industrial Avenue in Hubbard, Oregon.

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

2. Description of Facility

The facility described in this application is a Fabric Filter Northwest model 72-10 bag filter dust collector.

Claimed Facility Cost: \$21,609
(Accountant's Certification was provided).

3. Procedural Requirements

The facility was completed after December 31, 1983, so it is governed by ORS 468.150 through 468.190 in effect on January 1, 1984, and by OAR 340-16-015 (effective July 13, 1984; amended March 21, 1985).

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed November 6, 1984, 30 days before construction commenced on June 1, 1985.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on August 23, 1985, and the application for final certification was found to be complete on April 7, 1986, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to prevent a substantial quantity of air pollution. This prevention is accomplished by the elimination of air contaminants as defined in ORS 468.275, visible emissions standards.

Prior to intallation of the bag filter, grinding and sanding dust was emitted to the atmosphere and the company was unable to meet the Department's process weight standards. The bag filter now collects virtually all of these dust particles and no violations occur.

- b. Analysis of Eligible Costs

The sole purpose of the bag filter is for control of air pollution, therefore, the portion of the facility cost that is properly allocable to pollution control is 100 percent.

The claimed facility consists of a model 72-10 bag filter manufactured by Fabric Filters Northwest.

Cost breakdown is as follows:

Fabric Filters Northwest Bag Filter	\$ 9,780
Ductwork Manufacturing and Installation	9,895
Fan	1,560
Labor and Freight	<u>374</u>
	\$21,609

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 air pollution and accomplishes this purpose by the elimination of air contaminants as defined in ORS 468.275.
- 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 the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$21,609.00 with 100 percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1817.

Robert Harris:s
AS2970
(503) 229-5259
May 20, 1986

STATE OF OREGON - DEPARTMENT OF ENVIRONMENTAL QUALITY
Tax Relief Application Review Report

1. Applicant

John Rieger
8735 Bewley Creek Road
Tillamook, OR 97141

The applicant owns and operates a dairy farm in Tillamook, Oregon.

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

2. Description of Facility

The facility described in this application is an animal waste manure control facility consisting of a 59' x 44' x 6' high roofed and guttered concreted dry storage area, and a 14' x 50' guttered roof tank.

Claimed Facility Cost: \$28,565.30 (Accountant's Certification was provided).

The Accountant certified a facility cost of \$28,565.30. The U.S. Department of Agriculture Stabilization and Conservation Service reimbursed the applicant \$18,856.00. This amount will be subtracted by the applicant from the amount of tax credit for which he is eligible when he files his State Income Tax form.

3. Procedural Requirements

The facility was completed after December 31, 1983, so it is governed by ORS 468.150 through 468.190 in effect on January 1, 1984, and by OAR 340-16-015 (effective July 13, 1984; amended March 21, 1985).

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed June 20, 1983, more than 30 days before construction commenced in May 1984.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on October 11, 1984, and the application for final certification was found to be complete on January 29, 1986, within two (2) years of substantial completion of the facility.

4. Evaluation of Application

- a. The sole purpose of these facilities is to control wastes from the farm operation to reduce the contamination of the Tillamook Bay Drainage Basin.

b. Analysis of Eligible Costs

Prior to installation of the claimed facilities, waste manure was stacked outside the barn where rainfall would occasionally wash manure into Bewley Creek. The concrete dry storage facility provides covered containment of manure until it can be spread on land. This facility has eliminated contaminated runoff from the manure storage area. In addition, a roof was placed over an existing animal confinement area to eliminate contaminated runoff. There is no significant return on investment from this project. The Department conducted water quality surveys in Tillamook Bay during 1979 - 1980. The surveys concluded that dairy operations were a major cause of high bacterial contamination in the drainage basin which threatened the oyster industry. The Department required the development of a Tillamook Bay Drainage Basin Agricultural Non-Point Source Pollution Abatement Plan which was incorporated into the North Coast Basin Water Quality Management Plan by the Environmental Quality Commission on August 28, 1981.

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 it has:
 - (1) The sole purpose of the facility is to control a substantial quantity of water pollution; and
 - (2) 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 the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$28,565.30 with 100 percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1822.

L.D. Patterson:h
WH755
(503) 229-5374
4-25-86

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Ore-Ida Foods, Inc.
P.O. Box 10
Boise, ID 83707

The applicant owns and operates a frozen potato products, chopped onion, and cob corn processing plant in Ontario, Oregon.

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

2. Description of Facility

The facility consists of a Sharples continuous feed solids centrifuge, piping, and associated control equipment.

Claimed Facility Cost: \$179,193 (Accountant's Certification was provided).

3. Procedural Requirements

The facility was completed after December 31, 1983, so it is governed by ORS 468.150 through 468.190 in effect on January 1, 1984, and by OAR 340-16-015 (effective July 13, 1984; amended March 21, 1985).

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed June 13, 1983, before construction commenced on July 1, 1983.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on February 10, 1984, and the application for final certification was found to be complete on February 10, 1986, within 2 years of substantial completion of the facility.

4. Evaluation of Application

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

Department to control water pollution. The requirement is to comply with NPDES permit conditions.

Prior to installation of the claimed facility, primary sludge from the waste water treatment system was thickened by two basket type centrifuges. These units had a solids capture efficiency of about 50 percent. The new continuous feed centrifuge replaced the two existing units which were modified to aid in thickening waste secondary sludge. The new centrifuge has a solids capture efficiency of about 80 percent.

The principal purpose of the facility was to lower the solids and organic loading to the biological secondary treatment system. The clarified water leaving the centrifuge is plumbed back to the treatment system. The secondary treatment system was overloaded and needed modification to continue to comply with the NPDES permit.

This control is accomplished by the use of treatment works for industrial waste as defined in ORS 468.700.

b. Analysis of Eligible Costs

Although the principal purpose of the facility is pollution control, it collects approximately 18,524 tons of potato solids per year. These solids are sold as cattle feed at \$4.30 per ton for a Gross Annual Income of \$79,653. The Annual Operating Expenses are \$44,360, which results in an Annual Cash Flow of \$35,293. Using a useful life of eight (8) years (provided by the applicant), the portion of actual costs properly allocable to pollution control is 62 percent.

4. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to control water pollution, and it accomplishes this purpose by the use of treatment works for industrial waste as defined in ORS 468.700.
- c. The facility complies with permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 62 percent.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$179,193 with 62 percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1823.

L. D. Patterson:h

WH774

(503) 229-5374

May 7, 1986

STATE OF OREGON - DEPARTMENT OF ENVIRONMENTAL QUALITY

Tax Relief Application Review Report

1. Applicant

Jim Durrer
2905 McCornick Loop Road
Tillamook, OR 97141

The applicant owns and operates a dairy farm in Tillamook, Oregon.

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

2. Description of Facility

The facility described in this application is a 45' x 94' guttered roof over an existing liquid manure storage tank and manure accumulation area.

Claimed Facility Cost: \$14,506.20 (Accountant's Certification was provided).

The Accountant certified a facility cost of \$14,506.20. The U.S. Department of Agriculture Stabilization and Conservation Service reimbursed the applicant \$10,471.00. This amount will be subtracted by the applicant from the amount of tax credit for which he is eligible when he files his State Income Tax form.

3. Procedural Requirements

The facility was completed after December 31, 1983, so it is governed by ORS 468.150 through 468.190 in effect on January 1, 1984, and by OAR 340-16-015 (effective July 13, 1984; amended March 21, 1985).

The facility met all statutory deadlines in that:

- a. The request for Preliminary Certification was filed September 11, 1984, more than 30 days before construction commenced in May 1985.
- b. The request for Preliminary Certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on June 15, 1985, and the application for final certification was found to be complete on March 3, 1986, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The sole purpose of this facility is to control wastes from the farm operation to reduce the contamination of the Tillamook Bay Drainage Basin.

b. Analysis of Eligible Costs

Prior to installation of the claimed facility, waste manure was washed off the manure accumulation area by rainfall into a nearby creek. The roof provides covered containment of manure until it can be spread on land. This facility has eliminated contaminated runoff from the manure storage area. There is no significant return on investment from this project. The Department conducted water quality surveys in Tillamook Bay during 1979 - 1980. The surveys concluded that dairy operations were a major cause of high bacterial contamination in the drainage basin which threatened the oyster industry. The Department required the development of a Tillamook Bay Drainage Basin Agricultural Non-Point Source Pollution Abatement Plan which was incorporated into the North Coast Basin Water Quality Management Plan by the Environmental Quality Commission on August 28, 1981.

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 it has:
 - (1) The sole purpose of the facility is to control a substantial quantity of water pollution; and
 - (2) 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 the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$14,506.20 with 100 percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1824.

L.D. Patterson:h
WH763
(503) 229-5374
4-29-86

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Pacific States Galvanizing Inc.
720 N.W. 15th Avenue
Portland, Oregon 97209

The applicant owns and operates a hot dip galvanizing plant at Portland, Oregon.

Application was made for tax credit for a hazardous waste treatment facility.

2. Description of Facility

The facility consists of a system to neutralize and precipitate heavy metal solids from the plants sulfuric acid and sodium hydroxide rinse tanks and to remove iron from the sulfuric acid pickle bath. It is a wastewater pretreatment/acid regeneration facility purchased as a unit.

Claimed Facility Cost: \$120,211.68 (Accountant's Certification was provided).

3. Procedural Requirements

The facility was completed after December 31, 1983, so it is governed by ORS 468.150 through 468.190 in effect on January 1, 1984, and by OAR 340-16-015 (effective July 13, 1984; amended March 21, 1985).

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed October 14, 1985 (less than 30 days before installation) and installation commenced on October 16, 1985. The application was reviewed by DEQ staff and the applicant was notified on October 14, 1985 that the application was complete and that installation could commence.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Installation of the facility was substantially completed on December 20, 1985, and the application for final certification was found to be complete on April 14, 1986, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the federal Environmental Protection Agency to reduce hazardous waste. Generators must comply with Section 3002 (B) of RCRA which requires certification that the company has made an attempt to reduce the volume and toxicity of hazardous waste. The facility was designed to remove ferrous sulfate crystals from the sulfuric acid bath. Prior to installation when the iron content of the sulfuric acid bath exceeded 10% the entire bath was removed and transported to CSSI at Arlington as a hazardous waste. As much as 8200 gallons of contaminated spent acid was shipped each six weeks. The process removes approximately 64 cubic feet of cake sludge (ferrous sulfate heptahydrate) which has an economic value of \$30.00/Ton. During the process acid and sodium hydroxide dip tanks are neutralized. The system is presently used as a closed system, that is the neutralized acid/base is recirculated as makeup water for the new acid bath.
- b. Analysis of Eligible Costs

The facility has an estimated life of five years. Since the facility will have a negative average annual cash flow (\$18,072/year) the return on investment will be zero and the facility is therefore eligible for 100% tax credit (applicant's worksheet and analysis of average annual cash flow is attached).

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 federal Environmental Protection Agency to reduce hazardous waste, Section 3002 (B) of RCRA.
- 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 the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$120,211.68 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1825.

Attachment
RLBrown:r
SR917
(503) 229-6237
May 15, 1986

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR FINAL CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 ET. SEQ.

(Continued)

SECTION IV
SIGNIFICANT DATES
AND INFORMATION

(12) Has claimed facility previously been certified by DEQ for tax credit, or is tax credit application currently pending on claimed facility or any portion of it? Yes _____, please explain. No X

(13) Has claimed facility, or any portion of it, previously been certified as an Energy Conservation Facility by the State Department of Energy, or is such an application pending? Yes _____, please explain. No X

SECTION V
ALLOCATION OF COSTS

(1) Provide the following information regarding costs associated with the claimed facility. Fill out tables as designated.

a. Actual cost of the claimed facility \$ 120,211.68 + HCL Disposal \$11,091.54

b. Salvage value of any facility removed from service \$ 2,500.00

c. Calculation of annual cash flows:

YEAR	GROSS ANNUAL INCOME*	ANNUAL OPERATING EXPENSES*	ANNUAL CASH FLOW
1-	<u>864.00</u>	<u>17,218.00</u>	<u>16,354.00</u>
2-	<u>907.00</u>	<u>18,078.00</u>	<u>17,171.00</u>
3-	<u>953.00</u>	<u>18,982.00</u>	<u>18,029.00</u>
4-	<u>1000.00</u>	<u>19,931.00</u>	<u>18,931.00</u>
5-	<u>1050.00</u>	<u>20,929.00</u>	<u>19,879.00</u>
TOTALS	<u>4774.00</u>	<u>95,138.00</u>	<u>(90,364.00)</u>

d. Average annual cash flow \$ (18,072.00)

Calculate by using the following formula:

$$\frac{\text{Total of Annual Cash Flows}}{5} = \text{Average Annual Cash Flow}$$

e. Useful life of claimed facility 5 years

f. Return on investment factor \$ -0-

Calculate by using the following formula:

$$\frac{\text{Cost of Facility}}{\text{Average Annual Cash Flow}} = \text{Return on Investment Factor}$$

g. Annual percent return on investment (ROI) (Use Table 1, OAR 340-16-030) -0- %

h. Reference annual percent return on investment (RROI) (Use Table 2, OAR 340-16-030) -0- %

i. Portion of actual costs properly allocable to pollution control 100 %

Calculate by using the following formula:

$$\frac{\text{RROI} - \text{ROI}}{\text{RROI}} \times 100\% = \text{Percent allocable}$$

*Attach calculations for each of the first five years.

Labor	88 Hrs./Mo. x \$14.00/hr.	\$1232.00	
Electricity	Est.	250.00	
Sulphuric Acid	1.30/gal. x 440	572.00	
Polymer	613.80/52 Gal. 13 Gal.	153.40	
Sodium Hydroxide	.135/700#	94.50	
Sulphuric Acid (Neutralization)	1.30/gal x 50	65.00	
General Maintenance		<u>200.00</u>	
		\$2566.90 x 12	
		<u>\$ 30803.00</u>	

Disposal Cost (Savings)

Disposal (CSSI)	9555.00	
Freight to CSSI	<u>4030.00</u>	
	\$ 13585.00	(13585.00)

\$17,218.00

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Columbia Plywood Corporation
Klamath Plywood Division
PO Box 1780
Klamath Falls, OR 97601

The applicant owns and operates a plywood factory off Highway 97, 5 miles south of Klamath Falls, Oregon.

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

2. Description of Facility

Wood waste handling system.

Claimed Facility Cost: \$38,461
(Accountant's Certification was provided).

3. Procedural Requirements

The facility was completed after December 31, 1983, so it is governed by ORS 468.150 through 468.190 in effect on January 1, 1984,.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed June 5, 1984 before construction commenced in November 1984.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed in March 1985 and the application for final certification was found to be complete on May 14, 1986 within 2 years of substantial completion of the facility.

4. Evaluation of Application

The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution. The requirement was to reduce cyclone opacity from the existing wood waste handling system consisting of cyclones, baghouse, collection fan, and a small centrifugal fan which discharges collected dust from the baghouse to the boiler.

This reduction was accomplished by redesigning the existing wood waste handling system as a closed system. To accomplish this two additional cyclones and three skimmers were required, which were connected to the existing baghouse, and the existing ductwork was revised.

The applicant has reported that virtually all of the previous emissions have been eliminated by going to a closed system. The 15 tons/year reported reduction has virtually eliminated the previous emissions which were estimated to be 15.4 tons/year. The facility has been inspected by Department personnel and has been found to be operating in compliance with Department regulations and permit conditions.

All material collected is used as boiler fuel. The value of this material is estimated to be \$2.00/BDT (bone dry ton) which amounts to approximately \$30.00/year. Therefore, the rate of return on investment in the facility is negligible and 100 percent of the facility cost is allocable to pollution control.

5. Summation

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

6. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$38,461 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1826.

W. J. Fuller:s
AS2981
(503) 229-5749
May 14, 1986

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Precision Castparts Corp.
Titanium Plant
4600 SE Harney Drive
Portland, OR 97206

The applicant owns and operates a foundry for the production of titanium investment castings at 5001 Southeast Johnson Creek Boulevard in Milwaukie, Oregon.

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

2. Description of Facility

The facility consists of a bag filter dust collection system.

Claimed Facility Cost: \$63,126.22
(Accountant's Certification was provided).

3. Procedural Requirements

The facility was completed after December 31, 1983, so it is governed by ORS 468.150 through 468.190 in effect on January 1, 1984.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed October 20, 1983 prior to construction January 1984.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed in November 1984 and the application for final certification was found to be complete on May 2, 1986, within 2 years of substantial completion of the facility.

4. Evaluation of Application

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 emission reduction is accomplished by the installation of an air cleaning device, as defined in ORS 468.275.

The air cleaning device consisting of the bag filter dust collection system was required to prevent emissions from the titanium sand blast operations which were recently installed.

The claimed facility has been inspected by Department personnel and has been found to be operating in compliance with Department regulations and permit conditions. It has been reported by Precision Castparts Corporation that the facility, which has a rated efficiency of 99.75 percent, collects approximately 79.5 tons/year of ceramic and silica dust.

All material collected is transported to a landfill for disposal. Therefore, there is no return on the investment in the facility and 100 percent of the facility is allocable to pollution control.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution and accomplishes this purpose by the installation of an air cleaning device as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules, and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100 percent.

6. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$63,126.22 with 100 percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1827.

State of Oregon
Department of Environmental Quality

REISSUANCE OF POLLUTION CONTROL FACILITY CERTIFICATE

1. Certificate issued to:

Far West Farmer's Cooperative, Inc.
33790 Santiam Highway
Lebanon, OR 97355

The certificate was issued for an air pollution control facility.

2. Summation:

The Environmental Quality Commission issued a pollution control facility certificate to Far West Farmer's Cooperative March 13, 1981 for three dust collectors. This company has since been sold to JasPar Seed, Inc. and the Department has been notified by letter of the transaction.

3. Recommendation:

It is recommended that Pollution Control Certificate No. 1208 be revoked and reissued to JasPar Seed, Inc.; the certificate to be valid only for the time remaining from the date of the first issuance.

S.Chew
229-6484
21 May 86

John I. DeNoma
39105 Military Road
Monmouth, Oregon 97361

March 7, 1986

503/745-5026

Cheri Chew
DEQ
P.O. Box 1760
Portland, Oregon 97207

Re: Far West Farmer's Cooperative, Lebanon, Oregon.

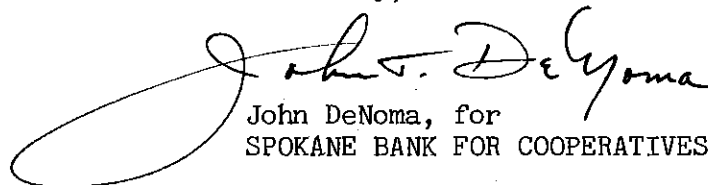
Dear Ms. Chew,

This is to notify you officially that Far West Farmer's Cooperative, Inc., 33790 Santiam Highway, Lebanon, Oregon 97355, has been sold to JasPar Seed Inc., 33790 Santiam Highway, Lebanon, Oregon 97355.

I am unable to find the Certificate for credit as the files presently are in the possession of a legal firm in Eugene. However, I am certain you will be able to locate a copy.

I am most appreciative of the assistance and help in this matter, and the sparkle in your voice.

Sincerely,


John DeNoma, for
SPOKANE BANK FOR COOPERATIVES

JTD:dd

Copy; Spokane Bank for Cooperatives

far west farmer's cooperative inc.

33790 SANTIAM HIGHWAY
LEBANON, OREGON 97355
(503) 258-7156

April 3, 1986

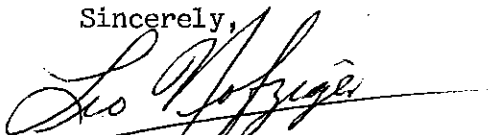
Sherry Chew
DEQ
P.O. Box 1760
Portland, Oregon 97207

Dear Ms. Chew,

I have been requested by John T. DeNoma, of Spokane Bank for Cooperatives, to issue you a letter of acknowledgement regarding FAR WEST FARMER'S COOPERATIVE, Lebanon, Oregon.

This is to notify you that all assets were turned to the Spokane Bank for Cooperatives through a Deed in Lieu to satisfy the secured interest of the bank.

Sincerely,



Leo Nofziger
Chairman of the Board
FAR WEST FARMER'S COOPERATIVE

JTD:dd

Management Services Div.
Dept. of Environmental Quality

RECEIVED
APR 21 1986



FARMERS WORKING
FOR FARMERS

May 23, 1986

Sherry Chew
Tax Credit Dept

I am writing to notify the tax dept that Far West Farmers
Cooperative has been sold to JASPAR SEED

There for we want to terminate or transfer or Tax Certificate
No 1208 to JASPAR SEED

Leo Nofziger Pres.


In behalf of Far West Farmers



33790 N. Santiam Hwy.

259-3404

Lebanon, OR 97355

May 21, 1986

ATTENTION: Sherry Chew

This is to advise you that the former property known as Far West Farmer's Cooperative, 33790 Santiam Highway, Lebanon Oregon, has been purchased by Jim and Sherri Parker and Ray and Patti Brant and will be known as JasPar Seed Corporation.

The business was purchased on March 13, 1986 through the Spokane Bank of Cooperative and will continue to be located at the previous location (33790 N. Santiam Highway, Lebanon).

We are requesting that all tax credits allocated to Far West Farmer's be reverted to us. If you have any further questions, please contact us.

Thank you,

JasPar Seed Corporation

Sherri Parker

Sherri Parker, Secretary

SP/

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Certificate No. 1208

Date of Issue 3/13/81

Application No. T-1295

POLLUTION CONTROL FACILITY CERTIFICATE

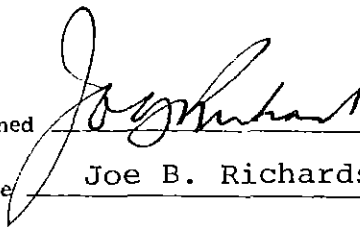
Issued To: Far West Farmers Cooperative, Inc. 33790 Santiam Highway Lebanon, Oregon 97355	Location of Pollution Control Facility: 33790 Santiam Highway Lebanon, Oregon
As: <input type="checkbox"/> Lessee <input checked="" type="checkbox"/> Owner	
Description of Pollution Control Facility: Three dust collectors with six bags on each; one conventional cyclone located on dust storage bin; one 30 hp fan and the related ductwork.	
Type of Pollution Control Facility: <input checked="" type="checkbox"/> Air <input type="checkbox"/> Noise <input type="checkbox"/> Water <input type="checkbox"/> Solid Waste <input type="checkbox"/> Hazardous Waste <input type="checkbox"/> Used Oil	
Date Pollution Control Facility was completed: <u>1/21/80</u> Placed into operation: <u>7/1/79</u>	
Actual Cost of Pollution Control Facility: \$ <u>41,135.64</u>	
Percent of actual cost properly allocable to pollution control: <p style="text-align: center;">80% or more</p>	

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of ORS 468.175 and subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

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

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

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

Signed 
 Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on
 the 13th day of March, 1981

State of Oregon
Department of Environmental Quality

REISSUANCE OF POLLUTION CONTROL FACILITY CERTIFICATES

1. Certificates were issued to:

Champion Building Products
PO Box 10228
Eugene, OR 97401

The certificates were issued for air, water and solid waste pollution control facilities.

- 2 The Environmental Quality Commission issued four certificates to the Champion Building Products Division of Champion International Corporation in Mapleton, Oregon. This mill has been sold to Davidson Industries. The certificates were issued in 1977, 1978 and 1981 (copies attached). Champion has notified the Department of the sale of their mill and Davidson has requested a reissuance of the certificates under their name (letters attached).
3. It is recommended that Pollution Control Facility Certificates 821, 823, 944, and 1340 be revoked and reissued to Davidson Industries; the certificates to be valid only for the time remaining from the date of the first issuance.

S. Chew
229-6484
21 May 86

Timberlands
P.O. Box 849
Eugene, Oregon 97440
503 687-4647

Management Services Div.
Dept. of Environmental Quality
RECEIVED
DEC 3 1985

LDP



November 18, 1985

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
NOV 20 1985
WATER QUALITY CONTROL

Department of Environmental Quality
Box 1760
Portland, OR 97207

Gentlemen:

Our mill at Mapleton, Oregon has been sold to Davidson Industries, P.O. Box 7, Mapleton, OR 97453. I will advise them that the following pollution control certificates are available for transfer to them:

<u>Certificate No.</u>	<u>App. No.</u>	<u>Description</u>
821	T-904	Waste Water Collection
823	T-906	Incinerate Dryer Emissions
944	T-1027	Hog Fuel Preparation System
1340	T-1434	Dryer Wash Water System

Our mills at Idanha and Lebanon, Oregon have been sold to Freres Lumber Co., Box 312, Lyons, OR 97358. I will advise them that the following control certificates are available for transfer to them:

<u>Certificate No.</u>	<u>App. No.</u>	<u>Description</u>
948	T-1026	Hog Fuel Preparation System
822 2/3 of Cert.	T-905	Buffalo Bag House Filter
830	T-914	Glue Waste Recirculation
1018	T-1122	Two Baghouses
1019	T-1123	Dryer Wash Water Recirc.
1022	T-1127	Clark Baghouse
1336	T-1430	Waste Water Recirculation
1339	T-1433	Dryer Exhaust to Boiler

Our Lebanite plant at Lebanon has been sold to U.S. Plywood Corporation, 37680 River Road, Lebanon, OR 97355. I will advise them that the following pollution control certificates are available for transfer to them:

Department of Environmental Quality
November 8, 1985
Page 2

<u>Certificate No.</u>	<u>App. No.</u>	<u>Description</u>
822 1/3 of Cert.	T-905	Buffalo Bag House Filter
837	T-916	Baghouse Control System

Our mills at Gold Beach and Dee have not been sold and are still on the market. There are several potential buyers currently looking at these mills. The following certificates apply to Gold Beach and Dee:

<u>Certificate No.</u>	<u>App. No.</u>	<u>Description</u>
825	T-908	Glue Wash Water
826	T-909	Three Baghouses
857	T-932	Wood Waste Reclaim System
871	T-944	Dryer Washwater Treatment
1021	T-1126	Glue Wash Water System
1338	T-1432	Modify Dryers & Scrubber
858	T-933	Waste Treatment Plant
945	T-1028	Hog Fuel Boiler

Very truly yours,

M. F. Rapp

Marvin F. Rapp

MFR/se

cc W. O. Larson
R. Heinert



Davidson Industries Inc.

MAPLETON, OREGON • 97453

"Makers of
Douglas Fir
Products"

April 9, 1986

Management Services Div.
Dept. of Environmental Quality

RECEIVED
APR 13 1986

Mrs. Margaret Conley
Department of Environmental Quality
Management Services Division
P.O. Box 1760
Portland, Oregon 97207

Dear Mrs. Conley:

On August 6, 1985, Davidson Industries, Inc. acquired the Mapleton veneer mill and other real property from Champion International Corporation. Enclosed please find copies of Pollution Control Facility Certificates numbered 821, 823, 944, and 1340. We request that these certificates be transferred to Davidson Industries, Inc., P.O. Box 7, Mapleton, Oregon 97453.

Thank you for your cooperation in this matter.

Yours truly,

DAVIDSON INDUSTRIES, INC.



Mark S. Vonderheit

MSV:gm

Enclosures

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Certificate No. 821

Date of Issue 9-23-77

Application No. T-904

POLLUTION CONTROL FACILITY CERTIFICATE

Issued To: <i>Champion International Corporation</i> Champion Building Products Division P. O. Box 10228 Eugene, Oregon 97401		Location of Pollution Control Facility: Mapleton, Oregon	
As: <input type="checkbox"/> Lessee <input checked="" type="checkbox"/> Owner			
Description of Pollution Control Facility: Waste water collection and treatment - Mapleton			
Type of Pollution Control Facility: <input type="checkbox"/> Air <input checked="" type="checkbox"/> Water <input type="checkbox"/> Solid Waste			
Date Pollution Control Facility was completed: <u>March 1974</u>		Placed into operation: <u>May 1974</u>	
Actual Cost of Pollution Control Facility: \$ <u>26,859.00</u>			
Percent of actual cost properly allocable to pollution control: 80% or more			

In accordance with the provisions of ORS 468.155 et seq., it is hereby certified that the facility described herein and in the application referenced above is a "Pollution Control Facility" within the definition of ORS 468.155 and that the air and water or solid waste facility was erected, constructed or installed on or after January 1, 1967, or January 1, 1973 respectively, and on or before December 31, 1980, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or solid waste pollution, and that the facility is necessary to satisfy the intents and purposes of ORS Chapters 459, 468 and the regulations thereunder.

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

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

Signed 

Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on

the 23rd day of September, 1977

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Certificate No. 823

Date of Issue 9-23-77

Application No. T-906


POLLUTION CONTROL FACILITY CERTIFICATE

Issued To: <i>Champion International Corporation</i> Champion Building Products Division P. O. Box 10228 Eugene, Oregon 97401	Location of Pollution Control Facility: Mapleton, Oregon <i>Lane</i>
As: <input type="checkbox"/> Lessee <input checked="" type="checkbox"/> Owner	
Description of Pollution Control Facility: 40,000 CFM fan with 60 hp 1800 RPM TEFC motor; ductwork with 2" fiberglass insulation' insulation dampers and bypass vent assemblies and overfire nozzles used to incinerate veneer dryer emissions inside the boiler.	
Type of Pollution Control Facility: <input checked="" type="checkbox"/> Air <input type="checkbox"/> Water <input type="checkbox"/> Solid Waste	
Date Pollution Control Facility was completed: <u>February 1975</u> Placed into operation: <u>March 1975</u>	
Actual Cost of Pollution Control Facility: \$ <u>82,235.55</u>	
Percent of actual cost properly allocable to pollution control: <p style="text-align: center;">80% or more</p>	

In accordance with the provisions of ORS 468.155 et seq., it is hereby certified that the facility described herein and in the application referenced above is a "Pollution Control Facility" within the definition of ORS 468.155 and that the air and water or solid waste facility was erected, constructed or installed on or after January 1, 1967, or January 1, 1973 respectively, and on or before December 31, 1980, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or solid waste pollution, and that the facility is necessary to satisfy the intents and purposes of ORS Chapters 459, 468 and the regulations thereunder.

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

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

Signed 
 Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on
 the 23rd day of September, 19 77

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Certificate No. 944
Date of Issue 11/17/78
Application No. T-1027

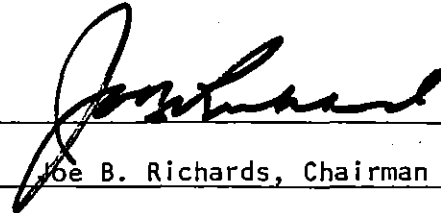
POLLUTION CONTROL FACILITY CERTIFICATE

Issued To: Champion International Corp. Champion Building Products P. O. Box 10228 Eugene, Oregon 97440	Location of Pollution Control Facility: Mapleton Lane County, Oregon
As: <input type="checkbox"/> Lessee <input checked="" type="checkbox"/> Owner	
Description of Pollution Control Facility: <p style="text-align: center;">Hog fuel preparation system</p>	
Type of Pollution Control Facility: <input type="checkbox"/> Air <input type="checkbox"/> Noise <input type="checkbox"/> Water <input checked="" type="checkbox"/> Solid Waste	
Date Pollution Control Facility was completed: <u>10/15/77</u> Placed into operation: <u>10/15/77</u>	
Actual Cost of Pollution Control Facility: \$ <u>180,293.18</u>	
Percent of actual cost properly allocable to pollution control: <p style="text-align: center;">100%</p>	

In accordance with the provisions of ORS 468.155 et seq., it is hereby certified that the facility described herein and in the application referenced above is a "Pollution Control Facility" within the definition of ORS 468.155 and that the air or water facility was constructed on or after January 1, 1967, the solid waste facility was under construction on or after January 1, 1973, or the noise facility was constructed on or after January 1, 1977, and the facility is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water, noise or solid waste pollution, and that the facility is necessary to satisfy the intents and purposes of ORS Chapter 459, 467 or 468 and the regulations adopted thereunder.

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

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

Signed _____

 Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on
 the 17th day of November, 19 78

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Certificate No. 1340

Date of Issue 12/4/81

Application No. T-1434

POLLUTION CONTROL FACILITY CERTIFICATE

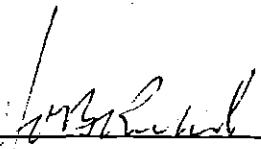
Issued To: Champion International Corp. Building Products Division P. O. Box 10228 Eugene, OR 97440	Location of Pollution Control Facility: Mapleton, OR
As: <input type="checkbox"/> Lessee <input checked="" type="checkbox"/> Owner	
Description of Pollution Control Facility: The facility is a veneer dryer wash water recirculation system consisting of concrete-metal troughs, three collection tanks, a Sweco screen, a 10 Hp chopper pump, a 20 Hp recirculation pump, associated plumbing, electrical controls and tank supports.	
Type of Pollution Control Facility: <input type="checkbox"/> Air <input type="checkbox"/> Noise <input checked="" type="checkbox"/> Water <input type="checkbox"/> Solid Waste <input type="checkbox"/> Hazardous Waste <input type="checkbox"/> Used Oil	
Date Pollution Control Facility was completed: <u>Dec. 31, 1979</u> Placed into operation: <u>Dec. 31, 1979</u>	
Actual Cost of Pollution Control Facility: \$ <u>76,437.00</u>	
Percent of actual cost properly allocable to pollution control: <p style="text-align: center;">80% or more</p>	

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of ORS 468.175 and subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

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

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

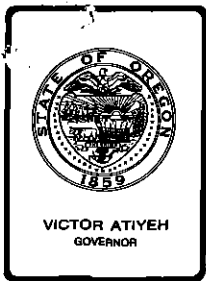
NOTE — The facility described herein is not eligible to receive tax credit certification as an Energy Conservation Facility under the provisions of Chapter 512, Oregon Law 1979, if the person issued the Certificate elects to take the tax credit relief under ORS 316.097 or 317.072.

Signed _____ 

Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on

the 4th day of December, 1981



Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207

522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item D, June 13, 1986, EQC Meeting

Informational Report -- Proposed Delegation Agreement
Between the EPA and the DEQ for Phased Delegation of
Construction Grants Program Management from the EPA to the
DEQ.

Background

The draft Delegation Agreement is presented to the EQC at staff initiative as an informational item. The Agreement would represent acceptance of a significant increase in responsibility by the DEQ for management of the wastewater facility construction program.

Notice that the draft Delegation Agreement is available for review and comment was provided to the groups and individuals who receive information about the Construction Grants Priority List, and was placed in the "Oregonian." A public meeting to answer questions and receive comments was held June 3, 1986.

The objectives of the proposed Agreement are to: 1) eliminate duplication of administrative responsibility for the program, 2) improve operating efficiency for the program, 3) make it easier for grantees (cities) attempting to get construction assistance, and 4) increase the state's control over the quality of the program in Oregon. Additionally, accepting delegation allows the state to begin preparations for transition of the construction assistance from a grants program to whatever new form may emerge as a result of changes in the Clean Water Act, when that Act is reauthorized.

The Conference Committee appointed several months ago by the House and Senate to draft a reauthorization proposal has not yet completed its work. Reauthorization of the Act in FY86 is increasingly less likely as the time to begin work on the FY87 budget approaches. The existing versions of the reauthorization bill, however, all contain provisions to change the form of construction assistance from a grants program to a state-administered loan program. Twenty (20) percent of Oregon's FY87 appropriation, and of future appropriations for construction projects, can be set aside for establishment of a revolving loan fund.

Since reauthorization has not occurred, funding for construction grants is currently under a continuing resolution. Construction grants projects have been funded for FY86 at approximately one-quarter of the FY85 level; funding for administration of the program is at the same level as it was for FY85, minus the 4.3 percent required by the Gramm-Rudman bill. Oregon's FY85 and FY86 allotments for administration of the construction grants program are both available, upon signature of the Delegation Agreement by the DEQ and the EPA. Those allotments total approximately \$2.2 million, which, at expected expenditure levels, would fund the program at least through FY88.

Director's Recommendation

It is recommended that the Commission concur in the course of action outlined by the draft Delegation Agreement, which is to accept phased delegation of the management of the Construction Grants program from the EPA to the DEQ.

Mike Hansen
for
Fred Hansen

Attachments: Draft Delegation Agreement

Mary G. Wahl:h
WH807
229-5415
5-19-86

UMBRELLA DELEGATION AGREEMENT

Between

THE UNITED STATE ENVIRONMENTAL PROTECTION AGENCY

and

THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

UMBRELLA DELEGATION AGREEMENT

Between

THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

and

THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

**for the purpose of implementing the
Construction Grants Management Assistance Program**

ORIGINAL

I. PREAMBLE

The Regional Administrator, United States Environmental Protection Agency (EPA), Region X, and the Director of the Oregon Department of Environmental Quality (DEQ), hereby enter into this Agreement which outlines a program for the EPA and the DEQ to provide for efficient management of the Title II municipal treatment works Construction Grants Program under the Clean Water Act, 33 U.S.C. 466, et.seq. (the Act).

It is an objective of the Act and of this Agreement to restore and maintain the chemical, physical and biological integrity of the nation's waters through the construction of publicly owned waste treatment works under the construction grants program.

The EPA is responsible for the management of the construction grants program under the Act but can delegate much of its responsibility to the states. The purpose of this Agreement is to delegate to the DEQ the authority to review and certify grant project documents and to

perform grant program management tasks in order to decentralize the management of the construction grants program to the maximum extent possible consistent with carrying out the environmental objectives of the Act and prudent fiscal management to prevent Federal-State duplication.

II. DELEGATION OF AUTHORITY

The Regional Administrator has determined, based on a detailed review of the quantity and quality of the State's past efforts in the conduct of activities associated with the construction grant program and the plans, actions, and schedules set forth in this document, that the DEQ is capable of undertaking responsibility for management of part of the construction grants program.

III. AUTHORITY

The authority for this Agreement is contained in Section 205(g) of the Act and the implementing regulations, 40 CFR Subpart J. Nothing in this Agreement shall be determined to conflict with the aforementioned provisions but rather is meant as a supplement in order to implement a Construction Management Assistance (CMA) program between the EPA and the DEQ.

IV. ADMINISTRATIVE ELEMENTS

A. Amendment

This Agreement may be amended at any time by a written agreement between the EPA and the DEQ. Such an amendment may add to or delete portions of the scope of work included in this Agreement and will be accompanied by a corresponding amendment to any CMA grant to the extent such an amendment is necessary. Substantial amendments which affect policy matters will require the approval of the Regional Administrator of the EPA and the Director of the DEQ. Other amendments, such as changes to the body of the Agreement, will require approval of the Director of the Water Division of the EPA and the Administrator of the Water Quality Division of the DEQ. Minor modifications to specific functional statements, checklists, or attachments to specific functional statements, may be revised subject to the joint approval of the Water Quality Division of the DEQ and the EPA Operations Office.

B. Term

The term of this Agreement is five (5) years from the date of execution. It is the intent of both parties that the DEQ assume and retain the authorities delegated under this Agreement over the long term. To accomplish this, the parties may extend the term of the Agreement by amendment.

C. Termination

This Agreement shall remain in effect unless and until it is amended or terminated, in whole or in part, by either party, following one hundred and twenty (120) days written notice to the other party and sixty (60) days concurrent public notice. Any associated costs incurred after the effective date of termination will not be allowable under any CMA grant. The EPA may reduce the CMA grant amount on a proportional basis if the CMA grant is suspended or terminated by the EPA.

Upon termination of this Agreement, or any part thereof, all pertinent documents being maintained by the DEQ will be made available to the EPA.

D. Understandings

The DEQ and the EPA agree that state management of the construction grants program will improve program efficiency and responsiveness, while reducing confusion and redundancy. The EPA and the DEQ share the goal of reducing the number of agencies currently managing grants as quickly as possible without sacrificing the quality of construction grants projects.

The DEQ and the EPA recognize that the current federally funded grants program may evolve in time to a state revolving loan

program. DEQ and EPA recognize the need for advance planning for the phase-in from a federal grant to a state loan program.

The DEQ and the EPA recognize the need for staff capability to understand the complex construction grants regulations, policy and guidance, and to interpret these requirements accurately to local communities who are striving for infrastructure improvements. The EPA requires strict adherence to the federal construction grants regulations and recommends that serious consideration be given to applying federal grants guidance. Where possible, the DEQ will prepare alternatives to the EPA guidance and apply such guidance after EPA review and concurrence.

E. Terms and Conditions

This Agreement sets forth the general terms and conditions under which the DEQ will conduct delegated activities related to the construction grants program. The specific scope of activities to be performed by the DEQ for each delegated function is outlined in the Appendices to this Agreement.

F. Communications

Communications which relate to the general concepts contained in this Agreement will take place through the DEQ Water Quality Division and the EPA Water Division, Region. X. Communications

necessary to manage the program on a daily basis at the project level will take place between the appropriate individuals as listed below:

Construction Grants Coordinator

Environmental Protection Agency, Region X

Oregon Operations Office

522 S.W. 5th

Portland, OR 97204

Phone: (503) 221-3250 FTS 423-3250

Manager, Construction Grants Section

Department of Environmental Quality

522 S.W. 5th

Portland, OR 97204

Phone: (503) 229-5324

G. Previous Memoranda of Understanding

This Agreement supersedes all Memoranda of Understanding between the EPA and the DEQ which relate to the functions delegated by this agreement to the DEQ.

V. STATE AND EPA ASSURANCES

A. The DEQ, in the conduct of the activities delegated under this Agreement, will carry out its responsibilities in accordance with the intent and substance of all applicable Federal laws regulations, orders, policy issuances in effect on the effective date of this Agreement, and in keeping with the highest professional standards. The EPA guidelines will be considered advisory and not necessarily mandatory. The EPA will be responsive to the DEQ's recommendations to streamline the EPA policies and guidance where possible without jeopardizing the compliance with applicable regulations.

The EPA will actively solicit the DEQ comments on all future regulations and Region X policies prior to promulgation or issuance. New guidelines, policies, and interpretation of national policies by Region X, will be developed in cooperation with the DEQ prior to implementation to the extent applicable to Oregon projects. As new regulations or policies are issued by the EPA, the DEQ will carry out its activities in accordance with them consistent with the effective date or with an agreed upon implementation schedule.

The EPA is primarily responsible for interpreting all existing and future construction grants program regulations or policy issuances and advising the DEQ in a timely manner regarding implementation of these requirements. The EPA may recommend procedures if appropriate, or requested by the DEQ. The EPA will

provide supplemental grant assistance, if necessary, to implement any future changes.

- B. The DEQ will maintain staff resources necessary for effective management of delegated functions. Resources will be commensurate with the financial assistance available through the CMA grant and authorization made by the Oregon legislature. Staffing levels are described in Appendix A. DEQ will not significantly reduce its construction management staff without prior consultation with EPA. In turn, EPA will not significantly reduce the CMA grant without prior consultation with DEQ. A staffing analysis for the five- (5) year period of FFY86 - FFY90 is presented in Appendix A. A five- (5) year budget is presented in Appendix B. Also presented in Appendix B are organization charts and position descriptions.
- C. The DEQ will hire and train new personnel as necessary to satisfy the staffing plan consistent with assumption of additional delegated authorities under this Agreement, state personnel requirements, and availability of CMA funds.
- D. The DEQ and the EPA are committed to the goal of full delegation of the construction grants program to the State. The DEQ through the CMA program has assumed primary responsibility for program functions as described in Appendix E. Additional functions and schedules for delegation are identified in Appendix D. This schedule may be modified as future program activities change.

- E. The DEQ assumes no responsibility for performing the delegated functions under this Agreement in the absence of timely award of appropriated CMA funds.
- F. In anticipation of potential termination of the construction grant program, the DEQ and the EPA recognize the importance of maintaining a 205(g) reserve to provide for continued management of projects through completion. To this extent, the agencies agree to a goal of maintaining a 205(g) reserve sufficient to operate the program for twenty-four (24) months after termination.

VI. MAINTENANCE OF EFFORT

To qualify for CMA grant and to cover the costs incurred by the DEQ under the Agreement, the maintenance of effort requirements in 40 CFR 35.305(a) must be satisfied.

VII. ELIGIBLE COSTS

- A. Funding -- All costs associated with the performance of the functions delegated to DEQ under this Agreement shall be eligible per the requirements of 40 CFR 35.300(a) and (b).

Eligible Costs -- Additional eligible costs include but are not limited to costs for training, needs survey work, priority list management, assistance to USEPA with resolution of disputes and appeals, public participation and public information, management of State Water Pollution Control grants, and other assistance to municipalities for municipal wastewater treatment facility construction, general management and administration, Grants Information and Control System (GICS), and travel. Such costs will only be allowable to the extent that they pertain to management of construction grants to Oregon municipalities under 40 CFR, Part 35, Subparts E and I.

Special Tasks -- Release of 205(g) funds for programs or purposes other than those above must be approved by the USEPA Water Division Director. Award of such funds must be separate from the CMA grant.

VIII. ACCOUNTING

- A. The DEQ is responsible for accounting costs in the conduct of delegated construction grants program functions. The accounting system to be used is outlined in Appendix F.
- B. The DEQ agrees to submit to the EPA annual summary of costs incurred by selected program functions within ninety (90) days of

the ending of the budget period after which the CMA grant is awarded. The format will be as provided in Appendix F.

IX. STATE ORGANIZATION AND PROGRAM RELATIONSHIPS

A. Organization

The DEQ has been designated by the Oregon legislature as the agency responsible for water quality management. The DEQ, Water Quality Division, is responsible for the municipal construction grants program. The Administrator, Water Quality Division is directly responsible for planning, organizing, and directing the construction grants program. A staff of eight to be recruited in the near future will be responsible for carrying out the day-to-day program activities. This staff will be expanded through FFY87 and FFY88 to an eventual complement of twenty (20) individuals.

The organization structure is shown in Appendix B.

B. Water Quality Program Coordination

A close relationship exists between the State water quality program and the construction grants program. The DEQ will make every effort to integrate and coordinate the NPDES permit and water quality planning program activities with the construction

grants management activities. The DEQ will continue to develop and manage its needs survey work and project priority list consistent with EPA guidance.

C. CMA Grant

This Delegation Agreement is not a grant. However, costs incurred under this Agreement will be eligible for compensation under a CMA grant. To accommodate State budget cycles, the EPA agrees to award CMA grants for future fiscal years without a workplan for those years, provided the State is operating under an approved workplan for the current period, and a workplan is approved for the remainder of the grants planning system. CMA grants are for implementing the Delegation Agreement and accomplishing the annual workplan.

It is recognized that there exists a very close relationship between the on-going Section 106 State Program Plan, the Section 106 grants, the CMA, and the CMAG. The primary effect of this Agreement and potential CMAG funds on the Section 106 activities would be to free funds from activities which have previously been sponsored by Section 106.

Upon award of the CMAG, Section 106 funds for activities which will be covered under the CMA grant may be reprogrammed. When that is the case, a budget showing the reprogramming of funds

will be submitted with the first subsequent State/EPA Agreement to be submitted to the EPA, Region X.

X. IMPLEMENTATION

A. Staffing and Training

The organization structure (Appendix B) addresses the staffing levels which are required to carry out the responsibilities delegated. Position descriptions for all present and proposed staff to implement the construction grants program are also shown in Appendix B.

Training is a key part of the program and will be accomplished through on-the-job training, attendance at EPA courses, formal and informal meetings and conferences, in-house training, and through judicious use and subscriptions to Civil Service courses and EPA technology transfer sessions. The EPA will make every effort to support the DEQ's training plan as described in Appendix C. As the need arises, the EPA will facilitate COE involvement in providing the DEQ staff with training.

B. Transition

As each new function is added to the Agreement by amendment, there will be a transition period of specific duration. This

period will be used by the DEQ to train and familiarize staff with new responsibilities. The EPA will use the period to support and verify the State's capability for adequately performing each delegated function. During the transition period, EPA will retain full responsibility for the functions proposed for delegation. At the end of the transition period, the functions are fully delegated and the DEQ will assume full responsibility. The specific length of each transition period is described in each amendment to the Agreement.

The salaries for personnel may be funded from CMAG funds, for a staffing/training period of up to twelve (12) months prior to the DEQ assuming full responsibility for each activity.

If, at the end of the transition period, the EPA and the DEQ are convinced that the State has not developed full capability to carry out the new function, the Region X Administrator may extend the transition period up to an additional three (3) months. This action, if taken, will be accompanied by a written description of the deficiencies which preclude State delegation of the functions in question.

C. Formal Delegation

When both the EPA and the DEQ agree that the DEQ is ready to assume a function, the Water Division Director, on behalf of the

Regional Administrator shall formally transfer the responsibility to the DEQ by letter. Such letters automatically become part of this Agreement and will be included in Appendix E.

D. Sufficient Authority and Project Certification

The construction grants delegation regulation (Subpart J, Section 35.3020) incorporates the concept of sufficient authority for State project certification from Section 209 of the Clean Water Act. Sufficient certification authority is achieved when essential pre-award activities are fully delegated to the State.

Sufficient authority certification enables the DEQ to certify projects and establishes the schedule for subsequent EPA actions. The Regional Administrator shall approve or disapprove all State applications for project certification within forty-five (45) days of the date of receipt of such application. If the Administrator does not approve or disapprove such application on schedule, the applications shall be deemed approved.

Specific procedures for certification and approval of grant documents are contained in Appendix E.

E. Assignment

The DEQ will not assign, in whole or in part, its interest in this Agreement; however, the DEQ may, with the approval of EPA,

contract for resources (such as with the COE) to conduct specific functional construction grants program tasks and other related tasks.

XI. OVERSIGHT OF DELEGATION

A. Purpose

An oversight program is required by 40 CFR 35.3010(b)(7) and 35.3025, and is intended to ensure that both the DEQ and the EPA efficiently and effectively execute the fiscal and program responsibilities under the Clean Water Act and related legislation. Oversight will be accomplished in accordance with the Oversight Strategy in Appendix H, and by the annual State-EPA Agreement (SEA).

B. Planning Objectives and Outputs

The SEA workplan (including CG outputs) shall constitute the grant assistance workplan required by Subpart A, 40 CFR 35.130. If the current SEA and CG outputs do not cover the entire grant budget period, the DEQ may cover the remaining budget period by negotiating a new SEA and CG outputs in accordance with a schedule determined by the EPA. The SEA will include those strategies, resources, and outputs proposed by the DEQ and the EPA, and determined through negotiation to be of highest priority

for the coming year. Included in the construction grants output will be the priority objectives, outputs, and measures identified and negotiated between the DEQ and the EPA in the EPA's current national systems for program planning and accountability. The SEA will also include a negotiated oversight plan which will establish the specific oversight activities for the coming year. Appendix G identifies the DEQ's role in developing construction grant outputs for which the COE is responsible.

C. Monitoring and Evaluation

Progress toward the SEA workplan goals and outputs including construction grants, will be monitored quarterly as described in the Oversight Strategy. The SEA will set the schedule for evaluation activities. Issues and agenda for the mid-year review and annual program evaluation will be established by the EPA prior to that review and evaluation. Generally, the EPA will conduct a mid-year review and an annual program evaluation. After the mid-year and annual evaluation reports are finalized, a follow-up plan will be negotiated establishing any necessary current year corrective actions and actions to be considered in the next year's SEA.

D. Reporting

Regular reporting required of the State includes providing GICS information, GICS project data requirements, and the special

conditions or financial reporting for the 205(g) grant assistance on delegated activities. Most of the data needed for program management will be obtained through GICS, inquires from the EPA, or requirements of the 205(g) grant. Additional reporting may be arranged through negotiation in the SEA or as required by the EPA.

XII. EPA ROLE

- A. Before full delegation is reached, the EPA will conduct the following activities:
1. Provide formal, structured training to the DEQ staff during the transition phase for each function to be delegated;
 2. Monitor the transition phase for each function to determine readiness to assume the function or identify potential problems;
 3. Provide continual comments and feedback, as appropriate, during the transition phase for each function;
 4. Retain the primary responsibility for the performance of each function carried out by the EPA prior to its delegation; and

5. Provide necessary oversight of the COE as long as the agency continues to carry out functions identified in the Interagency Agreement. This oversight includes coordination between the COE and the DEQ to ensure that work flows continuously and smoothly.

B. During the life of this Agreement, in addition to those functions cited elsewhere, the EPA will:

1. Provide necessary maintenance and documentation to assure effective operation of GICS to meet State and the EPA needs;
2. Perform or oversee all delegation functions not assumed by the State at that time;
3. Assist the DEQ on technical issues as requested;
4. Provide training on new requirements and initiatives;
5. Provide legal services representing the EPA in grant appeals (40 CFR 35.960), and executing change-of-name agreements;
and
6. Be available through the EPA Regional Counsel to assist the DEQ Counsel on legal matters pertaining to construction grant laws and regulations.

XIII. EXCLUSIONS

The EPA retains the responsibility and the primary authority for the following:

1. Award of Step 3 and combined Step 2/3 grants and amendments thereto;
2. Review of projects for determination regarding whether Environmental Impact Statements will be required under the National Environmental Policy Act of 1969, 42 USC 4321, and the preparation and issuance of such statements or of Findings of No-Significant Impact required by Part 6 of this Chapter;
3. Civil rights determinations and enforcement related to the Civil Rights Act of 1964, Executive Order, 11246, 40 CFR, Part 8, and other Federal requirements related to discrimination;
4. Final dispute determinations under 40 CFR 35.960;
5. Determinations of protests under 40 CFR 35.939;
6. Review of construction grant audit exceptions and resolution;

7. Final project audit;
8. Processing project payments;
9. Determination that an overriding Federal interest exists in a particular project which requires greater Federal oversight or participation. Such determination will be confirmed to the DEQ in writing and will be subject to the "Disputes" provision of this Agreement;
10. Any functions not specifically delegated by the terms of this Agreement; and
11. If a State action interferes with or prevents the EPA from performing a non-delegated activity, the EPA may request the DEQ to change the prior action or the EPA may need to override it.

A. State Records

The DEQ will keep adequate records of all actions performed under this Agreement and provide access to the EPA.

B. Project Files

The DEQ will:

1. Maintain an official project file for each construction grant project during the life of the project, including all grant-related correspondence and documents;
2. Keep the files current and accessible for the public, auditors, and other program officials;
3. Provide copies of file documentation as necessary for requests made in accordance with the Freedom of Information Act (FOIA);
4. When appropriate, transport files by hand-carried or certified mail; and
5. Maintain the file for three (3) years after the project audit has been completed or after a decision is made not to audit the project.

The EPA will:

1. File summary checklists with the EPA records. Extra copies may be made available to the DEQ per the terms of this Agreement.

C. Records Retention

1. The DEQ will retain hard copies of grant documents on any given Step until work is completed and an audit has been completed or the EPA determines that an audit is not needed. Upon receipt of a copy of the audit report or receipt of the determination not to audit, DEQ will retain such files for a minimum of three (3) years, or until project is closed out.
2. The DEQ will transmit hard copy records of the official financial assistance file to the Federal Record Center in accordance with instructions furnished by the EPA.

D. Access to Records

1. The DEQ will allow any person to review its records related to the construction grants program consistent with the following policy:
 - a. The DEQ may require a written request twenty-four (24) hours in advance;
 - b. The DEQ will answer requests within a reasonable period of time;
 - c. Requests must be specific. The DEQ reserves the right to scan records in advance and remove legally confidential information;

- d. The DEQ reserves the right to observe the person while the records are being reviewed;
 - e. The DEQ reserves the right to charge for copies of records requested;
 - f. All information that is not legally confidential, consistent with ORS 192, shall be available for public review.
- 2. The DEQ will make all construction grant files readily available to the EPA.
 - 3. The EPA will allow any person to review its records relating to the construction grants program at any time consistent with the Freedom of Information Act. Pursuant to that Act, financial records given the EPA in confidence by any firm will not be available for inspection except with permission of the firm which sent the data.

XIV. RESOURCE NEEDS

- A. The DEQ will not less often than annually analyze staffing and other resource needs as they relate to the construction grants program responsibilities delegated, or planned for delegation, under this Agreement. Resource analyses will be provided to the

EPA during negotiation of the State/EPA Agreement, and whenever the DEQ applies for additional CMA funds.

- B. Amendments to the Agreement may be made as necessary based upon the revised resource needs. As appropriate, staffing shortfalls may be compensated through increased 205(g), 106, or State funding, if available, or by adjustment of performance goals.

XV. DISPUTES AND APPEALS

- A. Determinations by the Regional Administrator concerning denial of an application for the Construction management Assistance grant and determinations by the Regional Administrator concerning disputes arising under a CMA grant, including suspension or termination of grant assistance, shall be final and conclusive unless appealed by the State within thirty (30) days from the date of receipt of such final determination in accordance with the "Disputes" provision of 40 CFR, 35.960.
- B. The DEQ will implement the EPA regulations, policies, orders, and guidelines. In those cases where the DEQ does not agree with a regional policy, guidelines, or interpretation of national policy, the DEQ may appeal to the Regional Administrator whose decision on the matter shall be final. If the appeal is submitted within ten (10) days of the DEQ receipt of a new Region X policy or guideline and contains sufficient information for the

Regional Administrator to decide on the matter, implementation will be delayed until the Regional Administrator makes a decision.

- C. A grantee or applicant may request of the Regional Administrator a review of an adverse State determination.

XVI. PUBLIC PARTICIPATION

- A. The DEQ has solicited public involvement in the development of this Agreement and in so doing has satisfied the requirements of 40 CFR, Part 25 and 40 CFR 35.3035.
- B. The DEQ will maintain contact with interested public bodies, for example, the League of Oregon Cities. Public meetings will be held if sufficient statewide interest is indicated in proposed revisions and changes to this Agreement.

FOR THE ENVIRONMENTAL PROTECTION AGENCY

Date

Regional Administrator

FOR THE STATE OF OREGON, DEPARTMENT OF ENVIRONMENTAL QUALITY

Date

Director

APPENDIX A

Oregon Construction Grants Program

Staffing Analysis

FFY86 - FFY90

I. ASSUMPTIONS

A. Federal Funding

1. Annual national appropriations will be \$2.4 billion; annual allocation for Oregon will be approximately \$28,000,000.
2. The EPA grant share for projects will be 55 percent of the eligible costs.
3. The number of active projects in Oregon will increase due to more small community projects, beginning FFY87.

- B. Initial delegation of approximately half of Pre-Step 3 functions to the DEQ will be accomplished by December 31, 1986; delegation of the remaining Pre-Step 3 functions and certification, review, and recommendation for Step 3 awards is scheduled by September 30, 1987; delegation of Step 3 functions to the DEQ is scheduled by September 30, 1988.

C. The estimated annual level of effort per project is based upon EPA workload models and the EPA Oregon Operations Office and the DEQ experience.

D. FTEs are determined by dividing annual workdays by 220.

E. Fiscal years (FFY) are federal fiscal years, which run from October 1 through September 30.

II. STAFFING LEVEL ESTIMATES FOR FFY86 - FFY90:

<u>FFY</u>	<u>PROJECT MANAGEMENT</u> FTEs	<u>PROGRAM MANAGEMENT</u> FTEs	<u>TOTAL FTEs</u>
86 (Present)	3.2	2	5.2
86 (Present & Proj.)	3.5	2	5.5
87	11.5	2.5	14
88	16.5	3.5	20
89	16.5	3.5	20
90	16.5	3.5	20

III. THE ESTIMATED ANNUAL CONSTRUCTION GRANT WORKLOAD ANALYSES FOR THE
FFY86 - FFY90 ARE AS FOLLOWS:

WORKLOAD ANALYSIS FFY86

ACTIVITY*	PROJECTS			WORKDAYS/PROJECT			TOTAL WORKLOAD
	Small	Medium	Large	Small	Medium	Large	
Pre-Grant Management	25	15	3	10	15	25	550
Advances	2	0	NA	5	7	NA	10
Facility Plans	5	6	2	10	15	20	180
Environmental Review	5	6	1	5	5	10	65
AT Review	2	0	0	2	5	10	4
Plans & Specifications	11	12	3	5	10	15	220
UC & SUO	6	5	0	5	5	10	55
Change Orders (Tech.)	10	5	3	3	4	5	65
Change Orders (Elig.)	10	5	3	2	4	5	55
O&M Manual	4	4	2	2	4	6	36
O&M Inspections	6	5	3	1	1	2	17
Priority List Development and Update, and Fund Management							87
TOTAL WORKDAYS							1344
TOTAL FTEs (Includes 1 Supervisor)							7

* Activities are those Phase 1 functions to be transitioned to the DEQ in FFY86 and FFY87.

WORKLOAD ANALYSIS FFY87

<u>ACTIVITY*</u>	<u>PROJECTS</u>			<u>WORKDAYS/PROJECT</u>			<u>TOTAL WORKLOAD</u>
	<u>Small</u>	<u>Medium</u>	<u>Large</u>	<u>Small</u>	<u>Medium</u>	<u>Large</u>	
Phase 1							1344
Step 4 Application	5	NA	NA	4	4	5	20
B & C Review	25	10	0	5	10	15	225
Fin. Management Review	20	5	0	2	3	5	55
Step 3 Application	20	10	1	5	10	15	215
A & E Contracts	25	10	1	2	3	5	85
Force Account Review	3	5	1	2	3	5	26
Step 3 & 4 Amendment	50	20	4	2	3	5	180
Plan of Operation	25	10	2	1	2	2	49
Perf. Cert. Review	25	10	2	3	4	5	125
O&M Inspections	25	10	2	1	1	2	<u>39</u>
TOTAL WORKDAYS							2363
TOTAL FTEs (Includes 1 Supervisor)							12

* Activities are those Phase 1 & 2 functions to be carried out by the DEQ in federal FFY87.

WORKLOAD ANALYSIS FFY88 - FFY90

<u>ACTIVITY*</u>	<u>PROJECTS</u>			<u>WORKDAYS/PROJECT</u>			<u>TOTAL WORKLOAD</u>
	<u>Small</u>	<u>Medium</u>	<u>Large</u>	<u>Small</u>	<u>Medium</u>	<u>Large</u>	
Phase 1							1344
Phase 2							1019
Value Engineering	0	1	1	5	5	10	15
Project Engineering	25	10	1	3	4	6	121
Precon. Conference	30	15	2	3	4	6	162
Bid Review	30	15	2	4	6	8	226
Bid Protest	1	1	0	10	13	16	23
Interim Inspection	25	10	2	8	12	20	360
CME	1	1	1	30	45	60	135
Step 3 Payment	25	10	2	1	2	3	51
Outlay Management	25	10	2	2	3	4	88
On-Site Presence	0	0	0	0	0	0	0
Final Inspection	25	10	2	4	6	9	178
Admin. Completion	25	10	2	7	7	10	265
Audits	1	1	0	5	10	15	15
Closeouts	25	10	2	1	1	1	37
Project Management	25	10	2	7	10	15	<u>305</u>
TOTAL WORKDAYS							4344
TOTAL FTEs (Includes 1 Supervisor)							21

* Activities are those Phase 1, 2 & 3 functions to be carried out by the DEQ in federal FFY88 - FFY90.

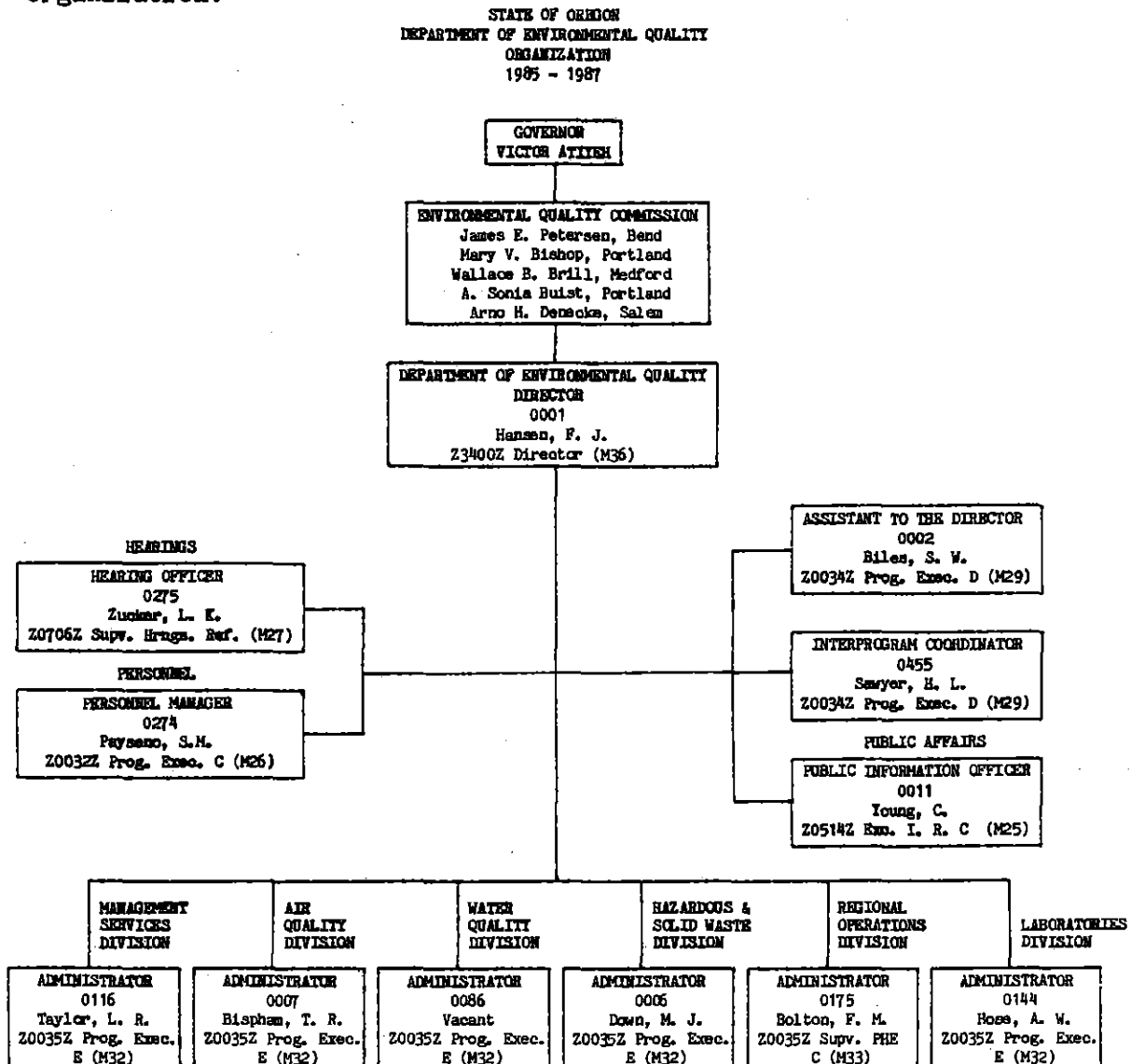
APPENDIX B

CONSTRUCTION GRANTS MANAGEMENT IN OREGON

Primary Agency: Oregon Department of Environmental Quality

Mission: Administer a system to safeguard the quality of State waters both surface and underground, and ensure safe drinking water supplies for the citizens of Oregon.

Organization:



WATER QUALITY DIVISION

ADMINISTRATOR
0086
VACANT
Z0035Z Program Exec. E (M32)

DIVISION MGT. ASSISTANT
0087
Michels, B. F.
X0010X Mgt. Asst. A (M14B)

WORD PROCESSING SPECIALIST
0089
Watson, C. R.
C0015U WP Specialist (11)

PERMIT CLERK/SC SECRETARY
0088
Brown, M. J.
C0008U Clerk Spec. (9E)

WORD PROCESSING SPECIALIST
0223
Smith, H. Y.
C0015U WP Specialist (11)

GRANTS CLERK
0485
Vacant
C0008U Clerk Spec. (9E)

WORD PROCESSING SPECIALIST
0489
Vacant
C0035U SP Specialist (11)

DIVISION RECEPTIONIST
0367
Arnold, G. C.
C0008U Clerk Spec. (9E)

LICENSING CLERK/CSS SEC.
0280
Hoge, J. D.
C0008U Clerk Spec. (9E)

DATA ENTRY CLERK
0097 (PT)
Arrastia, G. F.
C0008U Clerk Spec. (9E)

PLANNING

WQ PLANNING MANAGER
0106
Lucas, T. J.
X9333X Env. Mgr. B (M19)

SEE PAGE B-3

INDUSTRIAL WASTE

INDUSTRIAL WASTE MANAGER
0094
Ashbaker, C. K.
X3054X Supv. PHE B (M29)

SEE PAGE B-3

SEWAGE DISPOSAL GRANTS

SEWAGE DISPOSAL MANAGER
0130
Halliburton, M. M.
X9332X Env. Mgr. B (M29)

SEE PAGE B-4

CONSTRUCTION

CONSTRUCTION GRANTS MANAGER
0478
Vacant
X9332X Env. Mgr. B (M29)

SEE PAGE B-4

MH765.B

1
2
1

(Continued)

WATER QUALITY DIVISION

ADMINISTRATOR
0086
VACANT
Z0035Z Program Exec. E (M32)

PLANNING

WQ PLANNING MANAGER
0106
Lucas, T. J.
X9332X Env. Mgr. B (M29)

INDUSTRIAL WASTE

INDUSTRIAL WASTE MANAGER
0094
Ashbaker, C. K.
X3054X Supv. PHE B (M29)

WATER QUALITY ANALYST
0126
Quan, E. L.
C9328U Princ. Env. Anal. (28)

0486 (LD) (PT)
Vacant
C3058U Sr. Env. Engr. (27)

WATER QUALITY ANALYST
0125
Carter, G. D.
3C9328U Prin. EA (28)

INDUSTRIAL WASTE ENGINEER
0120
Patterson, L. D.
C3058U Sr. Env. Engr. (27)

GROUNDWATER QUALITY SPECIALIST
0368
Pettit, G. A.
C9323U Env. Spec. 3 (25)

POINT SOURCE SPECIALIST
0092
Vacant
C3057U Env. Engr. (24E)

INDUSTRIAL WASTE ENGINEER
0098
Wong, P. S.
C3058U Sr. Env. Engr. (27)

PROJECT COORDINATOR
0357
Jackson, J. E.
C9327U Sr. Env. Anal. (25)

0461 (LD)
Vacant
C3057U Env. Engr. (24E)

INDUSTRIAL WASTE SPECIALIST
0458
Vacant
C3057U Env. Engr. (24E)

0460 (LD)
Vacant
C9327U Sr. Env. Anal. (25)

WATER QUALITY SPECIALIST
0464
Vacant
C9322U Env. Spec. 2 (22)

SPECIAL PROJECTS ANALYST
0380
Wolniakowski, K. U.
C9326U Env. Anal. (22E)

(LD) Limited Duration (PT) Part-Time

(Continued)

WATER QUALITY DIVISION

ADMINISTRATOR
0086
VACANT
Z0035Z Program Exec. E (M32)

SEWAGE DISPOSAL

CONSTRUCTION GRANTS

SEWAGE DISPOSAL MANAGER
0130
Halliburton, M. M.
X933X Env. Mgr. B (M29)

CONSTRUCTION GRANTS MANAGER
0478
Vacant
X9332X Env. Mgr. B (M29)

MUNICIPAL FACILITIES COORD.
0107
Vacant
C9324U Env. Specialist 4 (27)

ASST. SUPV., SEWAGE DISPOSAL
0486 (LD) (PT)
Olson, S. O.
C9327U Sr. Env. Anal. (25)

0479
Vacant
C3058U S. Env. Engr. (27)

CONSTRUCTION GRANTS COORD.
0193
Vacant
C0033U Prog. Coord. 3 (26)

SEWAGE WORKS ENGR. SPEC.
0117
Van Domelen, J. L.
C3058U Sr. Env. Engr. (27)

ALTERNATIVE SYSTEMS SPECIALIST
0370
Ronayne, M. P.
C9327U Sr. Env. Anal. (25)

0480
Vacant
C3057U Env. Engr. (24E)

CONSTRUCTION GRANTS SFEC.
0091
Evans, R. T.
C0032U Prog. Coord. 2 (24)

STP OPR. TRAINING SPEC.
0114
Andresen, C. J.
C9326U Env. Analyst (22)

SOIL SCIENTIST
0111
Paeth, R. C.
C3085U Soil Scientist (26)

0481
Vacant
C3057U Env. Engr. (24E)

CONSTRUCTION GRANTS SPEC.
0483
Vacant
C0032U Prog. Coord. 2 (24)

0480
Vacant
C3057U Env. Engr. (24E)

0484
Vacant
X0022X Mgt. Asst. B (M16)

(LD) Limited Duration

(PT) Part-Time

WH765.B

1
4

I. DESCRIPTION OF POSITION DUTIES

A. Construction Grant Manager

Responsible for directing the State/EPA wastewater treatment facilities construction grants program. Directs construction grants activities of all personnel assigned to this program area of Water Quality. Prepares and maintains construction grants program plan including project priority list, public participation, hearings, project schedules, and program budget. Serves as primary liaison with EPA, the public, and other officials.

B. Senior Environmental Engineer

Serves as lead worker and technical expert for environmental engineering work related to treatment facilities construction. Performs difficult, complex engineering assignments. Provides direction and technical assistance to municipalities. Interprets and applies State and EPA regulations and standards. Manages development of the Needs Survey.

C. Senior Civil Engineer

Serves as lead worker and technical expert for construction aspects of wastewater treatment facilities. Performs difficult, complex engineering assignments. Provides direction and

technical assistance to municipalities. Interprets and applies state and EPA regulations and standards. Acts as primary liaison between state and city staff doing construction site activities and central office or EPA staff. Consults with contractors, engineers, and the Corps of Engineers regarding construction site activities.

D. Construction Grants Coordinator

Serves as primary liaison between the DEQ and the EPA regarding construction grants funding issues. Develops monthly reports of grant fund status, including funds committed and remaining, project status, and significant activities and issues. Serves as lead worker for program coordinators, organizes and conducts pre-planning and pre-application conferences for potential grantees, and acts as project officer for complex projects. Provides guidance/interpretation of federal program requirements and guidance regarding construction grant funding. Develops and revises for adoption by the Environmental Quality Commission any necessary Administrative Rules relating to the construction grants program.

E. Environmental Engineer

Works under the direction of a Senior Environmental Engineer performing application reviews, plans and specification reviews, change order/addenda reviews, and O & M Manual reviews and

inspections. Provides A/E and construction cost reviews, and value engineering reviews.

F. Civil Engineer

Works under the direction of a Senior Civil Engineer performing biddability and constructability reviews of plans, on-site construction inspections and other on-site duties, and value engineering reviews. Provides technical assistance to municipalities and performs construction cost reviews.

G. Program Coordinator II

Serves as project officer for funded projects. With project engineer, coordinates the administrative and technical activities for wastewater facility construction. Assists in the development and management of the Project Priority List. Reviews and makes recommendations on facility plans, and performs environmental assessments. Provides expert assistance to municipalities in pre-application activities including planning, grant application, and information collection. Interprets and applies federal and state regulations and standards.

H. Administrative Coordinator (IPA)

Responsible for grant schedule tracking, maintaining current knowledge of the EPA and the State administrative requirements,

final State processing of grant applications, EEO, grant offers, administrative close-out procedures, and priority lists. Reviews user charge ordinances and sewer use charges. Responsible for maintenance of Grant Information Control System (GICS), records management, retention schedules, regulation/guidance tracking, and tracking payments to grantees.

I. Clerical Specialist/Records Manager

Responsible for all correspondence preparation, mailing and filing relative to the construction grants program. Organizes and maintains appropriate grant information, regulations, and procedures documents.

J. Word Processor

Types all documents for Water Quality Word Processing station including letters, reports, memos, EQC items, Governor and Director letters, charts, and tables in a timely manner, with special attention on rush work. Runs all documents through "Spell" and proofs all documents.

APPENDIX B

BUDGET SUMMARY

FFY86

Personal Services (Salary + OPE) = \$62,798 + \$21,979 =	\$	84,777
Indirect Costs @ 19.96% of Personal Services		16,921
Services & Supplies (Includes travel, rent reproduction supplies, professional services, etc.)		43,746
Capital Outlay		<u>17,800</u>
TOTAL	\$	163,244

FFY87

Personal Services (Salary + OPE) = \$342,861 + \$120,001 =	\$462,862
Indirect @ 22% of Personal Services	101,830
Services & Supplies	182,836
Capital Outlay	<u>17,050</u>
TOTAL	\$ 764,578

FFY88

Personal Services (Salaries + OPE) = \$531,103 + \$185,886 =	\$716,989
Indirect @ 22% of Personal Services	157,738
Services & Supplies	190,454
Capital Outlay	<u>10,000</u>
TOTAL	\$1,075,178

FFY89

Personal Services (Salaries + OPE) = \$553,232 + \$193,631 =	\$746,863
Indirect @ 23% of Personal Services	171,778
Services & Supplies	198,390
Capital Outlay	<u>10,000</u>
TOTAL	\$1,127,031

FFY90

Personal Services (Salaries + OPE) = \$576,283 + \$201,699 =	\$777,982
Indirect @ 23% of Personal Services	178,936
Services & Supplies	206,656
Capital Outlay	<u>10,000</u>
TOTAL	\$1,173,574

APPENDIX C

TRAINING PLAN

Training for project officers for FFY86 and the beginning of FFY87 will consist of both on-the-job training sponsored mainly by the EPA's Oregon Operations Office and formal courses such as CG 250, "Introduction to Construction Grants" offered by EPA Headquarters. This training plan will be updated annually to reflect additional responsibilities assumed by DEQ following the delegation schedule outlined in Appendix D.

<u>Training</u>	<u>Schedule/Location</u>	<u>Cost</u>
1. Oregon Operations Office		--
a. Facility plan review (incl. AT): EPA regulatory requirements, policies, guidelines, practices, co-reviews.	July - August (2 hours/week for 6 weeks); Portland	N/C
b. Environmental review: EPA regulations, NEPA, co-reviews	August (1 hour/week for 4 weeks plus time for co-review); Portland	N/C
c. User charge/sewer use ordinance: EPA regulations, checklists, practices, handouts	August (1 hour/week for 4 weeks plus time for co-review); Portland	N/C
2. DEQ		
a. OJT to include:		
(1) General introduction to WQ functions and program crossover.	August - December (Initially, 2 hours/week, then on-going as needed)	N/C
(2) Coordination aspects of WQ sections.		

Training	Schedule/Location	Cost
(3) Information transfer Re: OAR, policies, funding.		
(4) Information transfer Re: EPA regulations, policies, reviews. (This training element recognizes that in- formation provided by EPA must be duplicated after EPA's initial presentations for new DEQ hires.)		
3. OG 250 "Introduction to Con- struction Grants" workshop or videotape	August 1986	To be Negotiated
4. Corps of Engineers Change order eligibility review: EPA regulations, checklists procedures	July (2 hour/week for 3 weeks) Portland	N/C

In addition, the DEQ will explore training opportunities offered by the Water Pollution Control Federation and co-training with the states of Idaho and Washington. The DEQ is committed to attending national and regional seminars and meetings that deal with construction grants issues, both to learn new material and also to participate in decision-making on new policies, guidelines and other requirements that the EPA will place on delegated states. The DEQ will attend, whenever feasible and appropriate, the EPA technology transfer courses and applicable Civil Service Courses. Finally, the DEQ will sponsor at least two trips between June and September 1986, for its Construction Grants Section Manager to Seattle to spend time with personnel of the Construction Grants Branch to learn the regulatory (and other) particulars of this extremely complex program.

APPENDIX D

DELEGATION SCHEDULE

<u>Function</u>	<u>Begin Transition</u>	<u>Full Delegation</u>
1. Pre-Step 3 Activities:		
A. Facility Plan Review	On-Going	Early FFY87
B. Advanced Treatment Review	On-Going	Early FFY87
C. Environmental Review	FFY86	Early FFY87
D. Step 4 Application Review	FFY86	Early FFY87
Certification & Recommendation	FFY86	Early FFY87
E. B & C Review	FFY86	Early FFY87
F. Plans & Specification Review	On-Going	Early FFY87
G. User Charge & Sewer Use	FFY86	FFY86
H. VE Studies Review	FFY87	FFY88
I. Financial Management System Review	FFY87	Late FFY87
2. Certification Review and Recommendation:		
A. Step 3 Application Review & Recommendation	FFY86	FFY87
B. A/E Subagreement Review, Procurement & Certification, including Self Certification	FFY87	FFY87
C. Force Account Review & Certification	FFY86	Late FFY87

<u>Function</u>	<u>Begin Transition</u>	<u>Full Delegation</u>
3. Step 3 Project Activities:		
A. Project Management Conference	FFY87	FFY88
B. Preconstruction Conference	FFY87	FFY88
C. Construction Bid Package	FF 87	FFY88
D. Procurement Protest/Appeals	FFY87	FFY88
E. Interim Inspections	FFY87	FFY88
F. Construction Management Evaluations	FFY87	FFY88
G. Change Orders:		
a. Technical Review	On-Going	Early FFY87
b. Eligibility Review	FFY86	FFY87
H. Steps 3 & 4 Non-Routine Payment Review & Outlay Management	FFY87	FFY88
I. Steps 3 & 4 Amendments	Early FFY87	Late FFY87
J. On-Site Presence	FFY87	FFY88
K. O&M Manual Review	On-Going	Early FFY87
L. Plan of Operation Review and Tracking	On-Going	FFY87
M. Project Officer & Construction Project Management Activities	FFY88	FFY88
4. Project Completion/Closeouts:		
A. Final Inspection & Project Completion	FFY87	FFY88
B. Project performance Certification	FFY86	FFY87

<u>Function</u>	<u>Begin Transition</u>	<u>Full Delegation</u>
C. Administrative Completion	FFY87	FFY88
D. Interim/Final Audit Resolution & Appeals Process	FFY87	FFY88
E. Grant Closeout	FFY87	FFY88
5. Regional Program Management:		
A. Public Inquiry Response	FFY86	FFY87
B. GICS	FFY86	Early FFY87
C. Maintenance, Storage & Retirement of Construc- tion Grants Files	FFY86	Early FFY87

APPENDIX E

FUNCTIONAL SUBAGREEMENTS

This Appendix provides procedures and details to be followed on a day-to-day basis by the parties to the Agreement. Detailed procedures are explained for each delegated function which include Plans and Specifications Review and Operations and Maintenance Manual review.

It is the intent of the DEQ to review and modify the checklist for the Plans and Specifications Review in the near future to more closely reflect actual DEQ strategies and methods. Further, the DEQ plans to review the Plans and Specifications process and propose amendments, deletions and/or additions to the EPA after one-two years of experience with the expanded checklist included here.

APPENDIX E-1

I. PURPOSE

The purpose of this Appendix is to identify the procedures to be followed by the DEQ in the review and certification of plans and specifications. The activities and judgments described in this section are those which are necessary to fulfill the federal requirements of this function as delegated to the DEQ.

II. ACTIVITIES

The following describes the associated activities, checks, judgments, and other requirements for the review and approval of plans and specifications:

A. DEQ will:

1. Determine that the proposed facilities have been designed in accordance with sound engineering principles and judgment. The following references may be used to determine the adequacy of the design: Water Pollution Control Federation publications Design and Construction of Sanitary and Storm Sewers, MOP 9, Design of Wastewater and Stormwater Pumping Stations, MOP FD-4, Wastewater Treatment Plant Design,

MOP 8, and Oregon Administrative Rules, Chapter 340, Division 52 and appropriate federal guidelines on design, operation, and maintenance of wastewater treatment facilities.

2. Determine that the specifications for the proposed facility include the appropriate EPA Specification Insert.
3. Document the adequacy of review with a design criteria checklist as part of the approval letter or separate memorandum, or both, prepared by the reviewer for each project. Attach a copy of the engineer's design data, if available.
4. Communicate directly with grantees and consultants concerning any deficiencies in plans and specifications and their resolution.
5. Prepare and mail an approval letter, including any conditions of approval, to the grantee which approves the plans and specifications on behalf of the DEQ and the EPA. A copy of the approval letter is to be sent to the EPA.
6. Respond to plan and specifications and addenda submittals within thirty (30) days of receipt.

B. EPA will:

Accept the DEQ plan and specifications certification as satisfying the requirements established in 40 CFR 35.925-7, Design.

APPENDIX E-2

O & M MANUAL REVIEW

I. PURPOSE

The purpose of this Appendix is to identify the procedures to be followed by the DEQ in the review and approval of Operation and Maintenance (O & M) manuals. The activities and judgments described in this section are those which are necessary to fulfill the federal requirements of this function as delegated to the DEQ.

II. ACTIVITIES

The following describes the associated activities, judgments, and requirements for the review and approval of O & M manuals:

A. DEQ will:

1. Review such manuals for adequacy and completeness pursuant to 40 CFR 35.935.12, and the Federal Guidelines for Operation and Maintenance of Wastewater Treatment Facilities (August 1974), "Requirements and Suggested Guide for an Operation and Maintenance Manual for Waste Treatment Facilities", (rev. July 1975), and the manual,

"Considerations for the Preparation of Operation and Maintenance Manuals", EPA 430/9074-001.

2. Document the review with notes and calculations as appropriate and complete the checklist for review of O & M manuals. Retain such documentation on file.
3. Advise the EPA promptly of the DEQ's receipt of a draft O & M manual or "evidence of timely development of such draft" (35.935.12c) so grant payments beyond 50 percent will not be delayed unnecessarily.
4. Advise the EPA promptly upon receipt of a final manual approvable for 90 percent payment purposes.
5. Respond to grantee within sixty (60) days of receipt of manual.
6. Prepare and mail the approval letter to the grantee on behalf of the DEQ and the EPA. A copy of the approval letter shall be transmitted to EPA.

B. EPA will:

Accept the DEQ certification as satisfying the EPA requirements that an adequate O & M manual has been prepared for the treatment facility.

APPENDIX E-2

OPERATION AND MAINTENANCE MANUAL REVIEW

Project Name: _____ Number: _____

Location: _____

Grantee: _____ Consultant: _____

Design Flow: _____ Type of Treatment: _____

Receiving Stream: _____ NPDES Permit No: _____

	SAT	UNSAT	NA	REMARKS
Table of Contents				
Introduction & Use of Manual				
Operator & Management Responsibility				
Effluent Limits Identified				
General Plant Description				
Collection System O & M				
Operation & Control of Unit Processes				
Trouble Shooter's Guide				
Emergency Operation				
Reference to Manufacturer's O & M				
Sludge Handling & Disposal				
Laboratory Controls				
Effluent Disposal				
Maintenance of Equipment Described				
Operation & Control of Other Mechanical Systems				
Maintenance Management System				
Equipment Record System				
Storeroom & Spare Parts Inventory				
Manpower Requirements				
Safety Equipment Requirements				
Electrical System Described				
Utilities Described				

A reasonably experienced reviewer could Operate and Maintain this sewage treatment plant using this Manual. YES: _____ NO: _____

State Reviewer: _____ Date: _____

APPENDIX F

ACCOUNTING AND TIMEKEEPING SYSTEM

I. PURPOSE

The purpose of this Appendix is to outline the accounting and timekeeping system to be managed by the DEQ to identify costs incurred to administer the municipal assistance program for the construction of municipal wastewater facilities. The system will provide information to identify appropriate costs and provide the means to maintain effective control over such costs.

II. THE SYSTEM

A. General

Funds received by the DEQ from the EPA under a SMAG will be recorded in a separate limitation. A coding system will be established to ensure proper allocation of costs and revenue.

The DEQ maintains a time reporting system which summarizes work effort by employee. This system supports salary and employee benefit expenditures.

B. Salaries and Fringe Benefits

Direct labor costs will be substantiated by individual monthly time sheets which will be maintained as required for audit purposes.

Fringe benefits (including such items as retirement, social security, medical and dental insurance, etc.) are calculated on an employee-by-employee basis at prevailing rates.

C. Supplies and Services

This category includes items such as travel, supplies and materials, rent, printing and reproductions, and purchased services.

The costs allowed for travel under the SMAG will be the same as allowed for any other travel activities for a state employee.

Expenditures will be shown as direct costs.

D. Equipment

Costs for equipment required for personnel assigned to tasks under this agreement will be direct charges.

E. Indirect Costs

The rate is negotiated annually with the EPA and applied against direct salaries and fringe benefit costs.

III. ACCOUNTING AND AUDIT PROCEDURES

The accounting system to be used as outlined in the Appendix will provide for the accountability of Section 205(g) costs as required by 40 CFR Subpart 30.510. The system is integral to this Agreement and should not be changed but may be modified for improvement without prior written concurrence of the Division Director, Water Division, USEPA, Region X.

The accounting system is subject to audit for a period of three years after the completion of each fiscal year pursuant to 40 CFR 30.500.

The Oregon Department of Environmental Quality agrees to provide the USEPA with an annual report of costs incurred within ninety (90) days after each budget period.

APPENDIX G

RELATIONSHIP TO CORPS OF ENGINEERS

The U.S. Army Corps of Engineers (COE) contributes a significant amount of expertise to the construction grants program in Oregon. This delegation agreement assumes that the current level of the COE involvement in the program will be maintained through federal fiscal years 86 and 87. The one exception to this is delegation of the eligibility review of change orders to the DEQ during FFY86. The state will work closely with the EPA to manage delegation of change orders and will draft a functional subagreement by August 31, 1986.

The EPA is responsible for procuring funding for the COE involvement and for negotiating the terms of such involvement with the COE. The DEQ will participate in the annual workplan negotiations between the COE and the EPA. The EPA will facilitate meetings between the DEQ and the COE to ensure the grants workload flows continuously and smoothly. The DEQ, EPA and the COE will meet as needed to evaluate the COE activities and the workplan.

The COE will remain responsible for carrying out those functions identified in the Interagency Agreement until those functions are delegated to DEQ per the schedule listed in Appendix D. The DEQ will draft functional subagreements for each of the Step 3 functions scheduled for delegation in late FFY87 and FFY88. The EPA and the DEQ will jointly negotiate a transition workplan, timetable and necessary training with the

COE prior to delegation. The EPA will be responsible for the required twelve-(12) month notification of the COE as functions are scheduled for delegation to the DEQ.

APPENDIX H

EPA REGION X OVERSIGHT POLICY

This strategy presents the approach the EPA will follow in its oversight of state management of the construction grants program. The purpose of federal oversight is to ensure that the Clean Water Act and its derivative construction grants and other regulations are being carried out in a consistent manner. An additional key EPA oversight responsibility is to ensure that progress on the environmental objectives negotiated between The EPA and the DEQ is being made.

In its exercise of oversight, the EPA will adhere to these general principles and employ the following oversight mechanisms:

I. GENERAL PRINCIPLES

A. Focus on Overall Performance

The EPA will be concerned with the overall performance and environmental results achieved by State programs. The oversight process will focus on individual procedures or actions only as indicators of overall program performance, or where actions involve significant national issues.

B. Respect State Technical Judgments

The EPA will respect the judgments of the DEQ technical staff, unless statutory requirements call for direct EPA involvement in project decisions or the technical issue has significant policy implications.

C. Use Specific Performance Criteria

The EPA will specify the criteria after consultation with DEQ that will be used to assess the state's program performance and include these annually in the SEA or negotiated workplans as appropriate. The criteria will address major program outputs and legally required procedures. Useful oversight can occur only if the DEQ and the EPA understand in advance about specific standards of performance to be met and how success in meeting them should be measured.

D. Tailor Amount of Oversight

The level and amount of oversight will be geared to the maturity and performance of the DEQ's program. A program which has been completely delegated for more than a year and demonstrates consistently strong performance levels, requires less oversight. Specifically, there should be less need for real-time reviews.

Conversely, poor performance should result in increased oversight by the EPA. A new delegation should include a specified transition period. In general, the Agency's oversight should reflect changing State needs and program priorities.

E. Emphasis on Strong, Informal EPA/DEQ Relationships

The EPA Region X has a unique ability, because of its Operations Offices, to rely on informal working relationships as an oversight mechanism. The use of formal written reports will be kept to the minimum necessary for the timely assessment and resolution of environmental problems and progress. The DEQ will also be encouraged to participate in the oversight of their own programs through joint audits and to evaluate EPA's performance in providing assistance and meeting commitments.

F. EPA Will Retain Responsibility

The EPA is responsible under statute for ensuring the consistent application and enforcement of national standards. If direct EPA action is necessary to ensure that environmental laws are carried out, such action will be taken, with appropriate consultation with the DEQ.

II. OVERSIGHT MECHANISMS

As noted above, most of the EPA's oversight of the DEQ construction grant program will take place through the day-to-day informal contact of the Operations Office staff with the DEQ personnel. To augment this, the EPA will employ the following mechanisms.

A. State/EPA Agreement (SEA)

The SEA is the basic document which identifies the major environmental problems in each state and the actions to be taken to address those problems. Each SEA is developed jointly by the Operations Office and the State and is completed before the beginning of the State fiscal year. It includes the executive summary, which identifies priority commitments and the more detailed workplans for the program grants. Both are signed by the DEQ Director and the EPA Regional Administrator.

The SEA will specify the oversight mechanisms and general criteria against which the State program will be judged. Including oversight as part of the SEA ensures that oversight procedures will be reviewed regularly and revised as needed. The SEA is a joint agreement. Finding of non-performance for the EPA responsibilities in the SEA will be noted and corrective action and/or adjustment sought.

B. Mid-Year Review

At approximately mid-point in the grant period, the Operations Office will conduct a review and schedule a conference to evaluate the progress being made on the SEA workplan commitments and to seek corrective action on issues unresolved by other audit mechanisms. The Operations Office will submit a draft agenda to the regional program office for their review and approval. The EPA and DEQ program managers will participate in the conference. Any unresolved issues will be addressed in a follow-up meeting between the DEQ Director and the EPA Regional Administrator. Changes to the grant workplan will be negotiated as needed.

A written report will be prepared jointly by the Operations Office and the DEQ summarizing the issues addressed and the actions to be taken. Copies will be forwarded to the Regional Office. An overview memo which summarizes the major issues for all programs will be prepared by the Operations Office for the Regional Administrator. The Regional program office will concur on the report and overview memo before it is forwarded to the Regional Administrator.

C. Year-End Review

At the end of the grant period, the Operations Office will again review the SEA workplan, as well as the action items in the mid-

year report to determine if all scheduled actions were completed. The Regional Office will define the elements of the review and participate as appropriate. The Operations Office will prepare an end-of-year program evaluation in consultation with the DEQ to be forwarded to the Regional Administrator and the DEQ after concurrence by the Regional program offices. General administrative and financial matters will also be covered. Ninety (90) days after the completion of the grant period, the State will submit a financial status report for each grant showing the disposition of grant funds.

D. Quarterly Monitoring of Workplan Commitments

Most of the data needed for these quarterly reports is gathered by EPA or through GICS. There may be formal construction grant meetings or document review separate from the mid-year water programs review as scheduled in the SEA oversight strategy. Information is used to respond to various management, and accountability systems and commitments.

E. Annual Program Evaluation

The EPA will conduct, at least annually, an in-depth program evaluation of delegated functions. Such a review will focus on the procedures the DEQ is using to make sure these comply with all Delegation Agreement requirements. A program evaluation may

entail file audits and field visits at the DEQ's main office to evaluate the timeliness and completeness of delegated activities, along with the reasonableness of technical judgment made in connection with these activities. The evaluation may also include an assessment of management activities, such as staffing, recruitment, training, and financial accountability.

The Operations office will negotiate an evaluation agenda with DEQ in consultation with the Regional Office. The scope of the evaluation will depend largely on the experience and past success that the DEQ has had with the various functions. Although this document is jointly prepared, the EPA will document its findings on the DEQ performance. Differing State opinions may also be included in the report. Follow-up activities in response to deficiencies will be negotiated and included in a follow-up memo, if short-term, or included in the SEA for the next year, if long-term.

Fiscal irregularities, ineligible uses of grant funds, or the use of grant funds for items of questionable value to the EPA program will be evaluated and analyzed as soon as they become apparent. Efforts will be made to resolve these issues at the program level without recourse to a formal evaluation, although advice from the auditor will be sought as needed.

F. File Audits

The EPA may over the course of the year select a limited number of project-specific files for review. File audits will be used as part of program audits. The general purpose of the file review is to evaluate program practices and procedures rather than generate recommendations pertaining to specific projects. However, where major errors or discrepancies are found, the EPA will discuss these with the State and negotiate a reasonable time for corrective action if needed.

G. Real-Time Project Reviews

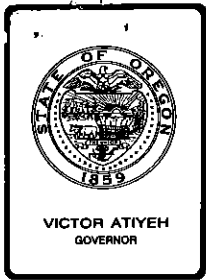
The objective for delegated programs is to eliminate Regional or Operations Office real-time document reviews (i.e., those conducted in time to affect final terms and conditions of specific State actions). For delegated functions which are in a transition phase or where program audits have consistently shown problems, real-time project reviews will be used.

After a function has been fully delegated and the transition period has passed, no real-time reviews will be conducted unless specifically negotiated due to a deficiency discovered during an oversight function or during performance of undelegated functions by the EPA. Project specific work will normally be evaluated

after the fact during audits as described above to evaluate overall DEQ performance.

H. Technical Assistance

The EPA encourages the DEQ to request federal assistance to supplement State capabilities. Under these oversight principles, the EPA's highest priority is the building and maintenance of State capability to manage authorized environmental programs. As requested, the EPA will provide in-house expertise, or as funding allows, contractual assistance on specific program or project matters.



Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207

522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item E, June 13, 1986, EQC Meeting

Information Report: Slash Burning Smoke Management Plan Revision

Background

This is a report to the Commission and the general public on the results of discussions between the Oregon Departments of Environmental Quality (DEQ) and Forestry (OSDF) and other land management agencies to review, update, and improve the Smoke Management Plan and guidelines for prescribed forest land (slash) burning.

This Plan review was the first part of a two-part process. The proposed changes to the Smoke Management Plan and guidelines discussed in this report reflect a broad and general evaluation of how slash burning can be managed more effectively to reduce adverse effects of smoke on the general public. A second, more focused effort to protect visibility in Class I areas was conducted concurrently, producing the proposed Visibility Protection Plan discussed in detail in the next agenda item (See Agenda Item F). Since the Smoke Management Plan and guidelines are the principal mechanisms for regulating slash burning, the key elements essential for visibility protection are proposed to be incorporated therein.

On November 2, 1984, the Commission directed staff to begin such a review with the objective of identifying necessary and feasible improvements in the methods and controls for slash burning. Such a review was considered timely because 1) the present Smoke Management Plan had not been formally reviewed or revised since its adoption in 1972, although many operational improvements have clearly been made, 2) some forest districts were anticipating significant increases in slash burning over the next several years and the Plan failed to clearly address prevention of significant

deterioration requirements, and 3) parallel efforts were just getting underway to address visibility protection in Class I areas. Since slash burning is the single largest source of fine particulate emissions in the state, it figures prominently in the development of federally mandated control strategies for visibility and for particulate (PM₁₀) standards currently under consideration.

A task force was appointed to review the Smoke Management Plan, co-chaired by OSDF and DEQ staff and including representatives from the U.S. Forest Service (USFS), Bureau of Land Management (BLM), Bureau of Indian Affairs (BIA), and private forest industry. The group met eleven times from March 1985 through February 1986. To initiate and guide the review, DEQ staff developed a preliminary outline of the issues and plan elements of principal concern and interest to the Department. OSDF staff provided informational materials and developed a work plan and schedule.

The review included discussions of the slash burning rules and guidelines, daily operational procedures and responsibilities, air quality impacts of burning, and the costs, methods, and constraints of improved burning techniques and available alternatives. The task force met with the slash burning coordinator for the State of Washington to learn more about how that program compares with Oregon's. They also met with the consultant conducting the cost/benefit analysis of slash burning alternatives and with USFS personnel involved in slash burning research. The Director of the Lane Regional Air Pollution Authority (LRAPA) and others also provided comment. Final drafts of the Plan (rules) and Directive (guidelines) were completed on March 3, 1986 and subsequently referred to the DEQ's Visibility Advisory Committee for incorporation of provisions specifically related to visibility protection. The revised Plan and Directive attached hereto represent the final products of this combined effort.

Authority and Historical Perspective

Oregon Revised Statute (ORS) 477.515 (see Attachment IV) require that the State Forester and DEQ approve a plan for the purpose of managing smoke in areas they designate. The Plan is to delineate areas to be regulated and "include but not be limited to consideration of weather, volume of material to be burned, distance of the burning from designated areas, burning techniques, and provisions for cessation of further burning under adverse air quality conditions." The OSDF is responsible for developing the Plan in cooperation with federal and state agencies, landowners, and affected organizations. The approved Plan is to be filed with the Secretary of State and may be amended thereafter in the same manner as its formation. The State Forester is to promulgate rules to carry out the provisions of the approved Plan.

The Environmental Quality Commission (EQC) has no expressed responsibility under ORS 477.515 related to the development or approval of a Smoke Management Plan, although ORS 477.520 does require the State Forester to consult with the EQC before refusing, suspending, or revoking slash burning permits when necessary in his judgment to prevent air pollution.

In response to legislative directive, a Memorandum of Agreement outlining a preliminary control strategy was entered into in September 1969 between DEQ, OSDF, USFS, BLM, BIA and the Oregon Forest Protective Association. This Agreement established a few basic smoke management objectives, designated certain populated areas for protection, and formally provided for the cooperation of the signing parties to develop and coordinate a more detailed plan.

A Smoke Management Plan was subsequently developed and approved in January 1972 by the Board of Forestry and the EQC. This approved Plan was adopted later that year as Oregon Administrative Rule (OAR) 629-43-043 **Smoke Management Plan**. The Plan identified the basic regulatory elements and limits on slash burning and the administrative responsibilities of the various entities involved. The Plan provided for consultation with the EQC in establishing "designated areas" for smoke protection, and for consultation with the DEQ in terminating burning when the air is adversely affected by smoke. The Plan has not been formally reviewed or modified since its adoption in 1972.

In addition to the Plan, OSDF has developed and operates under a Directive (1-1-3-411) **Operational Details for the Oregon Smoke Management Plan**. The Directive provides guidelines and procedures for the day-to-day operation of the program. It also includes instructions for use by field personnel in reporting burns, estimating fuel consumption, and rating slash units for burning priority. The Directive has periodically been revised by OSDF with little or no review by DEQ or the public.

The Smoke Management Plan (rules) is currently a part of the consolidated Oregon State Implementation Plan (SIP). The Directive document is not.

Program Overview

The Smoke Management Program is administered year-round by the OSDF Forest Protection Division in Salem, under the direction of the State Forester. The program regulates prescribed burning by forest protection district on all lands in western Oregon (i.e., west of the crest of the Cascades and including the forest protection areas of Mt. Hood and Deschutes National Forests). This includes burning on State and private lands (permits issued by OSDF) and burning by USFS, BLM and BIA.

The principal objective of the program is to minimize smoke in "designated areas" which are populated areas specifically identified as sensitive to smoke. Designated areas currently include the Willamette Valley, Roseburg, Ashland, Medford, Grants Pass, Coos Bay, and Tillamook. The Plan sets upper limits on burning (tonnages) at varying distances from designated areas, depending on plume height and prevailing meteorological conditions. Burning is limited to high priority units during the two-month period of heavy field burning activity. There is no maximum annual limit on slash burning.

Smoke management personnel develop daily weather forecasts and formulate a set of "instructions" specifying when, where, and how much slash burning is to be allowed. These instructions may include special restrictions on the timing or method of ignition, mop up requirements, unit size and elevation, or other considerations. Forecasts and instructions are disseminated to "field administrators" (i.e., district foresters or supervisors) who then permit or carry out the burning. Forest landowners or operators develop written plans prior to burning which outline the manpower, equipment and methods to be used including considerations for fire control and air and water quality. The districts report to OSDF each day on the units planned to be burned and those accomplished the prior day. The forecast, instructions, plans/accomplishments are also forwarded to DEQ Field Burning staff.

The OSDF and the other agencies do not carry out a comprehensive and continuous program for monitoring smoke drift and impacts, although some aerial and ground-based surveillance is provided. Incidental surveillance of slash smoke is also provided by DEQ field burning personnel. The OSDF has direct access to the DEQ Data Acquisition System, providing real-time wind and smoke concentration data for the Willamette Valley, principally during the summer field burning season.

An average of about 2 million tons on 100,000 acres are burned annually. While burning is conducted year-round, the heaviest activity typically occurs during the fall months of September, October and November. On a tonnage basis, more than half the burning is done by the USFS, followed in order by private, other federal agencies, and the State. Records indicate that an average 50-60 percent of the units submitted for burning are accomplished each year.

Proposed Revisions

Proposed revisions to the Smoke Management Plan (OAR 629-43-043) are presented in Attachment I. Language to be deleted is enclosed in brackets and new language is underscored. The proposed Directive 1-4-1-601 is an entirely new document and is presented in Attachment II. The existing Directive 1-1-3-411 proposed to be replaced is presented in Attachment III.

The proposed changes adequately address the Department's key concerns and, in the opinion of staff, would have the general effect of tightening current smoke management controls (these concerns and corresponding changes are highlighted in Table I). Consequently, the proposed changes should ensure continued compliance with state and federal air quality standards, including anticipated PM₁₀ standards. It should be noted, though, that the air quality benefits likely to result from these changes are difficult to quantify. The effectiveness of smoke management as an approach to pollution control has and will continue to depend greatly on how it is implemented at an operational level.

TABLE.1

KEY CONCERNS:

1. Daily and annual emission limits are needed to comply with federal Prevention of Significant Deterioration (PSD) requirements.
2. Additional areas should be designated for smoke protection based on population size and potential for impact.
3. Tonnage limits (based on smoke drift) need to be updated to reflect more restrictive current practices.
4. Improved uniform methods for estimating fuel loading/consumption and emissions are needed for all areas of the State (including eastern Oregon).
5. The authority and enforceability of the Plan, Directive, and OSDF's daily instructions should be clarified. Field administrators should not have discretion to exceed instructions.

PROPOSED CHANGES (page numbers refer to rule 629-43-043 and Directive 1-4-1-601):

- Rule (P.8)** DEQ to set PSD limits Statewide in cooperation with other agencies (planned after improved fuel/emission inventory is developed).
- Directive (P.9)** Same provision included.
- Rule (Exhibit 2)** Astoria, Lincoln City, Newport, and Bend are added as designated areas. **(P.3)** Heavy use recreation areas, special events, and Class I areas defined as sensitive to smoke **(P.4)** for same considerations as designated areas.
- Directive (P.11)** Tonnage limits to be reviewed by DEQ and OSDF following development of improved fuel inventory.
- Directive (P.7)** Fuel quantification methods are updated and **(P.11)** will be further developed by OSDF in cooperation with DEQ, to be implemented statewide in 1987.
- Rule (P.3-4)** The Directive is referenced in the rule. The Plan, Directive and instructions are to be strictly complied with. Any variances to daily instructions issued by OSDF will be recorded. **(P.4-5)** The State Forester is responsible for managing burning and evaluating air quality conditions.
- Directive (P.3)** The policy of the State Forester is to achieve strict compliance. **(P.5-6)** An enforcement section addressing violations is added.

6. More coordination between agencies is needed.
- Rule (P.1)** Coordination with other smoke management programs is added as an objective. **(P.3)** U.S. Fish and Wildlife Service is added as a cooperating agency. **(P.4)** Burning forecasts and plans of DEQ and Washington Dept. of Natural Resources will be considered when developing daily instructions. **(P.6)** State Forester will report daily to DEQ on forecasts, burning and intrusions.
- Directive** Various provisions included.
7. An effort is needed to reduce emissions from burning and increase slash utilization.
- Rule (P.1)** Minimizing emissions is added as an objective. **(P.4)** Visibility Protection Plan (containing emission reduction goal) is recognized by reference.
- Directive (P.3)** The policy of the State Forester will be to encourage cost-effective slash utilization. **(P.10)** Utilization of residue, fuel reduction, and alternatives will be encouraged. Emission reduction goals are supported. Spring burning, mass ignition, and mop up will be encouraged.
8. A uniform method of classifying smoke intrusions in designated or smoke sensitive areas is needed.
- Directive (P.7-8)** The "light-moderate-heavy" scheme of quantifying impacts (used for field burning) will be employed, using monitoring data or visual range estimates from observers. Intrusions from slash burning and **(P.10)** wildfires will be reported to DEQ.
9. Increased monitoring of smoke is needed.
- Directive (P.6)** Periodic monitoring by aircraft will be provided to ensure program compliance and assess effectiveness. Access to DEQ's real-time air monitoring data is recognized. **(P.10)** Smoke observation and monitoring will be intensified on marginal days.
10. Experimentation with improved burning techniques could prove useful.
- Directive (P.10)** A test project is scheduled for 1986-88.
11. Periodic and formal review of the Plan and Directive is needed.
- Rule (P.3)** DEQ must approve the Directive (as well as the Plan) and any subsequent changes.
- Directive (P.12)** The Smoke Management Plan and Directive will be reviewed by the cooperating agencies at least every 3 years.
12. Elements to protect visibility in Class I areas should be incorporated.
- Rule (P.1)** Conforming with state and federal air quality and visibility requirements is a stated objective. **(P.3)** All Oregon and Washington Class I areas will be considered smoke sensitive during the visibility protection period. **(P.4)** The Smoke Management Plan will be operated consistent with the Visibility Protection Plan.

Overall, the enforceability of the Plan and Directive would be enhanced and the accountability and authority of OSDF for authorizing all burning would be clarified. The communities of Astoria, Lincoln City, Newport and Bend would be added as new designated areas for increased protection from smoke. Other areas would benefit from general commitments to reduce emissions and encourage utilization of slash. There would also be commitments to develop improved and uniform methods of estimating fuel consumption and emissions, to track burning activity statewide, and to develop daily and annual emission limits pursuant to federal Prevention of Significant Deterioration (PSD) requirements. There would be a formal review of the Plan and Directive at least every three years. Some of the changes would formalize improvements which have evolved over many years, bringing the Plan in line with current practices.

With respect to visibility, a provision is proposed which would require that the Smoke Management Plan be operated in a manner consistent with the Visibility Protection Plan for Class I areas. In addition, Oregon and Washington Class I areas would be defined as "smoke sensitive" during the summer visibility protection period, with equivalent treatment as designated areas.

The proposed changes would not extend smoke management controls beyond the current restricted area (western Oregon). The Directive would continue to function as internal guidelines of OSDF and any changes thereto would require DEQ approval. Administrative changes to the Directive, which in the DEQ's judgment would not adversely impact air quality, would not require public hearing. The proposed changes would not establish performance-based smoke standards for slash burning or require that Best Available Technology be employed. The visibility control strategy revisions to the SIP, however, incorporate goals to advance the use of Best Available Technology to achieve emission reductions. The priority system of limiting burning to high priority units during the summer field burning season would not be modified. The tonnage limits (based on smoke drift) currently specified by rule would also remain unchanged, although subject to review at a later date.

Following approval of the revised Smoke Management Plan and Directive by DEQ and adoption (including rule promulgation) by OSDF and the Board of Forestry, the two documents will be appropriately incorporated into the State Implementation Plan.

Summation

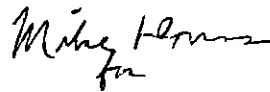
1. At the direction of the Commission, Department staff met with the Oregon Department of Forestry, other land management agencies, and the forest industry to review the rules and guidelines governing slash burning.
2. A number of rule revisions and a set of new guidelines are proposed which have been tentatively endorsed by both Departments.

3. The proposed revisions would designate four new areas for smoke protection, enhance enforceability, and provide for a review at least every three years. The changes would also improve information on slash burning activity statewide, update various operational procedures, and generally encourage reductions in smoke emissions. Provisions to reduce visibility impairment in Class I wilderness areas from prescribed burning would be incorporated.
4. Following approval by the Department and adoption by OSDF, the Smoke Management Plan (rule) and Directive will be incorporated into the SIP.

Director's Recommendation

It is recommended that the Commission concur in the following course of action to be pursued by the Department.

1. Solicit public comment on the proposed revisions to the Smoke Management Plan and Directive, coincident with joint public hearings on the smoke management rules (Department of Forestry) and the Visibility Protection Plan (Department).
2. Report to the Commission at its September 11, 1986 meeting on the comments received and proposed final revisions to the Plan and Directive, requesting guidance for approval action by the Department.


for

Fred Hansen

Attachments:

1. Draft Smoke Management Plan Administrative Rule (OAR 629-43-043)
2. Draft Directive 1-4-1-601 Operational Guidance for the Oregon Smoke Management Program
3. Directive 1-1-3-411 Operational Details for the Oregon Smoke Management Plan
4. Oregon Revised Statute 477.515

Sean O'Connell:s
AS3016
686-7837
May 28, 1986

FINAL DRAFT
5/19/86

SMOKE MANAGEMENT PLAN ADMINISTRATIVE RULE

(Including Visibility)

Smoke Management Plan

629-43-043 (1) Objective: To [keep] prevent smoke resulting from burning on forest lands from being carried to or accumulating in designated areas (exhibit 2) or other areas sensitive to smoke[.], and to provide maximum opportunity for essential forest land burning while minimizing emissions, to coordinate with other state smoke management programs, and to conform with state and federal air quality and visibility requirements.

(2) Definitions:

(a) "Deep mixed layer" extends from the surface to 1,000 feet or more above the designated area ceiling.

(b) "Smoke drift away" occurs where projected smoke plume will not intersect a designated area boundary downwind from the fire.

(c) "Smoke drift toward" occurs when the projected smoke plume will intersect a designated area boundary downwind from the fire or when wind direction is indeterminate due to wind speed less than 5 mph at smoke vent height.

(d) "Smoke vent height" - level, in the vicinity of the fire, at which the smoke ceases to rise and moves horizontally with the wind at that level.

(e) "Stable layer of air" - a layer of air having a temperature lapse rate of less than dry adiabatic (approximately 5.5°F, per 1,000 feet) thereby retarding [either] upward [or downward] mixing of smoke.

(f) "Tons available fuel" - an estimate of the tons of fuel that will be consumed by fire at the given time and place. [Low volume is less than 75 tons per acre, medium volume 75 to 150 tons per acre, and high volume over 150 tons per acre.]

(g) "Residual smoke" - smoke produced after the initial fire has passed through the fuel.

(h) "Field administrator" - a forest officer or federal land administrator who has the direct responsibility for administering burning permits on a unit of forest land within the boundaries of an official fire district.

(i) "Restricted area" - that area delineated in Exhibit 2 for which permits to burn on forest land are required year round, pursuant to rule 629-43-041.

(j) "Designated area" - those areas delineated in Exhibit 2 as principal population centers.

(k) "Heavy use" - unusual concentrations of people using forest land for recreational purposes during holidays, special events.

(l) "Major recreation area" - areas of the state subjected to concentrations of people for recreational purposes.

(m) "State Forester" means the State Forester or delegated Department of Forestry employe representative.

(n) "Instructions" means the specific burn authorizations and weather discussions issued and disseminated as needed by the State Forester.

(o) "Smoke Management Plan" means the administrative rule approved by the State Forester and the Department of Environmental Quality and administered by the State Forester to control prescribed burning on forest lands.

(p) "Smoke Management Directive 1-4-1-601", as approved by the Department of Environmental Quality, is the Department of Forestry's operational guidance for administration of the Oregon Smoke Management Program.

(q) "Other Areas Sensitive to Smoke" are intended to consider specific recreation areas during periods of heavy use by the public such as coastal beaches on special holidays, federal mandatory Class I areas during peak summer use, special events. All Oregon and Washington Class I areas shall be considered as areas sensitive to smoke during the visibility protection period, defined in the Oregon Visibility Protection Plan, OAR 340-20-047, Sec. 5.2.

(3) Control:

(a) The State Forester is responsible for the coordination and control of the smoke management plan. The plan applies [statewide] to the restricted area set forth in Exhibit 2 with full interagency cooperation with the U.S.D.A., Forest Service, Bureau of Land Management, U. S. Fish and Wildlife Service, Bureau of Indian Affairs, private forest [industry] landowners, and the Department of Environmental Quality. The smoke management plan, Department of Forestry Directive 1-4-1-601 and

the Smoke Management instructions (and authorized variances) issued pursuant to the plan, shall be strictly complied with.

(b) Certain "designated areas" are established in consultation with the Environmental Quality Commission. [The major objective of smoke control efforts will be to keep smoke from forest land burning out of these designated areas.]

Exhibit 2 delineates designated areas and specified ceilings.

(c) During periods of heavy use, major recreation areas in the state shall be provided the same consideration as "designated areas". Other areas sensitive to smoke shall be provided the same consideration as designated areas.

(d) The Smoke Management Plan shall be operated in a manner consistent with the requirements of the Oregon Visibility Protection Plan for Class I areas (OAR 340-20-047, Sec. 5.2).

(4) Administration:

(a) The State Forester, in developing instructions, and each field administrator issuing burning permits under this plan [will] shall manage the prescribed burning on forest land in connection with the management of other aspects of the environment in order to maintain a satisfactory atmospheric environment in designated areas (Exhibit 2). Likewise, this effort [may] shall be applied in special situations where local conditions warrant and that are not defined as designated areas but nevertheless are sensitive to smoke. The development of instructions and [A] accomplishment of burning will entail consideration of air quality conditions and weather forecasts (including burning forecasts and plans of the Department of Environmental Quality and the Washington Department of Natural

Resources), acreages involved, amounts of material to be burned, evaluation of potential smoke column vent height, direction and speed of smoke drift, residual smoke, mixing characteristics of the atmosphere, and distance from the designated area of each burning operation. [Designated areas are outlined and vertical extents or ceilings are indicated in Exhibit 2).]

(b) The State Forester and [E] each field administrator [will] shall evaluate downwind conditions prior to implementation of burning plans. When the State Forester or a field administrator determines that visibility in a designated area, or other area sensitive to smoke is already seriously reduced or would likely become so with additional burning, or upon notice from the State Forester through the Protection Division [of Fire Control], or upon notice from the State Forester following consultation with the Department of Environmental Quality that air in the entire state or portion thereof is, or would likely to become adversely affected by smoke, the affected field administrator [will] shall terminate burning. Upon termination, any burning already under way will be completed, residual burning will be mopped up as soon as practical, and no additional burning will be attempted until approval has been received from the State Forester.

(5) Reports: Field administrators [will] shall report daily at such times and in such manner as required by the State Forester covering their daily burning operations. Any wildfire that has the potential for smoke input into a designated or smoke sensitive area [will] shall be reported immediately to

the State Forester's office. The State Forester shall report to the Department of Environmental Quality each day on a timely basis its forecast, planned and accomplished burning, and smoke intrusions.

(6) Key to Smoke Drift Restrictions:

(a) Smoke drift away from designated area: No specific acreage limitation will be placed on prescribed burning when smoke drift is away from designated area. Burning should be done to best accomplish maximum vent height and to minimize nuisance effect on any segment of the public.

(b) Smoke drift toward designated area:

(A) Smoke plume height below designated area ceiling. Includes smoke that for reasons for fire intensity, location, or weather, will remain below the designated area ceiling. Also included are fires that vent into layers of air, regardless of elevation, that provide a downslope trajectory into a designated area:

(i) Upwind distance less than 10 miles outside designated areas. No new prescribed fires will be ignited.

(ii) Upwind distance 10-30 miles outside designated area boundary. Burning limited to 1,500 tons per 150,000 acres on any one day.

(iii) Upwind distances 30-60 miles outside designated area boundary. Burning limited to 3,000 tons per 150,000 acres on any one day.

(iv) Upwind distances more than 60 miles beyond designated area boundary. No acreage restriction unless otherwise advised by the Forester.

(B) Smoke will be mixed through the deep layer at the designated area. This section includes smoke that will be dispersed from the surface through a deep mixed layer when it reaches the designated area boundary:

(i) Upwind distance less than 10 miles from designated area boundary. Burning limited to 3,000 tons per 150,000 acres on any one day.

(ii) Upwind distance 10-30 miles from designated area boundary. Burning limited to 4,500 tons per 150,000 acres on any one day.

(iii) Upwind distances 30-60 miles outside designated area boundary. Burning limited to 9,000 tons per 150,000 acres on any one day.

(iv) Upwind distances more than 60 miles beyond designated area boundary. No acreage restriction unless otherwise advised by the Forester.

(C) Smoke above a stable layer over the designated area. Smoke in this group will remain above the designated area, separated from it by a stable layer of air:

(i) Upwind distance less than 10 miles outside designated area. Burning limited to 6,000 tons per 150,000 acres on any one day.

(ii) Upwind distance 10-30 miles outside designated area. Burning limited to 9,000 tons per 150,000 acres on any one day.

(iii) Upwind distances 30-60 miles outside designated area. Burning limited to 18,000 tons per 150,000 acres on any one day.

(iv) Upwind distances more than 60 miles beyond designated area boundary. No acreage restriction unless otherwise advised by the Forester.

(D) Smoke vented into precipitation cloud system. When smoke can be vented to a height above the cloud base from which precipitation is falling, there will be no restrictions to burning[.], unless otherwise advised by the Forester.

(c) Changing conditions: When changing weather conditions, adverse to the Smoke Management objective, occur during burning operations, aggressive mop-up [will] shall be initiated as soon as practical[.] and no additional burning shall be initiated.

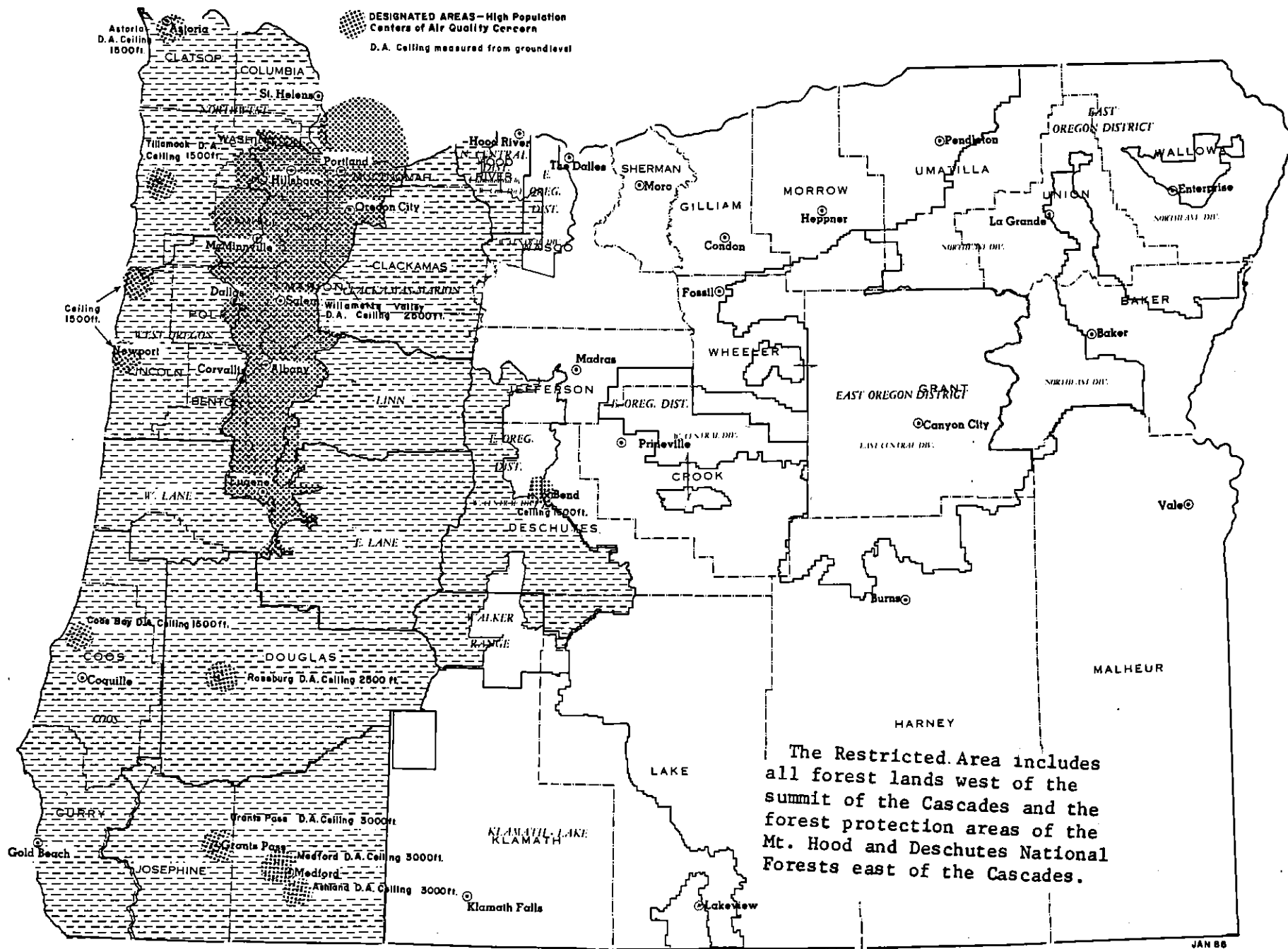
(7) Analysis and Evaluation: The State Forester [will] shall be responsible for the annual analysis and evaluation of [state-wide] burning operations under this plan. Copies of the summaries will be provided to all interested parties.

(8) The Department of Environmental Quality, in cooperation with the State Forester, federal land management agencies, and private forest landowners shall develop maximum annual and daily emission limits in accordance with federal PSD (Prevention of Significant Deterioration) regulations.

LEGEND

RESTRICTED AREA - Burning Permits Required Year Round as per O.A.R. 43-041

DESIGNATED AREAS - High Population Centers of Air Quality Concern
D.A. Ceiling measured from ground level



The Restricted Area includes all forest lands west of the summit of the Cascades and the forest protection areas of the Mt. Hood and Deschutes National Forests east of the Cascades.

Protection
5/19/86 - P.N.

FINAL DRAFT ^{DEQ} DIRECTIVE
1-4-1-601 P. A

OPERATIONAL GUIDANCE FOR THE OREGON
SMOKE MANAGEMENT PROGRAM
(Including Visibility)

PURPOSE. This directive sets forth the operational guidance for the Oregon Smoke Management Program. Contained herein are the objective, concept of operations, organizational guidance, and instructions for administration of the Oregon Smoke Management program.

SCOPE.

The Smoke Management Directive is:

1. Developed in cooperation with Federal and State agencies, landowners, and organizations which will be affected by the Smoke Management Program.
2. Jointly approved by the State Forester and (the Director of) DEQ.
3. Applicable to all prescribed burning on forests in western Oregon and selected portions of central Oregon as defined on Exhibit 2, OAR 629-43-043, Smoke Management Program.

SITUATION.

1. **Authority:**

ORS 477.515(3)(a) states:

"For the purpose of maintaining air quality, the State Forester and the Department of Environmental Quality shall approve a plan for the purpose of managing smoke in areas they shall designate."

ORS 477.515(3)(b) states:

"The State Forester shall promulgate rules to carry out provisions of the Smoke Management Plan..."

ORS 468.275 through 468.355 provides authority to DEQ to establish air quality standards including emissions standards for the entire state or an area of the state.

ORS 468.450 through 468.495 gives DEQ the authority to regulate field burning.

2. **Under this authority:**

a. The State Forester:

- (1) Coordinates the administration and operation of the plan.
- (2) Issues additional restrictions on prescribed burning in situations where the air quality of the entire state or any part thereof is, or would likely become, adversely affected by smoke.

OPERATIONAL GUIDANCE FOR THE OREGON
SMOKE MANAGEMENT PROGRAM
(Including Visibility)

- (3) Issues daily burning instructions when needed.
 - (4) Annually, analyzes and evaluates state-wide burning operations under the plan and provides copies of the summary to interested parties.
- b. The Department of Environmental Quality:
- (1) Maintains a real-time air quality monitoring network that is used by OSDF.
 - (2) Provides information on field burning activity.
 - (3) Establishes criteria for air pollution emergencies and notifies OSDF of episode stages such as alerts, warnings, and emergencies.
 - (4) Regulates the emission of air pollutants to ensure compliance with adopted standards, limits, and control strategy plans.
 - (5) Notifies the Department of Forestry when the air in the entire State or portions thereof is or would likely become adversely affected by smoke.
3. Prescribed Burning in Oregon: An average of 104,000 acres is burned annually in western Oregon on 3,300 units. Tonnage burned has varied between a low of approximately 1.6 million in 1984 and a high of approximately 4.5 million in 1976. Burning activity varies according to seasonal weather and fuel conditions, and reforestation and land management needs.
4. Cooperating Agencies: The policies and resources of many public and private agencies and organizations have substantial influence on the administration of the Smoke Management Program. The entities and their responsibilities are:
- a. State Agencies
- (1) Department of Environmental Quality: policy, information and resources.
 - (2) Washington Department of Natural Resources: information.
- b. Federal Agencies
- (1) USDA, Forest Service: resources.
 - (2) Bureau of Land Management: resources.
 - (3) Bureau of Indian Affairs: information.
 - (4) U. S. National Park Service: information.
 - (5) U. S. Fish & Wildlife Service: information.
 - (6) National Weather Service: information and resources.
- c. Other
- (1) Regional air pollution authority: information.
 - (2) Oregon Forest Industries Council: information.

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5. Program Resources: The State Forester maintains a staff of four personnel in Salem and a field force of 65 foresters throughout western Oregon and central Oregon who participate in the Smoke Management Program to accomplish the inspection, enforcement, monitoring, and reporting tasks.

In addition, the USDA Forest Service and the BLM maintain field forces of approximately 80 supervisory personnel and professional foresters trained in the techniques of prescribed burning and the elements of the Smoke Management Program.

ASSUMPTIONS.

The Smoke Management Program is premised on the assumptions that:

1. Prescribed burning is a silvicultural technique of forest management that is beneficial to reforestation, forest stand improvement, wildlife habitat and the reduction of insect and disease problems.
2. Significant reductions in the cost and damages resulting from wildfire are achieved by burning slash residues following harvesting operations.
3. Smoke resulting from prescribed burning can be managed meteorologically to minimize the air quality impacts on populated areas and other areas sensitive to smoke.

DEFINITIONS. See OAR 629-43-043 (2a - p).

POLICY.

The policy of the State Forester is to:

1. Regulate prescribed burning operations on forest land recognizing the need to maintain forest productivity and the need to maintain air quality in populated areas and areas sensitive to smoke.
2. Achieve strict compliance with the Smoke Management Plan, Directive and instructions.
3. Encourage cost-effective utilization of forest residues as a means to reduce burning.

OBJECTIVE. To prevent smoke, resulting from burning on forest lands, from being carried to or accumulating in designated areas and other areas sensitive to smoke; to provide maximum opportunity for essential forest land burning while minimizing emissions; to coordinate with other state smoke management programs; and, to conform with state and federal air quality and visibility requirements.

OPERATIONAL GUIDANCE FOR THE OREGON
SMOKE MANAGEMENT PROGRAM
(Including Visibility)

PROGRAM ELEMENTS.

- 1.- The Smoke Management Plan: The Smoke Management Plan (OAR 629-43-043) provides a specific framework for the administration of the Smoke Management Program as administered by the State Forester.

The plan instructs the State Forester and each Field Administrator to maintain a satisfactory atmospheric environment in designated areas and other areas sensitive to smoke consistent with the plan objectives and smoke drift restrictions.

In administering the Smoke Management Program, the Forester and the Field Administrators are required to continually monitor weather factors and air quality conditions in designated areas and other areas sensitive to smoke.

The plan establishes a set of limitations applicable to specified burning and mixing conditions. These limitations relate to tonnage of fuel per 150,000 acres which, ideally, may be burned under various sets of mixing conditions. Experience has shown that these standards are adequate to protect designated areas only under ideal conditions. Frequently, in order to meet air quality objectives, more specific restrictions must be applied through issuance of Smoke Management instructions by the State Forester.

2. Operator's Written Plan: OAR 629-43-045 requires that prior to prescribed burning, a forest landowner or operator shall, in cooperation with the State Forester, develop a written plan which shall include consideration of "air quality".
3. Smoke Management Forecasts: The Salem and Medford Forestry Fire Weather offices provide smoke management forecasts daily. The forecast is for the following day (the forecast period) with an update as necessary on the morning of the forecast period (Salem only). An extended forecast may be provided depending on the weather influences involved at any given time.

The forecasts include reference to transport winds and mixing for the restricted area and other areas sensitive to smoke. Burning will be conducted in accordance with the current forecast information, including updated forecasts, when issued.

4. Smoke Management Instructions

Smoke Management Instructions will be issued only by the Salem Forestry Fire Weather Center and only during periods when weather is favorable for significant amounts of burning (usually late May through October). The instructions provide constraints on burning in areas where the restrictions, set forth in the Smoke Management Plan, may be inadequate to protect designated areas or other areas sensitive to smoke.

OPERATIONAL GUIDANCE FOR THE OREGON
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The instructions are based upon an analysis of the atmospheric conditions affecting smoke transport, dispersion, and air quality and visibility conditions in designated areas and other areas sensitive to smoke.

5. Priority Burning System: The Forest Land Burning Priority Rating System was initiated to reduce the amount of forest land burning during the time when the maximum acreage of grass seed fields are being burned in the Willamette Valley. There are approximately 60 days during mid-summer when field burning has been given a high priority for use of the air shed in the valley for smoke dispersal. The Priority Burning System was developed by the Department of Forestry in coordination with the Department of Environmental Quality and with the cooperation of public and private forest land managers.

The priority burning period is established by the Department of Forestry upon the recommendation of the Department of Environmental Quality. The exact period varies from year to year and may extend for more or less than 60 days.

The Priority Burning System limits forest land burning during the 60-day period to units which must be burned during that time to meet the burning objectives. Only units with a high priority rating will be burned when the Priority Burning System is in effect. The Forester will provide notice to all Field Administrators when the Priority Burning System is initiated and rescinded.

The procedures for rating and prioritizing burn units are included in Appendix 3 of this directive. These procedures will apply to all units which may be burned when priority burning restrictions are in effect.

6. Enforcement: All forest land prescribed burning will be done in accordance with the daily Smoke Management Instructions and this directive:
- a. On private land: Violations of the Smoke Management Plan, Directive or the daily instructions issued by the State Forester are subject to enforcement action by the State Forester:
 - (1) Burning without a permit is a violation of ORS 477.515.
 - (2) Burning not in compliance with the Smoke Management Plan and Directive is a violation of OAR 629-24-301(7).
 - b. On Federal forest land:

Violations of the Smoke Management Plan Directive or the daily instructions issued by the State Forester are subject to federal enforcement action under Section 118 of the Clean Air Act, as amended in 1977.

OPERATIONAL GUIDANCE FOR THE OREGON
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Section 118 states that "Each...agency...of the Federal Government...engaged in any activity resulting...in the discharge of air pollutants...comply with all Federal, State, interstate, and local requirements,...respecting the control and abatement of air pollution in the same manner, and to the same extent as any nongovernmental entity."

7. Air Stagnation Advisories: Air stagnation advisories are issued by the National Weather Service Forecast Office in Portland when atmospheric conditions are such that the potential exists for air pollutants to accumulate for an extended period. During such times smoke and other pollutant sources within designated areas will create substantial air quality deterioration without the addition of smoke from outside sources. This condition is recognized in the administration of the Smoke Management Plan.

Smoke Management Instructions issued during an Air Stagnation Advisory will limit forest land burning to units which will not contribute smoke to a designated area covered by an Air Stagnation Advisory or an Air Pollution Alert issued by DEQ. Burning during such periods will be closely controlled.

8. Monitoring: The State Forester will monitor prescribed burning operations periodically by aircraft and other means:
 1. to insure compliance with the Smoke Management Program; and,
 2. to determine the effectiveness of smoke management procedures.

Real-time air quality monitoring data is available to the State Forester through computer link with DEQ. This information will be used in the preparation and validation of daily Smoke Management Instructions as appropriate.

9. Reporting and Analysis:

Information is needed from the Field Administrators to provide for analysis of the program procedures. Reporting will be accomplished in accordance with Appendix I, Detailed Instructions for the Oregon Smoke Management Reporting System.

10. Annual Report: The State Forester will prepare an annual report of statewide forest land prescribed burning, wildfire and smoke management activities. The report will summarize burning activities of the previous year and intrusion events and make pertinent observations toward improved operational efficiency in the program.

OPERATIONAL GUIDANCE FOR THE OREGON
SMOKE MANAGEMENT PROGRAM
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STANDARDS.

1. Quantification of Forest Residues: The consistent estimation of the tons of fuel consumed in each prescribed burn is important to the development and equitable operation of the Smoke Management Program. To determine the fuel consumed by a prescribed burn:
 - a. Determine total pre-burn fuel tonnage load.
 - b. Calculate woody fuel consumption using 1000-hour timelag fuel moisture and algorithm developed to predict large fuel consumption.
 - c. Calculate and add duff consumption.

Estimation by Field Administrators of the total pre-burn fuel tonnage will be through the application of the "planer transect method" of inventorying forest residue. The planer transect method may be applied by the actual measurement of fuels, or by use of the publication "Photo Series for Quantifying Forest Residue", or through supplemental photographs developed by following appropriate procedures.

Instructions for the actual measurement of fuels are contained in the "Handbook for Inventorying Downed and Woody Material", U.S.D.A. Forest Service General Technical Report INT-16, 24p, Intermountain Forest and Range Experiment Station, Ogden, Utah.

Instructions for using the "Photo Series" are included in Appendix 4. A publication has been developed for western Oregon and eastern Oregon fuel types.

Instructions for fuels inventory and consumption procedures and utilization of 1000-hour fuels data are contained in Appendix 4.

2. Intrusions Defined: A smoke intrusion occurs when smoke from prescribed burning enters a Designated Area or other smoke sensitive area at ground level. When measurements or observations are available, intrusions are characterized as light, moderate, or heavy based on hourly nephelometer measurements of less than 1.8×10^{-4} B-scat, between 1.8×10^{-4} and 4.9×10^{-4} B-scat, and 5.0×10^{-4} B-scat and greater, respectively, above the clean air background. The clean air background is the average nephelometer reading for the 3 hours prior to the intrusion.

When no nephelometer data are available, the following visibility table will be used when visibility data are available. Standard National Weather Service visibility observation criteria will be used for reporting purposes. (See Appendix 2.)

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INTRUSION CLASSIFICATION BASED ON VISIBILITY
(For instructions on use see Appendix 2)

Background Visibility (Miles)*	INTRUSION INTENSITY**		
	LIGHT	MODERATE	HEAVY
	<u>REDUCED VISIBILITY - RV (MILES)</u>		
> 50	RV > 11.4	11.4 < RV > 4.6	RV < 4.6
25-50	RV ≥ 10.5	10.5 < RV ≥ 4.4	RV < 4.4
20-24	RV ≥ 8.1	8.1 < RV ≥ 4.1	RV < 4.1
15-19	RV ≥ 7.5	7.5 < RV ≥ 3.8	RV < 3.8
10-14	RV ≥ 6.2	6.2 < RV ≥ 3.5	RV < 3.5
5-9	RV ≥ 3.7	3.7 < RV ≥ 2.5	RV < 2.5
3-4	RV ≥ 2.5	2.5 < RV ≥ 1.8	RV < 1.8
1-2	RV ≥ 1	1 < RV ≥ 0.5	RV < 0.5
0	RV ≥ -	-	0

* Background based on 3-hour average visibility prior to reduction due to activity smoke. Visibility changes during naturally occurring periods of change, may have to be factored into the classification on a case-by-case basis (i.e., from daylight to dark, during a rain shower, etc.).

** Reduced visibility must be determined to be predominantly from prescribed burning in order to determine intensity class.

Intrusions will be reported to the Smoke Management Program Administrator who will notify DEQ on a timely basis. See Appendix 2, Smoke Intrusion Report Form 1-4-1-601.

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3. Daily and Annual Maximum Tonnage: The Department of Environmental Quality, in cooperation with the State Forester, federal land management agencies, and private forest land owners shall develop maximum annual and daily emission limits in accordance with federal PSD (Prevention of Significant Deterioration) regulations.

SPECIAL GUIDANCE.

1. Instructions: Smoke Management Instructions will be issued from Salem at approximately 3:15 PM daily for the entire restricted area. By 7:00 AM each day a message will be placed on an automatic answering phone only if the previous 3:15 PM instructions will be updated. If the 3:15 PM instructions are still valid at 7:00 AM they will remain on the recording. If there is to be an update, burning shall not be initiated in the affected area until updated instructions are issued. Any amended instructions (either written or verbal) that are issued during the working day shall be strictly complied with.

The instructions shall be considered as directives from the State Forester. The authority for approving prescribed burning is delegated to the District Forester for burning regulated directly by the State Forester (private and BLM forest land), and to the Forest Supervisor for the U.S.D.A., Forest Service, and the Park Superintendent for the National Park Service for burning coordinated with the State Forester. These delegates and their designated field personnel are "Field Administrators". Any planned variances from the daily burning instructions will be discussed with the Smoke Management Duty Forecaster. If the Smoke Management Duty Forecaster and District Forester cannot agree on deviation from the instructions, the Deputy State Forester will discuss the situation and provide final resolution. If the Forest Supervisor or Park Superintendent and the Smoke Management Duty Forecaster cannot agree on deviation from the instructions, the Deputy State Forester will discuss the situation and make final resolution.

Variances or revisions to the instructions shall be recorded by the Protection Division.

2. Requests for Information: The State Forester's Office will provide more specific information to Field Administrators when requested by telephone. The following telephone numbers will be used in regards to the Smoke Management Instructions:

378-2800: "Automatic Answering Phone" recording with Smoke Management Instructions. Instructions will be recorded by approximately 7:00 AM (as needed) and 3:15 PM.

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- 378-2153: Smoke Management Duty Forecaster. Call this number for forecasts, instructions, and other daily operations. Do not call between 2:30 PM and 3:15 PM, or prior to 8:30 AM. These times are used to prepare instructions.
- 378-2509: Salem Fire Weather Forecast Service. Use this for fire weather needs; not smoke management.
- 378-2518: Salem Communications. For assistance in getting unit numbers, planning and resulting units or other daily data needs. Do not use for daily decision-making assistance.
3. Reduction of Emissions: The Department of Forestry will encourage private forest landowners to burn only those units that must be burned to achieve the landowners' objectives. Forest Practices Foresters, through the administration of the Forest Practices Act, will encourage utilization of residue, fuel reduction measures, and alternate treatment practices that are consistent with the purposes of the Forest Practices Act. The Department of Forestry supports efforts to reduce prescribed burning emissions and will strive to achieve emissions reduction goals established within the Oregon Visibility Protection Plan.
- Burning during time periods when 1000-hours and larger fuels (3 inches in diameter or larger fuels) have relatively high fuel moistures, such as during spring, will be promoted where such burning is within the prescription necessary to achieve the objectives of the landowner.
- Mass ignition methods will be encouraged to help reduce emissions where such techniques are economical and practical.
- To minimize impacts from residual smoke, mop-up will be initiated on all units consistent with atmospheric and wind conditions. Within this context, during periods of observed or forecast low level transport toward the designated areas, mop-up shall begin immediately.
4. Monitoring of smoke behavior will be intensified on marginal days. This will be done by use of lookouts, aerial observation, and on-site observation of smoke behavior.
5. Any wildfire that has the potential for smoke input into a designated area or other area sensitive to smoke will be reported immediately to the State Forester's Fire Operations Section who will advise DEQ on a timely basis.
6. Test Burn Project: In order to determine the feasibility of alternative schedules in burning to minimize smoke impacts while maintaining burning accomplishments, a test project will be established during 1986-88. Special strategies will be employed in burning, and assessment will be made for impacts on air quality and burning accomplishment.

OPERATIONAL GUIDANCE FOR THE OREGON
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7. Tonnage limits will be reviewed by the DEQ and the Department of Forestry for possible update and revision, as necessary, as uniform fuel loading estimation and consumption procedures are developed and tested.
8. A statewide forest fuels inventory procedure will be developed by the Department of Forestry in cooperation with the Department of Environmental Quality. The new procedure will be implemented in 1987.

RESPONSIBILITIES.

1. State Forester: The State Forester is responsible for the coordination of the Smoke Management Plan and the Operating Details between the National Weather Service, U.S.D.A. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service, forest landowners, Department of Environmental Quality, National Park Service, Bureau of Indian Affairs, Washington State Department of Natural Resources, and regional air quality authorities. In addition, the State Forester, through the Forest Protection Division, has the responsibility to issue additional restrictions on prescribed burning in situations where the air quality of the entire state or any part thereof is, or would likely become, adversely affected by smoke.
2. Forest Protection Division: The Forest Protection Division is directly responsible for:
 - a. Providing weather forecasting services for Smoke Management purposes.
 - b. Issuing Smoke Management Instructions to Field Administrators.
 - c. Coordinating with Department of Forestry's Area and District offices, cooperating agencies, and forest land owners in identifying training needs and in developing training programs.
 - d. Monitoring the Smoke Management Program.
 - e. Providing on-the-ground assistance to Field Administrators as requested.
 - f. Maintaining liaison with Field Administrators through the Smoke Management Meteorologist and normal staff/line relationships.
 - g. Maintaining the Smoke Management Record System.
3. Field Administrators: Oregon Department of Forestry field administrators will administer prescribed burning according to the Smoke Management Plan, Operational Guidance for the Oregon Smoke Management Program (Directive 1-4-1-601), and the daily Smoke Management Instructions.

OPERATIONAL GUIDANCE FOR THE OREGON
SMOKE MANAGEMENT PROGRAM
(Including Visibility)

U.S.D.A., Forest Service (USFS), Bureau of Land Management (BLM), National Park Service (NPS), U. S. Fish and Wildlife Service (USFWS), and the Bureau of Indian Affairs (BIA). Federal land management agencies are required by law to follow the directions of the Forester for the protection of air quality in conducting prescribed burning operations in the restricted area. They will follow the smoke management weather forecasts, smoke management instructions, and priority burning restrictions as provided by the Oregon Smoke Management Plan and the Operational Guidance for the Oregon Smoke Management Program (Directive 1-4-1-601).

- o Make daily reports relating to burning operations.
4. Department of Environmental Quality (DEQ): The State Forester and the DEQ are required by ORS 477.515 to approve a plan for the purpose of managing smoke in areas they shall designate. The Oregon Smoke Management Plan is the product of this statutory requirement.
 5. Private Forest Landowners: It is the responsibility of private forest landowners under Oregon Forest Laws to do forest land prescribed burning according to the Oregon Smoke Management Plan. They are responsible to burn according to directions from State Forestry Field Administrators and to do mop-up of prescribed burns necessary to maintain air quality and visibility in designated areas and areas sensitive to smoke.

CONTROL.

Review: The Smoke Management Plan and Directive shall be reviewed at least every three years. The review will be conducted jointly by the State Forester and the Director of Environmental Quality and will include representatives of affected agencies and parties.

AGREEMENT:

In witness whereof, the parties have agreed to the guidelines set forth in this Directive.

State of Oregon
Department of Forestry

State of Oregon
Department of Environmental Quality

by: _____

by: _____

Title: _____

Title: _____

Date: _____

Date: _____

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DIRECTIVE
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OPERATIONAL DETAILS FOR THE OREGON SMOKE MANAGEMENT PLAN

PURPOSE. This directive provides guidelines and constraints necessary to the successful accomplishment of forest land management objectives and to the maintenance of a satisfactory atmospheric environment in designated areas.

SITUATION. Prescribed burning to reduce hazardous fuel accumulations and prepare logged or brushy areas for reforestation is applied on an average of 111,000* acres of Oregon's forest land each year. The burning is done on approximately 3,400 separate parcels (units) of forest land.

Some units are burned for hazard reduction only; however, most burning is done to reduce hazard and to improve the chances for successful reforestation of logged sites and brush fields. A reduction in the use of herbicides has increased the importance of fire as a silvicultural tool, particularly in the highly productive forest lands in western Oregon where brush competition can severely reduce the chances for successful reforestation on many sites.

Along with the recognition of the critical role fire has in the successful management of Douglas fir forests has come a critical awareness of the problems smoke from these fires can cause for residents of the state. This awareness has resulted in the development of the Oregon Smoke Management Plan. The original plan for managing smoke from forest lands was first developed by the Department of Forestry in coordination with other forest land management agencies and the forest industry. It was later made into law by the Oregon Legislature.

The Smoke Management Plan consists of the original plan (Directive 1-1-3-410) as defined by Administrative Rule and refinements developed by the Department of Forestry as new knowledge and skills have developed in the science of predicting atmospheric conditions relative to smoke movement.

AUTHORITY. Substantial authority is granted to the Forester by ORS 477.515 to develop a plan for the management of smoke produced by forest land burning. This statute provides that the Department of Forestry and the Department of Environmental Quality shall approve a plan for managing smoke in areas they will designate. The statute also specifies a variety of control measures the Forester may use to administer the plan.

ORS 477.515 also states that the Smoke Management Plan shall be developed by the State Forestry Department in cooperation with federal and state agencies, landowners and organizations that will be affected by the plan. The plan is filed with the Secretary of State and is promulgated as Administrative Rule OAR 629-43-043. The State Forester has administrative authority to develop operating policies, procedures and practices to meet the objectives of the plan.

OBJECTIVE. The objective of the Smoke Management Program is to keep smoke resulting from burning on forest lands from being carried to, or accumulating in designated areas, or accumulating in other areas sensitive to smoke; and to provide maximum opportunity for essential forest land burning consistent with this objective.

*This is a running average for the five year period ending in 1980.

OPERATIONAL DETAILS FOR THE OREGON
SMOKE MANAGEMENT PLAN

POLICY. It is the policy of the Forester to manage prescribed burning on forest land with concern for all aspects of the environment and with particular consideration for the need for continuous forest production on Oregon's forest lands. It is also the policy of the Forester that the Smoke Management Plan, directives and guidelines issued relative to the plan be strictly complied with.

STANDARDS.

The Oregon Smoke Management Plan (Directive 1-1-3-410) provides a specific legal framework for the administration of the forest smoke management program for Oregon.

The State Forester is responsible for the coordination and control of the Oregon Smoke Management System. The plan applies to western Oregon. It is administered with full interagency cooperation with the U.S. Forest Service, Bureau of Land Management, Bureau of Indian Affairs, the Department of Environmental Quality and private forest industry.

The plan instructs each Field Administrator to maintain a satisfactory atmospheric environment in designated areas. The plan requires the Forester and the Field Administrator to continually monitor weather factors, advisories and air quality conditions in designated areas in conducting the burning program.

The plan establishes a set of limitations applicable to specified burning and mixing conditions. These limitations relate to tonnage of fuel per 150,000 acres which, ideally, may be burned under various sets of mixing conditions. Experience has proven these standards are adequate to protect designated areas only under ideal conditions. Frequently, more specific restrictions must be applied to meet air quality objectives.

The various standards used in the administration of the Smoke Management Plan follow:

A. Weather Forecasts

The Salem, Portland and Medford Fire Weather Offices provide twice daily smoke management forecasts. Each forecast provides a general discussion of meteorological conditions that influence air movement and atmospheric mixing conditions which will affect smoke movement and dispersion in the atmosphere.

Specific weather predictions are given for climatic zones within the area. A section of the forecast is devoted to the smoke mixing and dispersion characteristics of the atmosphere within the forecast area. This is determined by the stability of the air mass and the speed and direction of transport winds. Sections of the forecast provide information relative to burning conditions as well as air movement.

An outlook for the day following the forecast period is provided. The period of time covered by the outlook will depend upon the weather influences involved at any given time. Burning will be conducted in accordance with current forecast information.

OPERATIONAL DETAILS FOR THE OREGON
SMOKE MANAGEMENT PLAN

B. Smoke Management Advisory

Smoke Management Advisories will be issued by the Salem Smoke Management Section during periods when weather is favorable for significant amounts of burning. The advisories provide constraints on burning in areas where the basic Smoke Management Plan may be inadequate to protect Designated Areas.

The advisories are based upon an analysis of the atmospheric conditions affecting smoke transport and dispersion and of the air quality conditions in designated areas which might be affected by forest land burning.

The advisories will be issued immediately after the Portland, Salem and Medford weather forecasts, usually at 8:30 am and 4:00 pm. The morning advisory will regulate the current day's burning. The afternoon advisory will state the next day's expected constraints, and is primarily to assist field units in planning.

Field units planning early morning ignitions (prior to 8:30 am) should use the prior afternoon's advisory for smoke management considerations. Ignitions planned after 8:30 am should adhere to the current morning's advisory.

Field Administrators are encouraged to discuss plans for early morning or night time ignitions with the Smoke Management Coordinator.

A smoke management "Hot Line" is in operation in the Salem Fire Weather Forecast Office. This line provides recorded weather information to any caller at any time. Recorded weather information is updated as follows:

1. During the period when the Priority Burning System is in effect, the previous day's 3:00 PM forecast will be updated at 6:30 AM.
2. At 8:00 AM and 3:00 PM the most current forecast will be recorded.

This information can be obtained by calling 378-2800.

C. Priority Burning System (See Appendix 3)

The Forest Land Burning Priority Rating System (Priority Burning System), was initiated to reduce the amount of forest land burning during the time when the maximum acreage of grass seed fields are being burned in the Willamette Valley. There are approximately 60 days during mid-summer when field burning has been given a high priority for use of the air shed in the valley for smoke dispersal. The Priority Burning System was developed by the Department of Forestry in coordination with the Department of Environmental Quality and with the cooperation of public and private forest land managers.

The Priority Burning System limits forest land burning during the 60-day period to units which must be burned during that time to meet the burning objectives. Only units with a high priority rating will be burned when the Priority Burning System is in effect. The Forester will provide notice to all Field Administrators when the Priority Burning System is initiated and rescinded.

OPERATIONAL DETAILS FOR THE OREGON SMOKE MANAGEMENT PLAN

The priority burning period is established by the Department of Forestry upon the recommendation of the Department of Environmental Quality. The exact period varies from year to year and may extend for more or less than 60 days.

The procedures for rating and prioritizing burn unit is included in Appendix 3 of this directive. These procedures will be used on all units which may be burned during the summer months.

D. Air Stagnation Advisories

Air stagnation advisories will be issued by the Weather Service Forecast Office in Portland when atmospheric conditions are such that the potential exists for air pollutants to accumulate in designated areas for an extended period. During such times smoke and other pollutant sources within the designated area will create substantial air quality deterioration without the addition of smoke from outside sources. This condition is recognized in the administration of the Smoke Management Plan.

Smoke management advisories issued during an Air Stagnation Advisory will limit forest land burning to units which will contribute no smoke to a designated area covered by an Air Stagnation Advisory or an Air Pollution Alert. Burning during such periods will be closely controlled.

E. Measurement of Fuel Tonnage

The correct estimation of fuel tons that will be consumed by a burn is very important to the development and improvement of the smoke management program. It is essential that a reasonably accurate estimate of tons of fuel that will be consumed by a fire be reported in the burning plan.

The publication "Photo Series For Quantifying Forest Residues" will be used for making fuel tonnage estimates. Instructions for the use of this publication in estimating tonnage are included in Appendix 4.

A publication has been developed for western Oregon and eastern Oregon forest types.

F. Reporting

Three basic information items are essential to the administration of the burning program. These items are: (1) unit descriptions, (2) planned burns, and (3) accomplished burns. Additional information is needed to provide data for analysis, reporting and evaluation of the program procedures. Reporting will be accomplished in accordance with Appendix 1, Detailed Instructions for the Oregon Smoke Management Reporting System.

RESPONSIBILITY.

- A. State Forester. The State Forester is responsible for the coordination of the Smoke Management Plan and the Operating Details between the National Weather Service, United States Forest Service, Bureau of Land Management, Oregon Forest Protection Association, Department of Environmental Quality, and any regional air quality

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authorities. In addition, the State Forester, through the Forest Protection Division, has the responsibility to issue additional restrictions on prescribed burning in situations where the air quality of the entire state or any part thereof is, or would likely become, adversely affected by smoke.

- B. Forest Protection Division - Fire Operations Section. The Fire Operations Section is directly responsible for providing weather forecasting services for smoke management purposes.

Burning advisories will be issued in concurrence with weather forecasts and in coordination with the Department of Environmental Quality (DEQ) when the priority burning restriction is in effect or during air pollution alerts. Burning advisories will be written in clear and concise terms. The Operations Section will provide more specific information when requested by telephone.

The Operations Section will monitor the burning program currently. Monitoring will be intensified on marginal days and will involve aircraft observation and telephone calls to the districts relative to local conditions.

The Operations Section will work with the areas and districts in identifying training needs and in developing training packages.

Operations Section staff will provide assistance on the ground wherever needed. They will maintain a close liaison with field operations through the Smoke Management Meteorologist and normal staff-line relationships.

The Operations Section will maintain a smoke management records system. They will produce an annual summary of burning and smoke management activities. They will also provide available data to meet the immediate needs of staff and line personnel upon request.

- C. Area Directors and District Foresters. Each Field Administrator issuing burning permits under the Smoke Management Plan will manage prescribed burning on forest land with respect to other aspects of the environment in order to maintain a satisfactory atmospheric condition in designated areas. This effort will also be applied to special situations where local conditions warrant in areas not defined as designated areas but which are sensitive to smoke. Accomplishment will involve a consideration of weather forecasts, burning advisories, acreages involved, amounts of material to be burned, evaluation of potential smoke column vent height, direction and speed of smoke drift, residual smoke, mixing characteristics of the atmosphere, and distance from the designated area of each burning operation.

Each Field Administrator will evaluate down-wind conditions prior to implementation of burning plans. Upon notice from the Forest Protection Division that air in the entire state or portion thereof is, or would likely become, adversely affected by smoke, the affected Field Administrator will terminate burning. Upon termination, any burning already under way will be completed; residual burning will be mopped up as soon as practical; and no additional burning will be attempted until approval has been received through the burning advisory.

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Field Administrators will make daily reports covering burning operations. Monitoring of smoke behavior will be intensified on marginal days. This will be done by use of lookouts, aerial observation and on-site observation of smoke behavior.

Any wildfire that has the potential for smoke input into a designated area will be reported immediately to communications in the Fire Operations Section.

- D. Department of Environmental Quality (DEQ). The State Forester and the DEQ are required by ORS 477.515 to approve a plan for the purpose of managing smoke in areas they shall designate. The Oregon Smoke Management Plan is the product of this statutory requirement.

The DEQ cooperates with the Department of Forestry in all phases of the administration of the Smoke Management Plan. Particularly important is current and timely information on air pollution levels in designated areas and priority burning periods.

- E. United States Forest Service (USFS), Bureau of Land Management (BLM), and the Bureau of Indian Affairs (BIA). The USFS, BLM and BIA have signed agreements with the Department of Forestry and the DEQ to comply with the Oregon Smoke Management Plan. These agencies have agreed to follow the direction of the Forester in conducting burning operations. They follow the smoke management weather forecasts, smoke management advisories and priority burning restrictions.

National Forests within the state will coordinate currently with the Forester on smoke management and burning plans. The State Director of the Bureau of Land Management has directed BLM field people to comply with the Smoke Management Plan as administered by the State Forester.

- F. Private Forestry Operations. It is the responsibility of private forest operators under Oregon Forest Laws to burn according to the Oregon Smoke Management Plan. They are responsible to burn according to directions from State Forestry field personnel and to do mop-up of the burns necessary to prevent smoke intrusion into designated areas and to prevent fire escape.

Summary:

The State Forester is responsible for the administration of the Smoke Management Plan in Oregon. He does this in coordination with the Department of Environmental Quality and with the cooperation of the public land management agencies.

The Smoke Management Plan places the specific responsibility for making day-to-day decisions upon Field Administrators. The Forest Protection Division is responsible for providing meteorological and technical assistance to Field Administrators and for monitoring the program.

REPORTING SYSTEM
SMOKE MANAGEMENT PLAN

Objective: The Department of Forestry's communications center operates a computer program to record and process smoke management data. Data is received and transmitted through the State Forestry and U.S. Forest Service teletype systems.

The objectives of the reporting system are to provide a record of:

1. Locations and amounts of planned burning for the current day.
2. Locations and amounts of burning accomplished the previous day.
3. Smoke intrusions, including source, area affected, duration, and information relative to the cause of the intrusion.
4. Annual summaries of data.

Area Included:

The reporting system includes all of western Oregon, plus those parts of Hood River and Wasco Counties within the boundary of the Mt. Hood National Forest, and the part of Klamath County within Crater Lake National Park. Data is grouped by Administrative Units, i.e., each National Forest, Crater Lake Park, and each State Forest Protection District.

Types of Burning to be Included:

All burning related to forest management activities should be included in the reporting system. Some examples are slash and brush disposal after logging, road building, scarification, or burning of brush fields for reforestation. Other examples which should be included are underburning, or brush field burning for stand improvement or wildlife habitat.

Types of Burning That Should Not be Included:

Burning for debris disposal or burning related to *agricultural activities should not be included in the reporting system. Some examples are household or yard maintenance debris such as paper, leaves, lumber, etc., and grass or grain stubble. Small piled slash areas such as for a homesite should not be included if the amount to be burned is less than 5 tons.

While these examples would not be reported in the Smoke Management Data System, any western Oregon burning subject to permit under ORS 477.515 must conform to the Smoke Management Plan. Also, in some areas "backyard" and stubble burning must be done in compliance with Department of Environmental Quality rules, rather than the Oregon Smoke Management Plan.

- * The range burning on Class III (Grazing) lands, common in Coos and Douglas Districts, should not be included in the Oregon Smoke Management System (OSMS) Data System. This burning should be reported to Salem daily as a separate item following "Accomplishment Report". For each permit exceeding 5 acres, report township, range, section and acreage burned.

REPORTING SYSTEM
SMOKE MANAGEMENT PLAN

Procedure:

Three basic steps are involved in the reporting system:

1. A "Unit Description" is submitted to Salem for each "burn unit"* as provided on Reporting System Coding Sheet (Part I, Form 1-1-3-400). This results in a "Unit Number" assigned to the specific burn unit, usually months or weeks before burning is to be done.
2. "Unit Numbers" of planned burns are submitted by field offices on the day burning is to be done. This results in "Planned Burns" (Part II of Form 1-1-3-400). Planned Burns are listed daily on the teletype network to all users and to DEQ.
3. An "Accomplishment Report" is submitted by field offices the day after burning, again using the "Unit Number" as a reference (Part III of Form 1-1-3-400). The Accomplishment Report is listed daily on the teletype along with Planned Burns.

Detailed instructions for Reporting System Coding Sheet (Form 1-1-3-400)
(Also see instructions on back of form.)

Part I - Unit Description and Number Assignment.

Example entry for Part I, Form 1-1-3-400 (Unit Description).

Raw Data: This is the information needed from a field office to begin a record for a specific area to be burned. The data may be entered on the form and mailed or sent by teletype. Forms mailed should be addressed to:

Department of Forestry
Attn: Communications Section
2600 State Street
Salem, OR 97310

* Unit--this term is used to describe a contiguous area which will be burned at the same time. This could include a right-of-way containing piled slash if the area is considered one project and will be burned at one time.

REPORTING SYSTEM
SMOKE MANAGEMENT PLAN

Field No.
Data Entry

1	This example is located in: West Oregon District	WO
2	This example is located in: Benton County	2
3	This example is located in: Township 11S, Rng. 7W, Sec. 12	11S-7W-12
4	Average elevation of the Unit is 1,500 feet above sea level	1500
5	Distance from Designated Area, to nearest mile, is 12 miles	12
6	Type of burn will be broadcast	B
7	Acreage in unit to nearest acre is 15	15
8	Estimated tonnage that will be consumed by fire is 150	150
9	Burn is rated high priority. (See Priority Rating System, this directive and instructions, Part I, Field 9, on back of Form 1-1-3-400)	H
10	The unit is privately owned	P

Summarized for teletype transmittal, this data would appear as follows:

WO,2,11S-7W-12,1500,12,B,15,150,H,P

Teletype transmittal of numerous entries allows a tape of field data to be made as the data is received. This tape allows direct data entry into the computer. Therefore, it is critical that each element of data (field 1, 2, 3, etc.) be separated by a comma. Also, the Township, Range and Section must be separated by a hyphen. When the last data entry (field 10) is entered, do not use a comma. Start a new line by using line feed, carriage return. (On USFS teletypes, it is helpful if the "rubout" key is also used after line feed and carriage return.)

If an error is made at any point in a line of data, type three "X's" (XXX). The computer will recognize "XXX" and ignore the data in that line. Use line feed, carriage return, etc., and start the entry again.

Number Assignment

The Salem Communications Clerk enters the unit description into the computer, then sends a "Unit Verification and Number Assignment" on the teletype, to the appropriate field office(s).

The teletype will appear as follows:

SMOKE MANAGEMENT
UNIT VERIFICATION AND NUMBER ASSIGNMENT FOR 02/01/81

*Unit No.	WEST OREGON Twp Rge Sec	Elev.	BENTON Dist.	**Type	Acres	Tons	***Tons/Ac.	Owner
912	11S-07W-12	1500	12	B-H	15	150	10	P

- * Automatically assigned by computer.
- ** Type and priority are both listed, i.e., B = Broadcast, H = High priority.
- *** Automatically calculated by computer.

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Field offices should review these as soon as possible. If any errors are found, contact the Communications Clerk to correct the data.

This completes the entry process, Part I of Form 1-1-3-400.

PART II. Planned Burns

Example entry background: The field has decided to burn Unit No. 912 (the number assigned by the computer in Part I above) today, July 20, 1981. Estimated ignition time is noon. The entire unit will be burned.

Data to be sent to Salem by teletype:

<u>Field No.</u>		<u>Data Entry</u>
1	Unit Number 912	912
2	Estimated ignition time	1200
3	Tonnage to be burned	150

The teletype data line will appear as follows:

912,1200,150

If an error is made at any point on a line of data, three X's should be entered, then use line feed and carriage return, and enter the correct data.

Do not plan right-of-way burns. (See Form 1-3-4-420)

When all planned burns have been received from the field, the Communications Clerk enters the data into the computer, which results in a teletype listing as follows:

SMOKE MANAGEMENT

PLANNED BURNS FOR 07/20/81

Unit No.	WEST OREGON			BENTON			Acres	Tons	**Time
	Twp	Rge	Sec	Elev.	Dist.	Type			
912	11S	07W	12	1500	12	B-H	15	150	1200

** Estimated ignition time. This replaced tons/acre shown on Planned Burns, beginning January 1, 1981.

PART III. Accomplishment Report

Example entry background: Unit 912 was ignited as planned in the above example. However, only half the unit burned. Smoke from the burn entered Corvallis.

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REPORTING SYSTEM
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Data to be sent to Salem by teletype on July 21.

<u>Field No.</u>		<u>Data Entry</u>
1	Unit Number	912
2	Actual Ignition Time	1200
3	Actual tonnage burned	75
		*Yes

The teletype data line will appear as follows:

912,1200,75, Yes (Same instructions as above for errors, etc.)

* Report a smoke intrusion by adding YES at the end of the data field.

When a smoke intrusion occurs, Form 1-1-3-410, Smoke Intrusion Report, also must be completed as soon as practical. Usually, preliminary information can be telephoned. See Appendix 2 Smoke Intrusion Report.

All planned burns must be "accomplished" the following day or on the next business day if the Communications Center is not operational on a weekend or holiday. If no burning was done, the data line would appear as follows:

912,0,0

Units burned during weekends or holidays when the Communications Center is closed should be reported in groups by the date burning was done.

Use Form 1-3-4-420 to report right-of-way burns.

The accomplishment report sent out from Salem Communications Center will appear as follows:

SMOKE MANAGEMENT
RESULTS SUMMARY FOR 7/21/81*

Unit No.	WEST OREGON			BENTON		Acres	Tons	**Time	
	Twp	Rge	Sec	Elev.	Dist.				Type
912	11S	07W	12	1500	12	B-H	15	75	1200

* Burning actually occurred 7/20

** Actual Ignition Time. This replaced tons/acre beginning January 1, 1981.

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REPORTING SYSTEM SMOKE MANAGEMENT PLAN

Additional Instructions - "Available Tons" and "Tons Burned":

Background:

Tons of fuel burned is a critical element in the data system. It is used to estimate emissions from forest burning. It is important to private, state, and federal land managers, and air quality enforcement agencies. Therefore, the reporting of this information must be as accurate as possible. There is no advantage to be gained by knowingly reporting amounts smaller or larger than actually available or actually burned.

Entering Data:

When entering data in Part I, Field 8, the tons should be the amount expected to be burned under ideal burning conditions, not the total fuel loading. For example, old growth slash may total 150 tons/acre before burning. After burning it is not uncommon to have as much as 100 tons/acre (usually the larger material) remaining. In this case, 50 tons/acre should be the basis for estimating the "available tons". If the unit area was 10 acres, then $10 \times 50 = 500$ tons - the amount which should be entered in Part I, Field 8, of Form 1-1-3-400.

Planning a Burn:

The data system was modified in 1979 to allow planning all, or part, of a unit on a given day. If only part of a unit will be burned, the tons to be burned that day should be entered. (Part II, Field 3, Form 1-1-3-400.) The computer will list that amount on the "Planned Burn" list for that day.

Resulting a Burn:

Report the tons that actually burned.

Summaries Available:

In addition to the daily planned burns and results listings, several summary printouts are available. At approximately 3-month intervals, the Communications Clerk will send each field administrative unit the following summaries. Also, they may be obtained at any time by calling the Communications Clerk:

REPORTING SYSTEM
SMOKE MANAGEMENT PLAN

1. Available Units. Lists all units that have not been reported as 100% burned. Last item shown is percent of tonnage unburned.

Available Units Format:

SMOKE MANAGEMENT
AVAILABLE UNITS

WEST OREGON							
Unit	Twp-Rng-Sec	Elev.	Distance	Type	Acres	Tons	Left
912	11S-07W-12	1500	12	B-U-M	15	75	50%
					15*	75*	-

*Total acres and tons by District.

2. Accomplishment Report. Lists all units that have had any burning done. Tons is the cumulative amount burned prior to the printout date.

Accomplishment Report Format:

SMOKE MANAGEMENT
ACCOMPLISHMENT REPORT

WEST OREGON						
Unit	Twp-Rng-Sec	Elev.	Distance	Type	Acres	Tons
912	11S-07W-12	1500	12	B-H-M	15	75
1*					15*	75*

* Total units, acres and tons by District.

3. Problem Summary Report. This lists all burns from which an intrusion was reported. The last item shown is month and day the burn was conducted.

REPORTING SYSTEM
SMOKE MANAGEMENT PLAN

Reporting Schedules

Unit Descriptions

These may be transmitted any time during office hours; however, field offices should avoid periods when the teletype is scheduled for other data such as incoming weather or fire reports. Also, waiting to submit unit descriptions until the day the unit is to be burned places unreasonable demands on the data system. Whenever possible, these should be sent well before the day burning will occur.

Accomplished and Planned Burns

These are to be sent at 9:30 AM. The Salem Communications Clerk will transmit "Smoke Management Accomplished and Planned Please" at approximately 9:30 AM, after which field units should report in the following format: (Also see Reporting System pages 4-5 this Appendix)

District Identifier, Accomplished (yesterday's burning)

Unit No., Actual Ignition Time, Tons Burned, YES (only if intrusion occurred)

(use a new line for each unit number)

Planned (for today)

Unit No., Estimated Ignition Time, Tons Planned,

(use a new line for each unit number)

End - District Identifier

Smoke Management (Daily summaries from Salem)

As soon as Accomplished and Planned reports are processed in Salem, the Communications Clerk will transmit the summaries to field units and Department of Environmental Quality. Contents of these summaries are shown on pages 4 & 5 of this appendix.

SMOKE INTRUSION REPORT FORM 1-1-3-410

Definition

A smoke intrusion occurs when any visible or monitored smoke from prescribed forest burning enters a Designated Area below that Designated Area's ceiling.

Background

Smoke intrusions vary greatly in duration, concentration and effect on a Designated Area. For example, a smoke layer well above the surface would not affect the monitored air quality in a Designated Area, but is still an intrusion under the Oregon Smoke Management Plan. Smoke accumulating at the surface, and remaining overnight adversely affects air quality more than if smoke drifts through, clearing in an hour or two.

Purpose

This report provides a descriptive record of smoke intrusions, supplemental to the "Problem Burns" reported in the Smoke Management Data System. Reports are annually summarized in the "Smoke Management, Annual Report" compiled by the Smoke Management Section.

Responsibilities

Field units, i.e., State Districts or National Forests, are responsible for monitoring smoke from their burns, and reporting intrusions to the Smoke Management Coordinator:

1. On the burning "Accomplishment Report" given daily, and,
2. Through the use of form 1-1-3-410.

The Salem Smoke Management Coordinator is responsible for:

1. Combining field reports into one intrusion summary when more than one field unit is involved.
2. Liaison with Department of Environmental Quality to develop mutually acceptable descriptive reports of smoke intrusions within 3 days of the occurrence.
3. Completion of Form 1-1-3-410A, summary of meteorological information.
4. Preparing an annual summary of intrusions.

Detailed Instructions

When to report:

Any intrusion is to be reported as soon as possible. If 7-day operations are not in progress at Salem, then report on the first workday after the incident.

SMOKE INTRUSION REPORT FORM 1-1-3-410

It is also helpful to report potential intrusions, as soon as it appears that smoke may enter a Designated Area. This allows the Smoke Management Coordinator to obtain monitoring data prior to and during the incident. It also facilitates public relations work resulting from an incident.

Data Entries (See sample form page 4 of this appendix.)

Smoke Origin

1. The unit number(s) of burns contributing to the intrusion.
2. Date ignition occurred.
3. Name of State District, National Forest (or Crater Lake Park).
4. Wind direction and speed at burn site at time of ignition.
5. Time ignition began, use 24 hour clock time.

Intrusion Description

6. Brief description, including name(s) of communities, and extent of area affected. (For example, smoke entered Willamette Valley near Dallas, drifted SE through Monmouth to Albany.) Check yes if smoke entered city of 10,000 including 3-mile radius around city limits.
7. Date intrusion entered Designated Area (This may be later than date of ignition).
8. Time (24 hour clock) smoke entered Designated Area.
9. Number of hours smoke was present in Designated Area.
10. Check proper box. Main plume refers to smoke produced during active or convective phase of burn. Residual smoke is that which is produced after fire dies down to smoldering phase. Drift smoke is that which accumulates in one area, later moving into a Designated Area, or is split off from a main plume.
11. If smoke in Designated Area was at ground level, enter "surface" or "O" for base elevation. If smoke did not reach the ground, enter best estimate of distance between ground and bottom of smoke cloud.

For depth, enter best estimate of distance from bottom to top of smoke layer.
12. Check box which best describes smoke behavior in the Designated Area. Other descriptive phrases may be substituted if field reporter wishes.
13. Best estimate of visibility in miles in the Designated Area. (Airports are often the best source of information.)

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SMOKE INTRUSION REPORT FORM 1-1-3-410

14. Leave blank if no other visibility impairment was present or several may be checked.
- 15.&16. Self-explanatory.
17. Name of field person reporting the intrusion.

SMOKE INTRUSION REPORT

OREGON SMOKE MANAGEMENT PLAN

This information must be telephoned to Salem, 378-2518, no later than the next workday after intrusion.

Smoke Origin: Unit Number(s) 1 Date Burned 2
District/Forest 3 Mo. Day Year
Surface Wind Direction & Speed 4 at ignition time 5.

Intrusion Description

Area affected (Portion of DA where smoke was visible or monitored)

6

Did smoke affect populated area? (cities over 10,000 population, plus Lebanon, Tillamook) Yes No

Date 7 Time 8 smoke entered area. Duration 9 hrs.

Smoke Type: Main Plume Residual Drift Smoke

Vertical Characteristics: Base elevation (above terrain) _____ ft.
Depth _____ ft.

Behavior: Smoke remained at same level Smoke rose
Smoke subsided Smoke layered & maintained identity
Smoke dispersed, lost identity

Prevailing Visibility (at time smoke entered area) 13 miles

Other visibility restricting sources present (check those which apply)

- | | |
|---|---|
| 1. Field Smoke <input type="checkbox"/> | 5. Fog <input type="checkbox"/> |
| 2. Wildfire Smoke <input type="checkbox"/> | 6. Other (specify) <input type="checkbox"/> _____ |
| 3. Dust <input type="checkbox"/> | 7. Unable to Identify <input type="checkbox"/> |
| 4. Resident Emmissions <input type="checkbox"/> | |

Cause (Your explanation of reason smoke intrusion occurred)

15

Comments: (Any additional information which may clarify report)

16

Reported by 17
Name

FOREST LAND BURNING PRIORITY RATING SYSTEM

The Forest Land Burning Priority Rating System (Priority Burning System) identifies units* which require burning during the summer months to meet silvicultural and reforestation objectives. It provides a means for prioritizing units selected for summer burning into "high", "moderate", and "low", categories.

The objective of the Priority Burning System is to more closely regulate forest land burning during the approximately 60 mid-summer days when field burning is being accomplished in the Willamette Valley. The system insures that only forest units which must be burned during the hotter, drier mid-summer period will be burned while field burning is taking place.

The area covered by the system is that part of western Oregon north of the North Fork and main stem of the Umpqua River, excluding the Steamboat and Diamond Lake Districts of the Umpqua National Forest.

Rating forms for the Cascade and Coast Ranges were developed and field tested by two interagency-industry task force groups. The system is designed to identify those units which, because of the nature of the site, fuel and silvicultural requirements, must be burned during the hotter, drier mid-summer period.

The Priority Burning System is closely coordinated with the Department of Environmental Quality. The start and ending of the priority period** will be determined by the Forester with the advice of the DEQ on field burning levels. The priority burning systems will not be in effect when field burning is stopped, or at very low activity levels. Also, non-priority burning may be allowed in specified areas when the Forester determines that such burning will not impact the Willamette Valley.

Notification of the beginning, ending, and any areas exempt from the Priority Burning System will be included with daily smoke management advisories issued from Salem.

* Unit: A term used to describe a contiguous area of forest land with specific boundaries upon which some activity or activities will be conducted.

** Priority Burning Period: It is a period of time when only "high priority" forest land units will be burned. The 60 days is an approximate span of time; the period will generally begin in mid-July when heavy field burning has begun and will end when conditions no longer permit this level of burning in early September.

FOREST LAND BURNING PRIORITY RATING SYSTEM

Certain special areas will be classed as high priority without use of the priority rating procedure. Such areas are characterized by special or unique management objectives which make use of a rating system impractical. Such units include:

- Vegetation management areas, such as huckleberry fields.
- Visual management areas which must be burned under very restrictive prescriptions.
- Special watershed areas requiring burning.
- Game habitat improvement burning.
- Campground development.
- Special reseach projects.
- Right-of-way burning which must be done during the summer.
- Prescribed under-burning.
- *High elevation units.

-
- * High elevation units in the Cascades which may be burned with no risk of impact on the designated area will be considered high priority under the following circumstances:
- a. High elevation units must be at least 1000 feet in elevation above the designated area ceiling (designated area ceiling is 2500 feet). Thus, any unit must be at or near 3500 feet elevation to fall into this category.
 - b. In no event will any unit burned in this category be less than 1000 feet above a stable layer above the designated area.
 - c. There must be a sustained westerly air flow in the vicinity of the unit with no probability of a wind shift toward the designated area within 12 hours of ignition time.
 - d. All units must be at least 40 miles from the designated area.
 - e. All units must be cleared through the Smoke Management Coordinator prior to ignition.

FOREST LAND BURNING PRIORITY RATING SYSTEM

Instructions For Using Priority Rating Forms For Evaluating Forest Land Burning Units

The Preliminary Priority Burning Chart will be used for all units which are desirable to burn during the summer months. This chart is used to indicate the treatment objective for the site and whether burning is needed. If burning is needed, the season when burning objectives can best be met are identified. If summer burning is required or desirable, the appropriate Coast Range or Cascade Range Prioritizing Rating Form is used.

Using the Preliminary Priority Burning Chart Form 1-1-3-403

Listed under "treatment objective" are seven of the most common treatment objectives. More than one treatment objective may be present for any single unit. Additional space is provided for treatment objectives not listed.

When treatment objectives have been identified, the "Burning Required?" column is used to indicate whether or not burning is required to meet the objective.

If the "Burning Required?" column is checked "yes", the "When Can Burning Best Be Accomplished" column is checked as to when burning should be accomplished to meet the treatment objective. Where "Summer" is checked, the Coast or Cascade Range form is to be used to further evaluate the unit.

The "Comments" column is available for any special considerations such as special objectives, pre-treatment efforts required or other factors.

Burning Priority Rating Form for the Cascade Range Form 1-1-3-402

This form is adapted for the westside of the Cascade Range north of the North Fork and mainstream of the Umpqua River.

The "Slope" column is used to evaluate the way the steepness of the terrain will affect fire behavior on the unit. Fire will spread and broadcast much more readily on steep slopes than on gentle slopes or flat ground. Points are assigned for each slope class.

The "Special Considerations" column includes a variety of factors which relate to the need to burn during the summer months or to the risk of down-canyon winds advecting smoke into the designated area.

The "Aspect" column is used to consider exposure as it affects drying of fuels and fire behavior. For example, south exposure units receive much more direct sunlight and will be dry enough to burn many more days than north slopes.

The "Silvicultural Consideration" column include things such as pre-treatment requirements before burning, availability of essential planting stock or cost and potential for success of alternative treatments.

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FOREST LAND BURNING PRIORITY RATING SYSTEM

The "Soil Consideration" relates to soil which may be damaged if too dry, or too moist soils which preclude burning except during mid-summer drought periods. Also included are areas where excessive soil damage will result from mechanical piling activity.

The points are totaled. Any unit scoring 50 points or more is a high priority unit which may be burned during the Priority Burning Period. Units with less than 50 points will not be burned while the priority burning restriction is in effect.

Burning Priority Rating Form For the Coast Range Form 1-1-3-401

The "Plant Community" column relates to the plant community on the site and the difficulty of reforesting the site with desirable species. For example, the Salmonberry-Thimbleberry plant community is extremely difficult to reforest without burning or repeated chemical applications. The most difficult plant community to reforest receives the highest point values.

The "Fuels Overstory" relates to the fuel type that will remain after logging or treatment. Fuel types which will burn readily are rated lower than the Alder-Salmonberry combinations that are difficult to burn under ideal conditions.

The "Location" column relates primarily to marine air influence on drying and the probability of summer fog intrusions. Point values increase as the coastline is approached and in fog influx corridors.

The "Aspect" column uses the same consideration as the Cascades form. North slopes may be burned on much fewer days than can south slopes.

The "Fuel Treatment" column relates to the difficulty and effectiveness of alternate treatments and the pre-treatment essential to achieving the burning objectives. Units requiring mass ignition with explosive fuses are given a high point score because it is essential to fire such units at the earliest burn day following installation of the ignition equipment. Such units normally fall into a high category for other reasons also.

As in the Cascades, a score of 50 points or more is needed to place a unit in the priority burn category. Units with less than 50 points will not be burned during the Priority Burning Period.

FORM 1-1-3-411

UNIT _____

Priority Rating _____

A SLASH BURNING PRIORITY RATING FORM FOR THE COASTAL RANGE - WESTERN OREGON

SERIAL COMMUNITY (UNDERSTORY)	FUELS (OVERSTORY)	LOCATION	ASPECT (DOMINANT)	FUEL TREATMENT NECESSARY TO ACHIEVE SUCCESSFUL BURNING
Salmonberry, thimbleberry, red huckleberry, sword fern, vine maple <u>15</u>	Alder with a salmonberry salal undercover or a brush dominant site or predominately hemlock stand <u>15</u>	Strong marine influence of coastal strip up to 10 miles inland generally and 15 miles in fog influx* corridors or areas west of the coast range where the fog persists late in the day. <u>15</u>	NORTH NE NW <u>20</u>	Unit to be treated with dessicant or herbicide or hand slashed to meet vegetation control objective, and/or unit must be burned during dry period to reduce competing vegetation <u>18</u>
Salal, bracken fern, ocean spray, vine maple <u>8</u>	Spruce/hemlock or alder with 10-30% fir <u>12</u>	West of summit of the Coast Range <u>8</u>	E SE <u>8</u>	Unit can be mechanically bunched or slashed, or dessicant or herbicide applied to produce burn which will reduce competing vegetation. <u>12</u>
	Second growth fir and alder. Fir is 30% or more of the stand. <u>10</u>	East of the summit of the Coast Range <u>6</u>	SW W <u>6</u>	Unit has some hand slashing. No dessicant or herbicide used. Sufficient heavy slashing present to carry broadcast fire. <u>6</u>
Sword fern, Oregon oxalis <u>4</u>	Second growth or mature fir stand. 50% or more of stand is fir <u>4</u>	Valley fringe type <u>4</u>	SOUTH <u>4</u>	Burning will meet the vegetation control objective with little or no fuel treatment. <u>4</u>

Point system: 50+ High
35-50 Medium
Under 35 Low

*Fog influx corridors are areas where marine air flows through a drainage into the Valley--included are the Nestucca, Salmon, Siuslaw Yaquina, Alsea, Columbia and Umpqua Rivers.

"High elevation Units" which may be burned with no risk of impact will be considered high priority under the following circumstances:

- a. High elevation units must be at least 1000 feet in elevation above the designated area ceiling (designated area ceiling is 2500 feet). Thus, any unit must be at or near 3500 feet elevation to fall into this category.
- b. In no event will any unit burned in this category be less than 1000 feet above a stable layer above the designated area.
- c. There must be a sustained westerly air flow in the vicinity of the unit with no probability of a wind shift toward the designated area within 12 hours of ignition time.
- d. All units must be at least 40 miles from the designated area.
- e. All units must be cleared through the Smoke Management Coordinator prior to ignition.

PRELIMINARY PRIORITY BURNING CHART

This chart is to be used to indicate the treatment objective and whether or not burning is required to meet that objective. If burning is indicated, the period when that burning can best be accomplished will be indicated. Units which are checked for summer, spring-summer or summer-fall will then be evaluated on the Coast or Cascade Range Slash Burning Priority Status form for assignment of priority

UNIT: _____

TREATMENT OBJECTIVE	Burning Required?		When can burning best be accomplished?			UNIT _____ COMMENTS
	YES	NO	Spring	Summer	Fall	
1. Reduce duff layer, root mat or prepare seed bed						
2. Reduce or eliminate mechanical barrier to planting or seeding						
3. To control competing vegetation						
4. To eliminate or control shading for seeded or planted stock						
5. To control animal habitat, insect or disease						
6. To reduce overall fuel loading in the area to reduce fire hazard						
7. Reduce fire hazard in high risk areas						
8.						
9.						
10.						

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ESTIMATING TONS OF FUEL CONSUMED IN PRESCRIBED BURNS

The Photo Series for Quantifying Residue* provides reasonable means for estimating the tons of fuel per acre that will be consumed by a prescribed burn in residue left after logging. This publication contains 6 series of photographs displaying different forest residue loading levels, by size class, for areas of like timber types and cutting practice.

Information with each photo includes measured weights, volumes and other residue data, information about the timber stand and harvest and thinning actions, and fuel ratings. These photo series provide a fast and easy-to-use means for quantifying existing residues. An evaluation of the portion of each size class of fuel that will remain after burning will provide a reasonable estimate of the fuel which will be consumed by fire. It must be emphasized that this system, while not perfect, will provide reasonable estimates if used consistently. Experience in its use will increase the ease of using it and improve the accuracy of estimates.

Procedures for use of the photo series for estimating fuel tonnage which will be, or has been, consumed by fire follows:

1. Select the loading rank, forest type, forest size class, and cutting practice as explained on page 7 and 8 of the photo series. Selection of the loading rank may best be done by looking at the photo series after selecting the other three characteristics.

Example: Douglas Fir (FD0 type, size class 4 (20 inch dbh), clear cut (CC) will identify the series of photos from which a photo can be selected which is most representative of the slash unit being measured.

2. When the representation photo is selected the Data sheet for that fuel loading can be used to make the fuels estimate.

Using 7-Df-4-CC (page 22) as our example and assuming:

<u>Fuel size class</u>	<u>Weight/Acre</u>	<u>% that will be burned</u>
0.25-1.0	4.9	100%
1.1-3.0	11.3	95%
3.1-9.0	22.0	60%
9.0-20.0	13.9	20%
20.1+	45.0	10%

The following calculations will give a tonnage estimate per acre:

$$\begin{array}{r} (4.9 \times 100\%) + (11.3 \times 95\%) + (22.0 \times 60\%) \\ + (13.9 \times 20\%) + (45.0 \times 10\%) = \text{Tons per acre} \\ 4.9 + 10.7 + 13.2 + 2.8 + 4.5 = 36.1 \text{ tons per acre.} \end{array}$$

Examination of units before and after burning will increase the accuracy of estimating the percentage of each fuel type that will be consumed.

* USDA Forest Service General Technical Report PNW 51, 1976. Photo Series for Quantifying Forest Residues in the coastal Douglas-fir - Hemlock type and the coastal Douglas-fir - hardwood type. Also Technical Report PNW-52, 1976 (same title) for Ponderosa pine types, Ponderosa pine and associated species type and Lodgepole pine type.

PROTECTION OF FORESTS & VEGETATION FROM FIRE 477.530

477.510 Acts prohibited during closed season. It is unlawful, during a closed season in a forest protection district, to:

(1) Smoke while working in or traveling through any operation area in the district.

(2) Use fuse and caps for blasting in the district unless approval is granted by the forester.

(3) Use explosives in the topping of trees in the district unless approval is granted by the forester. [Formerly 477.165]

(Permits)

477.515 Permits required for fires on forest lands; waiver; permit conditions; smoke management plan; restricted areas; rules; excepted areas. (1) It is unlawful to set or cause to be set on fire any forest land, including flammable forest growth, forest refuse, slashing or forest debris, or any grass, grain, stubble, debris or other such flammable material, within the boundaries of a forest protection district or within one-eighth of one mile of a forest protection district for which a closed season has been designated under ORS 477.505, or when required under rules promulgated pursuant to subsection (3) of this section either on one's own land or on the land of another, without first securing a written permit from the forester or a warden and complying with the conditions of the permit. The forester may waive the requirement that the permit referred to in this section be secured prior to burning whenever conditions are such as to justify oral permission.

(2) In granting permits, the forester or any warden may prescribe conditions necessary to be observed in setting a fire and preventing it from spreading. Any permit obtained through wilful misrepresentation is void.

(3) (a) For the purpose of maintaining air quality, the State Forester and the Department of Environmental Quality shall approve a plan for the purpose of managing smoke in areas they shall designate. The plan shall delineate restricted areas to which this subsection applies. The plan shall also include but not be limited to considerations of weather, volume of material to be burned, distance of the burning from designated areas, burning techniques, and provisions for cessation of further burning under adverse air quality conditions. All burning permitted within the restricted areas shall be according to the plan. The plan shall be developed by the State Forestry Department in cooperation with federal and state agencies, landowners and organizations which will be affected by the plan. The

approved plan shall be filed with the Secretary of State and may thereafter be amended in the same manner as its formation.

(b) The State Forester shall promulgate rules to carry out the provisions of the smoke management plan approved under this subsection.

(4) The requirements of this section do not apply to lands protected pursuant to ORS 476.010 to 476.730 and 476.990 or ORS chapter 478, or lands protected within a city and for which lands a burning permit is required under such authority. [1965 c.253 §95; 1969 c.204 §204; 1969 c.680 §1; 1971 c.297 §1]

477.520 Suspension or revocation of permits. (1) The forester or any warden may refuse, suspend or revoke a permit authorized by or issued under ORS 477.515 (1), when necessary in his judgment to prevent danger to life, health or property. He may also refuse, suspend or revoke a permit authorized by or issued under ORS 477.515 (1), when necessary in his judgment, and after consultation with the Environmental Quality Commission to prevent air pollution, as defined in ORS 468.275.

(2) On the advice of the forester that conditions in a forest protection district, or part thereof, so require, the Governor may suspend any or all such permits and prohibit the use of fire therein. [1965 c.253 §96; 1969 c.680 §2]

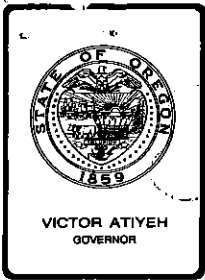
477.525 [1965 c.253 §97; repealed by 1967 c.429 §14 (477.526 enacted in lieu of 477.525)]

477.526 [1967 c.429 §15 (enacted in lieu of 477.525); repealed by 1969 c.204 §8]

477.530 Fire permits in federal grazing districts. (1) It is unlawful during a closed season to set or cause to be set on fire any forest land, grass, grain or stubble within the area inclosed by the outside boundaries of a federal grazing district established by the United States Department of the Interior, for which area a closed season has been designated, either on one's own land or on the land of another, without first securing a written permit from a fire warden appointed for the grazing district pursuant to ORS 477.355 (1)(b).

(2) In granting permits, a warden in a federal grazing district may prescribe conditions necessary to be observed in setting a fire and preventing it from spreading. The warden may refuse, suspend or revoke a permit when necessary in his judgment to prevent danger to life or property, and may prescribe conditions under which permits are not required. Any permit obtained through wilful misrepresentation is void.

(3) This section does not apply to any land within the boundaries of a city or that does not



Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207

522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item F, June 13, 1986 EQC Meeting

Request for Authorization to Hold Public Hearings on
Proposed Revisions to the State Air Quality Implementation
Plan (OAR 340-20-047) to Address Visibility Protection in
Class I Areas

Background

On December 2, 1980, the Environmental Protection Agency (EPA) published its rule for visibility protection for Federal Class I areas (40CFR 51.300-307). The rule requires the states to "develop programs to assure reasonable progress toward meeting the national goal of preventing any future and remedying any existing impairment of visibility in mandatory Class I Federal areas within which impairment results from manmade air pollution." Oregon has 12 Class I areas (1 National Park and 11 Wilderness areas). The EPA rule requires states to adopt Implementation Plan revisions that include:

1. A visibility monitoring program
2. New Source Review for visibility impacts
3. Short and long-term control strategies
4. Identification of Integral Vistas
5. Best Available Retrofit Technology

Following promulgation of the EPA regulations, numerous requests for reconsideration were received by EPA. Subsequent lawsuits led to the Environmental Quality Commission's decision to postpone adoption of an Oregon Visibility Protection Plan until the status of EPA's regulations could be clarified (Agenda Item No. N, April 16, 1982 EQC Meeting). A recent Washington D.C. Court of Appeals settlement now requires EPA to insure that each state's implementation plan includes revisions necessary to comply with Clean Air Act requirements for Class I area visibility

protection. The court decision requires that states undertake a two-phase process by first adopting New Source Review Rule revisions for visibility protection and monitoring commitments. The second phase requires that states adopt visibility control strategies, provisions for program coordination and periodic review, Best Available Retrofit Technology requirements and integral vista protection elements by the court-mandated deadlines of December, 1986. Meeting this deadline requires beginning the public hearing process this summer.

In adopting revisions to Oregon's New Source Review Rule and commitments for visibility monitoring (Agenda Item No. D, September 27, 1985 and Agenda Item No. J, November 22, 1985 EQC meeting), the Department completed the first phase rule adoptions required under the Court settlement. This request for authorization for public hearings on the Oregon visibility protection plan is the next step in meeting the court's mandate as administered by EPA.

Problem Statement

An assessment of visibility in Oregon's Northern and Central Cascade wilderness areas indicates that visibility is impaired by manmade air pollution an average of 25 percent of the summer daylight hours. Current provisions of the State Implementation Plan (SIP) do not contain provisions to correct manmade visibility impairment within Oregon's Class I areas. In addition, there are no provisions for program coordination with the federal land managers and other affected parties. In its current form, the visibility protection provisions of the SIP are inadequate, do not meet EPA requirements and are not sufficient to assure "reasonable progress" in achieving Clean Air Act visibility protection requirements. If the Department does not adopt and submit rules to correct these deficiencies by December 1986, EPA will be required, under the terms of a Court of Appeals decision, to propose a program for Oregon. This program may not be compatible with present Oregon rules and policies.

Control Strategy Development

In order to address the SIP deficiencies noted above and assure protection of visibility in Oregon's Class I areas, the Department has worked with the National Park Service, USDA Forest Service, Bureau of Land Management, EPA, Oregon State Department of Forestry (OSDF), the Oregon Seed Council, environmental groups and Oregon forest land managers during the past eight months to develop a visibility protection plan that would make significant progress toward reducing manmade visibility impairment in several Oregon Class I areas while protecting all of the state's Class I lands from future visibility deterioration.

Monitoring by the Department since 1982 has indicated that significant manmade visibility impairment occurs during the summer months in the Northern and Central Cascade Class I areas about one-fourth of the daylight hours, primarily as a result of forest prescribed burning and grass field burning.

Control strategies to remedy this impairment have therefore been oriented toward these two sources and their impact during the July-August period. During the July-August period, nearly 80 percent of the Class I areas visitation occurs. Control strategies are considered somewhat experimental in nature and a 3-year review has been scheduled to consider any needed revisions.

Implementation of the forest prescribed burning strategy necessitated modifying the Oregon Smoke Management Plan (see Agenda Item E). This plan administered by the Oregon State Department of Forestry and approved by DEQ is the primary mechanism for regulating forest prescribed burning in the state.

The proposed implementation plan revisions have been unanimously approved by the Oregon Visibility Advisory Committee, a group of 14 persons appointed by the Director from each of the groups noted above as well as state tourism and the public at large. Three of the 14 members representing environmental interests did have some concerns about the enforceability of the OSDF Smoke Management Plan in carrying out the Visibility Protection prescribed burning strategy.

The plan is expected to achieve a 60-75 percent reduction in the frequency of substantial visibility impairment associated with forest residue prescribed burning and a 30 percent reduction in substantial visibility impairment caused by Willamette Valley field burning, during the July 4th weekend to Labor Day period. Overall, the frequency of substantial visibility impairment during the summer months in Oregon's Northern and Central Cascade Class I areas should decrease by more than one-third. Additional visibility improvements associated with the long-term control strategy are expected to decrease the frequency of substantial impairment even further. Urban dwellers should also see improvements in visibility toward Mt. Hood and other Cascade peaks during the summer months.

Visibility improvements achieved as a result of this plan will occur because (a) coastal forest burning will be managed in such a way as to keep prescribed burning smoke out of Oregon and Washington Class I areas and (b) a new western Cascade prescribed burning prohibition will result in a shift in burning activity out of the July-August period mostly to the spring with possibly some increase in fall months. The increased spring and fall burning should not result in increased smoke impacts since the fuel conditions during these periods will result in fewer emissions and spring ventilation conditions are more favorable to smoke dispersal. An immediate 4 percent reduction in annual western Oregon prescribed burning fine particle emissions is also expected as a result of strategy implementation. An annual emission reduction goal approaching 22 percent from current levels is expected to be achieved by the year 2000.

Visibility improvements from grass field burning will primarily be achieved by restricting weekend burning, encouraging early season burning, smoke management plan improvements, use of improved burning methods, development of crops that do not require burning and increased straw utilization.

The overall visibility control strategy is written to expire within 3 years of adoption, providing an opportunity to evaluate (a) the effectiveness of the program in remedying visibility impairment and (b) costs to the forest land managers. The proposed SIP revision have been reviewed by EPA and have been found satisfactory.

Strategy Costs and Benefits

The Oregon Forest Industry Council had strongly suggested costs and benefit be considered in developing a visibility strategy. Consequently, DEQ contracted with a national firm, Engineering Science, to conduct a cost/benefit study. Control strategy costs to Oregon's forest land managers have been estimated at \$450,000 annually, assuming that no reduction in the amount of annual acreage that has historically been burned in western Oregon occurs as a result of the visibility control strategy. These costs might be incurred because of loss of work time in sudden rescheduling of burns and increased costs of burning because of greater demand for burning services and equipment during certain periods of time. The Department believes that this is the most likely case. A special provision of the strategy would suspend western Cascade burning prohibitions if the State Forester and the Director of the Department agree that undue, adverse economic impacts may occur as a result of strategy implementation. This may occur as a result of unusually wet spring weather which may limit the satisfactory accomplishment of spring prescribed burning.

Costs could, however, be as high as \$1.8 million per year if some of the acreage shifted out of the summer months must be carried over to the following year. Eighty-seven percent of these costs are related to the western Cascade summer burning restriction element of the strategy. The costs are incurred because of the need to reschedule burning activity outside of the visibility protection period and the application of some non-burning treatment for acres carried-over a year and still not able to be burned. Long-term impacts of the strategy on the forest industry was assessed through the use of a forest management model which indicated that no significant effect on projected harvest volumes was likely as a result of the proposed strategies.

Potential increased costs in the grass seed industry could not be calculated, but it is believed that the industry can bear these costs given that some elements of the strategy related to field burning are intended to enhance field burning opportunities. Overall costs of both forest and grass field burning strategies will be better documented after some experienced is gained through implementation of the strategies.

Visibility and health-related benefits were estimated using standard EPA methodologies and results from public opinion surveys completed in Oregon. Benefits of the strategy have been estimated at \$10.6 million per year for an overall benefit to cost ratio of 25.9 to 1. Assuming the highest cost and lowest benefit scenarios, an overall positive benefit to cost ratio of 6 to 1 has still been estimated.

Interstate Visibility Protection

The interstate visibility protection element of the plan is important to assuring protection of Washington and Oregon Class I areas from visibility impairment caused by prescribed burning activity in the adjoining state. The Oregon Visibility Protection Plan includes provisions implemented through the Oregon Department of Forestry Smoke Management Plan to protect Washington's Class I areas by treating them as "Smoke Sensitive Areas" into which smoke will not be intentionally vented during the July-August period. The general prohibition of Oregon Cascade burning will also help. Hopefully, the State of Washington's Visibility Protection Plan will be revised to incorporate a similar level of protection for Oregon's Class I areas. This is an important element of the Visibility Protection Plan since smoke from Washington burning may contribute as much as one-fourth of the visibility impairment associated with prescribed burning in Oregon's Cascade Class I areas. DEQ has written EPA and the State of Washington formally requesting improvements in Washington's Smoke Management Plan.

The Oregon Smoke Management Plan

The prescribed burning element of the Visibility Protection Plan will be implemented through the Oregon Department of Forestry Smoke Management Plan Administrative Rule (OAR 629-43-043) and Directives. The Department has worked closely with the Department of Forestry to revise the Smoke Management Plan to incorporate the Visibility Protection Plan requirements. Public hearings on the Smoke Management Plan will be jointly held by both agencies coincident with public hearing on the Visibility Protection Plan. Following adoption of the Smoke Management Plan by the Department of Forestry and approval by the Department, the new Smoke Management Administrative Rule and Directives will be appropriately incorporated into the State Implementation Plan.

Other Elements Of The Visibility Protection Plan

In addition to short and long-term control strategies, the plan includes several other elements which are required by the EPA regulations; (a) the plan does not mandate installation of stationary source Best Available Retrofit Technology (BART) since the visibility assessment has not implicated existing stationary sources as significant sources of visibility impairment; (b) since no integral vistas have been designated by the Federal Land Managers, no special provisions for integral vista protection have been included in the plan. It is believed substantial integral vista protection will be afforded by the general provisions of the control strategy, therefore no special provisions are necessary; (c) provisions for annual and a formal 3-year review of the program have been included, as have commitments for continued Federal Land Manager coordination; (d) emission reductions due to ongoing control programs are discussed; (e) Class I lands to be protected under the plan are identified and (f) definitions of important terms are provided.

Authority for the Commission to Act

ORS 468.020, gives the Commission authority to adopt necessary rules and standards; ORS 468.305 authorizes the Commission to prepare and to develop comprehensive plans. Attachment 1 contains the Statement of Need, Fiscal and Economic Impact and Land Use Consistency Statement.

Alternatives and Evaluations

A Visibility Protection Plan has been drafted which fulfills the visibility protection requirements of the Clean Air Act as currently administered by the U.S. Environmental Protection Agency. The plan will be proposed for rule adoption at the September 1986 meeting of the Commission following completion and evaluation of comments received during the public hearings.

An alternative to the proposed rule is to delay public hearings and adoption of the plan, forcing EPA to proceed with promulgation of a federal visibility protection plan that may not be compatible with Department rules and programs.

Summation

1. In December 1980 the Environmental Protection Agency (EPA) published a rule requiring States to incorporate visibility protection for Class I areas in their SIPs. A recent court decision has required EPA to insure that the Department submit an adopted visibility protection plan by December 1986. If the Department fails to adopt the required SIP revisions, EPA will be forced to develop and adopt a visibility plan for Oregon that may not be compatible with present Oregon rules and policies.
2. As required by the first phase of the EPA regulations, the Department has adopted New Source Review and visibility monitoring SIP revisions for visibility protection in Oregon's Class I areas. EPA regulations require that the second phase SIP revisions addressing control strategies, Best Available Retrofit Technology and other issues be adopted by the Department by December 1986.
3. The Department has found that visibility in Oregon's northern and central Cascade wilderness areas is significantly impaired. Rules adopted by the U.S. Environmental Protection Agency require that control strategies to remedy existing impairment be included in state implementation plans.
4. The Department has developed a second-phase Visibility Protection Plan which meets EPA requirements. The plan has been unanimously supported by the Oregon Visibility Advisory Committee, a broad-based group appointed by the Director of the Department. Eleven of the 14 members of the Committee feel that the prescribed burning control strategy's implementation under the Department of Forestry's Smoke Management Plan is adequate with 3 environmental representatives raising some concern about the enforcement aspects of OSDF's Smoke Management Plan.

5. The proposed control strategy focuses on protection of visibility during the July 4 weekend-Labor Day period when over 80 percent of the annual Class I visitation occurs. During this period, Willamette Valley grass field burning will be reduced on weekends, western Cascade forest residue prescribed burning will be prohibited and smoke from coastal prescribed burning will be managed to ensure that it is not transported into Oregon or Washington Class I areas. Increases in spring prescribed burning should not result in increased emissions or impacts due to the more favorable combustion characteristics of the fuel and ventilation conditions at this time.
6. The control strategy is expected to result in a 30 percent reduction in the frequency of visibility impairment related to field burning and a 60-75 percent reduction in the frequency of impairment caused by prescribed burning. Overall, at least a one-third reduction in the frequency of substantial impairment is expected. The prescribed burning strategy may cost the forest products industry about \$450,000 to \$1.8 million per year with visibility and health benefits estimated at about \$11 million annually. The expected benefit to cost ratio of the strategy is 25:1 but may be as low as 6:1 if some reduction in prescribed burning acreage reduction results from the strategy.
7. The proposed plan would make significant progress toward the correction of "manmade" visibility impairment that exists in northern and central Oregon cascade wilderness areas while assuring future protection of visibility in all of the State's Class I areas. The plan will also provide substantial visibility benefits to urban dwellers as well by increasing the visibility toward Mt. Hood during the summer months.
8. Improvements are needed in Washington's Smoke Management Plan to insure full protection of Oregon Class I area visibility and the Department has begun pursuit of needed improvements with the Washington Department of Ecology.

Director's Recommendation

Based on the summation, the Director recommends that the EQC authorize hearings to consider public testimony on the proposed visibility protection plan State Implementation Plan (SIP) revision which control strategy, Best Available Retrofit, program coordination, integral vistas and other elements under OAR 340-20-047, Section 5.2.


for
Fred Hansen

Attachments:

1. Draft Public Notice and Statements of Need, Fiscal and Economic Impact and Land Use Consistency Statement.
2. Proposed Revisions to OAR 340-20-047, Section 5.2, Visibility Protection Plan.
3. Visibility Protection Plan Appendices; Draft Smoke Management Plan Administrative Rule and Directives.

J. E. Core:s
AS3110
229-5380
May 30, 1986

RULEMAKING STATEMENTS

for
ADOPTION OF STATE IMPLEMENTATION PLAN REVISIONS
for
VISIBILITY PROTECTION IN CLASS I AREAS

Pursuant to OAR 183.335, these statements provide information on the intended action to amend a rule.

STATEMENT OF NEED

Legal Authority

This Rule amends OAR 340-20-047, Section 5.2 of the State Implementation Plan. It is proposed under the authority of ORS Chapter 468, Section 305 which authorizes the Commission to adopt a general comprehensive plan for air pollution control.

Need for the Rule

The Clean Air Act Amendments require that the State of Oregon adopt a visibility protection plan for Class I areas that will assure reasonable further progress toward the preservation and remedying of visibility impairment where the impairment results from man-made air pollution. Current provisions of the Oregon State Implementation Plan do not adequately protect Oregon's Class I areas. The required SIP revisions include visibility control strategies, program coordination, Best Available Retrofit Technology, integral vistas, interstate protection and other elements.

Principal Documents Relied Upon

- (1) Clean Air Act As Amended, Section 169(a)(1) (PL 95-95)
- (2) Visibility Protection for Federal Class I areas (40CFR51), December 2, 1980
- (3) Visibility in Oregon's Wilderness and National Park Lands, Department of Environmental Quality, September, 1985.
- (4) Cost/Benefit Analysis of Impact Reduction Alternatives for Prescribed Burning in Western Oregon, Final Report to the State of Oregon Department of Environmental Quality by Engineering Science, April, 1986.

FISCAL AND ECONOMIC IMPACT STATEMENT

The proposed rule would impose additional fiscal impacts on western Oregon forest land managers and Willamette Valley seed growers. These economic impacts are related to the visibility control strategy provisions.

1. Fiscal impacts on western Oregon forest land managers have been estimated at \$451,000 per year, assuming that no reduction in the amount of acreage that has historically been burned in western Oregon occurs as a result of the visibility control strategies. About \$59,000 of the above costs are associated with the "smoke sensitive area" protection changes in the Oregon Smoke Management Plan to ensure that prescribed fire smoke does not impact Class I areas during the July 4 weekend to Labor Day period. Costs of approximately \$393,000 per year are associated with the partial prohibition on Western Cascades prescribed burning during the above period. These costs would be incurred by Oregon forest land managers in rescheduling burning activity from the July-August period to the Spring and Fall months.
2. Estimated annual control strategy cost of \$451,000 would be distributed as noted below:

Land Owner	Summer Burning Restrictions	Class I "Smoke Sensitive Areas"	Total
Private, BLM, State	\$214,000	\$9,500	\$223,500
USDA Forest Service	\$178,500	\$49,000	\$227,500
Totals	\$392,500	\$58,500	\$451,000

The negative economic impacts of the rule are offset by the benefits of preserving the scenic resources of Oregon's Class I areas, health benefits associated with improvements in particulate air quality and costs such as expensive fire protection costs that could be avoided by the land manager as a result of rule implementation. The proposed rule should result in an overall visibility and health benefits estimated at \$11.9 million per year at a cost of \$451,000 per year for an overall benefit-to-cost ratio of 26.4 to 1.

Visibility Benefits

Oregon's wilderness lands are used at a rate of 600,000 visitors days per year. Approximately 500,000 people visit Crater Lake National Park annually with an average visit of 8 hours, adding another 160,000 visitor days per year. Overall visibility benefits to these wilderness area users has been estimated at about \$553,000 per year. Benefits of improved visibility for Willamette Valley residents viewing scenic points within the Cascade wilderness areas has been estimated at \$10.1 million per year. Total estimated visibility benefit therefore approach \$10.6 million per year. This estimate is based on opinion surveys of public's willingness to pay to protect visibility in Oregon.

Health Benefits

Reductions in prescribed burning emissions and subsequent improvements in air quality resulting from partial restrictions on burning were estimated to result in a \$1.07 million annual health benefit. Estimates were based on recent air quality-medical cost studies sponsored by the Environmental Protection Agency.

Avoided Costs

An estimated \$234,000 (\$40,900 USDA Forest Service and \$193,500 private land owners) in forest land manager cost savings has been estimated as a result of reduced mop-up and fire holding costs.

LAND USE CONSISTENCY STATEMENT

The proposed rule appears to affect land use and is consistent with Statewide Planning Goals.

With regard to Goal 6 (air, water and land resource quality), the rule is designed to enhance and preserve air quality in the affected areas and is therefore consistent with the goal.

The proposed rule is consistent with Goal 5, which seeks to protect the natural and scenic resources of the State.

Goal 11 (public facilities and services) is deemed unaffected by the rule.

Public comment on any land use issue involved is welcome and may be submitted in the same fashion as are indicated for testimony in this notice.

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 Statewide Planning Goals within their expertise and jurisdiction.

The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any apparent conflict brought to our attention by local, state or federal authorities.

AS3111

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

**Proposed Visibility Protection Plan for Class I Areas
NOTICE OF PUBLIC HEARING**

Date Prepared: May 30, 1986
Comments Due: August 15, 1986

**WHO IS
AFFECTED:**

Residents, industries and Federal Land Managers within the State of Oregon.

**WHAT IS
PROPOSED:**

The Department of Environmental Quality is proposing to amend OAR 340-20-047, Section 5.2 of the Oregon State Implementation Plan by adopting a Visibility Protection Plan for Oregon's Class I areas. Oregon has 11 wilderness areas and one national park. Monitoring data collected since 1982 has indicated significant manmade visibility impairment in the Northern and Central Cascade Class I areas about one-fourth of the summer daylight hours, primarily as a result of smoke from forest prescribed burning and grass field burning. Adoption of the proposed Visibility Protection Plan is expected to reduce the frequency of visibility impairment by more than one-third over the next 5 years during the July 4 weekend-Labor Day period. Additional improvements are expected over the next 15 years as a result of the long-term strategy. During the July-August period, Willamette Valley grass field burning will be reduced on weekends, Western Cascade forest residue prescribed burning will be generally prohibited and smoke from coastal prescribed burning will be managed to ensure that it is not transported into Oregon and Washington Class I areas. Estimated annual control strategy costs of \$450,000 would be incurred by Western Oregon forest land managers while estimated visibility and health-related benefits are estimated at \$11.9 million for an overall benefit to cost ratio of 26 to 1. The proposed revisions to the Oregon State Implementation Plan include prescribed burning and agricultural field burning control strategies, Best Available Retrofit Technology, interstate protection, integral vista and program coordination elements. The plan will be implemented primarily through the Oregon Department of Forestry's Smoke Management Plan and the Department's field burning smoke management program. Joint hearings on this matter will be held in association with Department of Forestry hearings on amendments to the Oregon Smoke Management Plan. Public hearings will be held in Portland, August 5, 1986), Eugene (August 7, 1986), Newport (August 11, 1986), Medford (August 13, 1986) and Bend (August 15, 1986).



P.O. Box 1760
Portland, OR 97207

8/10/82

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 1-800-452-7613, and ask for the Department of Environmental Quality. 1-800-452-4011



WHAT ARE THE HIGHLIGHTS:

Major elements of the proposed Visibility Protection Plan include:

- o Adoption of western Oregon short- and long-term prescribed burning and agricultural field burning visibility control strategies. During the July 4 weekend to Labor Day period, Willamette Valley field burning would be restricted on weekends, western Cascade prescribed burning would be generally prohibited and western Oregon coastal burning would be managed such that prescribed burning smoke would not be vented into Oregon or Washington Class I areas. Annual costs to forest land managers has been estimated at \$450,000 while visibility and health benefits resulting from strategy implementation have been estimated at \$11.9 million per year.
- o Program coordination commitments between the DEQ and the Federal Land Managers and other interested parties.
- o An Interstate Visibility Protection Plan designed to insure that smoke from western Oregon prescribed burning does not impair visibility in Washington's Class I areas.
- o Best Available Retrofit Technology Requirements for stationary, industrial sources. Because industrial point sources have not been identified as significant sources of visibility impairment, the installation of BART controls on industrial sources is not required by the plan.
- o Integral Vista Protection. No integral vistas have been designated by the Federal Land Managers and no special provisions for integral vista protection have been included in the plan. The plan should afford, however, a substantial degree of protection to integral vistas.

HOW TO COMMENT:

Copies of the complete proposed rule package may be obtained from the Air Quality Division in Portland (522 S.W. Fifth Avenue) or the regional office nearest you. For further information contact John E. Core at 229-5380.

Public hearings will be held before a hearings officer at:

10:00 a.m.
August 5, 1986
DEQ Conference Room
1400 Authority Offices
520 SW Fifth Avenue
Portland, Oregon

10:00 a.m.
August 7, 1986
Lane Regional Air Pollution Authority
Springfield, Oregon

10:00 a.m.
August 13, 1986
Medford, Oregon

7:00 p.m.
August 13, 1986
Bend School District
Administrative Offices, Rm 314
520 NW Wall Street
Bend, Oregon

10:00 a.m.
August 15, 1986
Newport, Oregon

Oral and written comments will be accepted at the public hearing. Written comments may be sent to the DEQ Air Quality Division, P.O. Box 1760, Portland, OR 97207, but must be received by no later than 5:00 p.m., August 15, 1986.

**WHAT IS THE
NEXT STEP:**

After public hearing the Environmental Quality Commission may adopt rule amendments identical to the proposed amendments, adopt modified rule amendments on the same subject matter, or decline to act. The adopted rules will be submitted to the U. S. Environmental Protection Agency as part of the State Clean Air Act Implementation Plan. The Commission's deliberation should come at its September 11, 1986 Bend meeting 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.

AS3112

03/16/86

Adopted Visibility SIP

*****ADOPTED BY VISIBILITY ADVISORY COMMITTEE*****
---DRAFT OF March 13th 1986---
VISIBILITY PROTECTION PLAN FOR CLASS I AREAS
(OAR 340-20-047, Section 5.2)

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5.2 Visibility Protection for Class I Areas

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

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

The intent of the Oregon Visibility Protection Plan is to insure significant reasonable further progress toward achievement of the National Visibility Goal of "the prevention of any future and the remedying of any existing impairment in Mandatory Federal Class I areas which impairment results from manmade air pollution". The Plan is directed at the mitigation of visibility impairment within the Mt. Hood and central Oregon Cascade wilderness areas through short and long-term control strategies for forest prescribed burning and Willamette Valley agricultural field burning. Visibility protection for all of Oregon's Mandatory Federal Class I areas is administered under the provisions of a diversity of regulations including the Prevention of Significant Deterioration and New Source Review rules.

The objective of this Plan is to assure compliance with the requirements of the Clean Air Act and US EPA Phase I program requirements. These requirements specify the adoption of strategies directed toward the control of existing stationary sources impairing visibility, the evaluation of visibility impacts of new stationary sources, the control of other existing sources not meeting the more stringent source size requirements for existing stationary facilities and, finally, the adoption of control strategies designed to achieve reasonable progress toward meeting the National Visibility Goal. Future phases of the EPA regulations will extend the program by addressing more complex problems such as regional haze. The Department believes that the Oregon Visibility Protection Plan not only meets the requirements of the EPA Phase I requirements but will make substantial progress in reducing impairment caused by regional haze.

Mandatory Class I Federal Areas

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

the Clean Air Act Amendments of 1977.

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

Class I Area	Acreage	Public Law Establishing	Federal Land Manager
Crater Lake	160,290	57-121	USDI-NPS (1)
Diamond Peak Wild.	36,637	88-577	USDA-FS (2)
Eagle Cap Wild.	293,476	88-577	USDA-FS
Gearhart Mtn. Wild	18,709	88-577	USDA-FS
Hells Canyon Wild.	108,900	94-199	USDA-FS
Mountain Lakes Wild.	23,071	88-577	USDA-FS
Mt. Hood Wild.	14,150	88-577	USDA-FS
Mt. Jefferson Wild.	100,208	90-548	USDA-FS
Mt. Washington Wild.	46,116	88-577	USDA-FS
Strawberry Mtn. Wild.	33,003	88-577	USDA-FS
Three Sisters Wild.	199,902	88-577	USDA-FS
Kalmiopsis Wild.	76,900	88-577	USDA-FS

Notes: (1) U. S. Department of Interior, National Park Service
(2) U. S. Department of Agriculture, Forest Service

Areas Redesignated to Class I

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

5.2.1 Definitions

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

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

"Best Available Retrofit Technology" means an emission limitation based on the degree of reduction achievable through the application of the

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

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

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

"July 4 Weekend to Labor Day" means the period extending from the weekend closest to, or including, July 4th through Labor Day, inclusive. If July 4th falls on a Wednesday, the visibility protection period shall include the 3 day weekend following July 4th to Labor Day, inclusive.

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

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

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

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

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

"Substantial Impairment" means the percent of daylight hours, during the period of July 4 weekend to Labor Day, which equals or exceeds 0.8×10^{-4} per meter, hourly average light scattering coefficient excluding

periods of natural visibility impairment measured at an ambient air monitoring site representative of a Class I area. Evaluation of the frequency and cause of impairment will be made annually in consultation with the Federal Land Managers.

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

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

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

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

5.2.2 Introduction

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

The Clean Air Act Amendments recognize the importance of air quality related values, including visibility, and set forth as a national goal "The prevention of any future and the remedying of any existing impairment of visibility in mandatory Class I Federal areas which impairment results from manmade air pollution". The Amendments instructed EPA to promulgate regulations to assure reasonable further progress toward attainment of the national visibility goal.

The principal effect of the EPA visibility regulations is to require states to (a) revise their State Implementation Plans (SIPs) to establish long-range goals, (b) commit to a planning process to protect visibility and (c) to implement procedures requiring visibility protection for mandatory Class I Federal areas. This revision of the SIP describes the visibility protection plan that Oregon will follow to comply with the requirements of Section 169 A of the Clean Air Act.

5.2.2.1 Assessment of Visibility Impairment

An assessment of visibility impairment in Oregon's Class I areas was reported by the Department in a document entitled "Visibility in Oregon's Wilderness and National Park Lands". This report, published in September 1985 by the Department, presents results from visibility monitoring conducted during the summers of 1982-1984. A overview of the visibility monitoring program may be found in Section 5.2.3 of this document. Specifics of the monitoring methods used, site locations and quality assurance program may be found in the above report.

Visibility is frequently impaired by uniform haze and, to a lesser extent, ground based layered haze within several of Oregon's Class I areas for which monitoring data is available. Uniform haze causes visibility impairment over wide geographical areas but, unlike regional haze, can be attributed to a known source. Many of the uniform haze episodes appear to be associated with impacts from dispersed agricultural field burning and forest prescribed burning activity. Plume blight impairment associated with well defined plumes is uncommon.

During the 1982-84 period, the Department estimated that about one-third of the hours of impairment were related to discrete plume impacts from burning activity while two-thirds were associated with regional haze events. Regional haze is associated with visibility impairment over wide geographical areas. It is caused by a large number of widely dispersed urban plume sources, areas sources (including vegetative burning), industrial point sources and natural sources. Observer notes, photographic evidence and the aerosol chemistry within the Mt. Hood and Central Cascade Wilderness Areas (Mt. Jefferson, Mt. Washington and Three Sisters Wilderness Areas) all indicate that urban haze, transportation emissions and industrial point sources are not significant sources of the fine particles that cause visibility impairment.

Perceptible manmade impairment within the Mt. Hood and Central Cascade Wildernesses and Crater Lake National Park has been estimated to occur 17%, 33% and 4% of the daylight hours during the summer months of highest visitor use. Moderate impairment, i.e. manmade impairment which occurs during the poorest 20% of the summer days, occurs 7%, 16% and 1% of the daylight hours at these locations. Nearly one-third of the moderate impairment periods occur on weekend days. About 40% of the wilderness areas visitation occurs on Saturdays and Sundays, while 79% occurs during the months of July and August. Nearly 96% of the visitation occurs during the mid-June to mid-September period.

The sources contributing to non-meteorological visibility impairment have been identified by receptor modeling and aerosol chemistry studies. Contributing sources include secondary aerosols, soil dust, agricultural field burning, wildfires and forest prescribed burning smoke. Grass field and forest prescribed burning are the principal contributing sources of manmade pollution. During the monitoring period, an estimated average of 48% of the fine particle mass at the Mt. Hood site was associated with prescribed burning while 24% was

from field burning. Within the central Cascades, prescribed burning contributed an estimated 41% of the mass while field burning contributed 16% of the mass. Trajectory modeling analysis suggests that up to one-fourth of the impact-hours may be related to State of Washington prescribed burning smoke.

Monitoring studies conducted within the Strawberry Mountain, Kalmiopsis, Diamond Peak and Eagle Cap Wilderness Areas have not demonstrated a conclusive visibility impairment problem. Monitoring has not been conducted within the Gearhart Mountains, Hells Canyon or Mountain Lakes Wilderness areas since these areas have much lower visitation.

Based on the 1982-1984 studies referenced above, the Department finds that (A) significant impairment exists within the Mt. Hood, Mt. Jefferson, Mt. Washington and Three Sisters Wilderness Areas; (B) control strategies to remedy existing visibility impairment are required to correct existing impairment within these four wilderness areas; (C) the control strategy should be directed toward mitigation of impacts from Willamette Valley field burning and forest prescribed burning during the summer periods of peak visitation; (D) control strategies to ensure future protection of all Class I areas are required and (E) an interstate visibility protection program coordinated with the State of Washington is essential to assure the protection of visibility within Oregon's Class I areas.

5.2.3 Visibility Monitoring

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

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

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

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

- o Visual observations of impairment phenomena, meteorological conditions and visual range.
- o A standardized photographic and standard visual range monitoring program to record actual visibility and target contrast.
- o An integrated nephelometer network to measure extinction due to light scattering caused by fine particles.
- o A meteorological network consisting of relative humidity, wind speed and wind direction.
- o A fine particle sampling network to identify source impacts on visibility and fine particle mass using receptor models.
- o Other monitoring and analytical methods that may be appropriate to achieve the objective of the monitoring plan.

5.2.4 Procedures for Review, Coordination and Consultation

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

5.2.4.1 Annual Meetings

All state and federal agencies involved in the Plan will be invited to an annual meeting, to be held no later than April of each year, to review the Visibility Protection Plan. The meeting will be open to public participation and input with meeting notification sent to members of the Visibility Advisory Committee, the news media and interested persons included on a Department mailing list. Issues to be addressed will include (a) assessment of the effectiveness of the control strategies; (b) a review of the monitoring program design; (c) progress toward achievement of long-term control strategy plan elements (d) discussion of reasonable progress toward achievement of the national visibility goal and (e) review of reports describing findings of the State Forester and the Director of the Department of Environmental Quality relative to enactment of the prescribed burning restriction emergency clause described in Section 5.2.5.1 (A) of this Plan. A report summarizing the proceedings of these meeting will be distributed to the Land Managers, EPA, the Visibility Advisory Committee and other interested parties. These reports will form an important element of the periodic Plan review process.

5.2.4.2 Strategy and Reasonable Further Progress Review

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

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

5.2.4.3 Other Meetings

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

5.2.5 Control Strategies

The protection of visibility in Oregon's Class I areas requires both correction of existing visibility impairment within the Mt. Hood and central Cascade Wilderness areas and protection of all Class I areas from future impairment. The Oregon Visibility Protection Plan incorporates strategies to make reasonable progress toward remedying impairment caused by Willamette Valley agricultural field burning and forest prescribed burning. The Plan also includes provisions for the protection of all Class I areas from future impairment through the visibility impacts assessment requirements of the New Source Review rule. This section of the SIP describes the major elements of the Plan.

5.2.5.1 Strategy Elements as Related to the National Goal

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

permitting process and emission reductions achieved as a result of in-place control strategies. Each of these Plan elements is discussed below:

(A) Short-Term Strategies For Visibility Protection

Strategy Overview

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

Willamette Valley Field Burning

Short term strategies for reducing impairment caused by field burning are listed in Table IIa. These are based mainly on smoke management; however, strategies 1 and 4 listed on Table IIa will result in some emissions reductions. The minimum cumulative effect of these strategies is expected to be a one-third reduction in the occurrence of moderate and severe visibility impairment caused by field burning within the first three year review. Given that the monitoring data indicates that approximately 20% of the Central Cascade substantial impairment is related to field burning, a 7% improvement in visibility (minimum) should be achieved by this strategy element. Actual benefits will likely be greater than estimated due to reductions in regional haze.

Since all Willamette Valley field burning occurs during July through October, these short term strategies are automatically directed at remedying impairment during the summer peak visitation period. Further attention to weekend visitation periods is provided by strategy 5 which is expected to eliminate field burning related visibility impairment on most visibility important weekend days.

Provision has been made to incorporate these short term strategies into the field burning smoke management program. Implementation of strategy elements 2 and 4, Table IIa, was begun during the 1985 field burning season when element 4 was successfully tried on a large scale. The remaining elements will be implemented initially during the 1986 burning season, and it is anticipated that most of the benefits of the short-term strategies will be realized by the first three year review.

Specifics of the Field Burning Smoke Management Plan are included in Appendix A.

Prescribed Burning

The prescribed burning short-term strategy includes a reduction in substantial visibility impairment within the Mt. Hood, Mt. Jefferson, Mt. Washington and Three Sisters Wilderness Areas by restricting summer prescribed burning and setting aside these Class I lands as protected areas under the Smoke Management Plan. The estimated goal of the short-term strategy is a 60-90 % reduction in substantial visibility impairment from the 1982 to 1984 monitoring baseline. This program should not result in additional impacts in other designated areas at any time during the year, nor should it result in additional summertime impairment within other Class I areas within Oregon or Washington. The prescribed burning short-term strategy will remain in effect for three years following adoption by the Department and applies to Western Oregon burning (Lane, Linn, Marion, Clackamas, Multnomah, Hood River, Columbia, Clatsop, Tillamook, Yamhill, Polk, Benton, Lincoln and Washington counties). Following expiration of the following short-term strategy, a replacement program of comparable or greater visibility protection will be adopted by the Department.

The following strategy elements apply to non-meteorologically impaired periods within the Mt. Hood, Mt. Jefferson, Mt. Washington and Three Sisters Wilderness Areas during the July 4 weekend-Labor Day period. A general prohibition on prescribed burning will apply within the above counties, except as noted below. The intent of the strategy is to shift burning that would be accomplished during the July-August period to the Spring and Fall months of lesser Class I area visitation and higher fuel moistures and not reduced acreage burned. To encourage Spring and Fall burning while maintaining protection of areas designated under the Smoke Management Plan, improvements in the Plan have been made to accommodate the additional burning activity. It is expected that the visibility improvements accomplished by these short-term strategies can be achieved without significantly reducing, annual acreage burned by prescription below historical levels. For purposes of visibility protection, the Mt. Hood, Mt. Jefferson, Mt. Washington, Three Sisters and Diamond Peak Wilderness areas and Crater Lake National Park as well as all State of Washington Class I areas will be set aside as "Smoke Sensitive" areas during the July 4 weekend to Labor Day period to be protected from visibility impairment.

Exemptions To Prohibition

(1) Coastal Burning.

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

enhancement goals of this strategy.

(2) Western Cascade Burning.

(A) Research & Hardwood Conversion Burning.

Research fires and hardwood conversion burning are exempt from summer burning restrictions. The burning of these units will, however, be conducted in accordance with the Smoke Management Plan under which the Northern and Central Cascade Wilderness Areas will be treated as "Smoke Sensitive" areas. Research and hardwood conversion burning permitted under this exemption are not expected to exceed 1,200 acres during the July 4-Labor Day weekend period. Best Available Technology may be required by the Department of Forestry if greater than 1,200 acres is burned annually, as necessary to accomplish the visibility improvement and protection goals of this Plan. A report of acres burned and likely impacts on Class I areas visibility will be prepared by the Department of Forestry for inclusion in the annual Smoke Management Report. All reasonable attempts will be made to accomplish burning permitted under this exemption on meteorologically impaired days. Western Cascade burning includes the East Lane, Linn and Clackamas-Marion Forest Protection Districts as well as Mt. Hood and Willamette National Forest lands west of the crest of the Cascade Range.

(B) Willamette National Forest Burning.

Burning is allowed at elevations above 5000 feet during the July 4-Labor Day weekend period, with Class I areas treated as "Smoke Sensitive" areas.

Prescribed Burning Restriction Emergency Clause.

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

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

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

Environmental Quality, every effort will be made to to increase the tonnage limitations and decrease the unit distance requirements during the remainder of the year, within the constraints of the Oregon Smoke Management Plan, to assure that the burning is accomplished. The Department of Forestry shall manage the burning to insure the protection of the Designated Areas.

The specifics of the prescribed burning short-term strategy will be contained in the Smoke Management Plan, Appendix B.

(B) Long-Term Strategy for Visibility Protection.

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

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

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

(3) Measures to mitigate construction impacts related to point sources are administered through the Air Contaminant Discharge Permitting and PSD rule process while soil dust entrained as a result of construction activities is controlled under the A95 review process, State and Federal Forest Practices Acts and permitting processes.

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

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

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

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

Long-Term Strategy Overview

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

- (A) New Source Review
- (B) Intergovernmental Review (A95) Process
- (C) Emission Reductions Due to Ongoing Programs
- (D) Prevention of Significant Deterioration Rule
- (E) Development of New Crops Not requiring field burning
- (F) Development of grass straw utilization technology
- (G) Grass seed industry research and development efforts to seek, develop and promote viable alternative to burning
- (H) A goal of reducing annual forest prescribed burning emissions within Western Oregon by 22%, relative to 1984 emissions, through BAT application without further deterioration of visibility within other Class I areas of the state.

The elements of the long-term strategy have been coordinated with existing plans and goals, including those provided by the Federal Land Managers, which may affect visibility impairment within the Class I areas. Future coordination will be accomplished through the annual and 3-year Plan review process specified in Section 5.2.4. New Source Review Element of the Long-Term Strategy.

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

Field Burning Element of the Long-Term Strategy

Long term field burning strategies are listed in Table IIb. When fully implemented, these will result in a 40% reduction in the maximum annual emissions and a 45% reduction in average emissions from the 1982-84 baseline period. Coupled with appropriate smoke management strategies, these emission reductions are expected to result in a 50% reduction in occurrence of field burning related visibility impairment (a 10% overall reduction in visibility impairment due to all sources) within the Central Cascade Class I areas, excluding the regional haze benefits of the strategy.

The long-term strategies are being developed through an ongoing research program investigating alternatives to open field burning established under ORS 468 in 1977. This program has a nominal baseline funding level of \$500,000 per biennium. Additional funding can be expected thru the Oregon New Crops Development Board, from Oregon Lottery Commission funds (ORS 814) and from the federal Critical Agricultural Materials Program.

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

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

Prescribed Burning Element of the Long-Term Strategy

The long-term objective of this portion of the Plan is to meet the objectives established in the Clean Air Act as referenced in section 51.300 (a) of the EPA Regulations. In light of current technology, the Department believes that an additional 22 % emission reduction in Western Oregon prescribed forest burning emissions from that which occurred during 1982-1984 period is achievable. Emission reductions to be achieved under this provision of the long-term strategy will be implemented in a reasonably linear manner throughout the 15 year period of this strategy.

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

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

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

Provisions for annual and 3-year review of the Plan (section 5.2.2) will provide a forum to review progress toward achieving these long-term emission reduction goals. In addition, new technologies will be reviewed to determine the advisability of increasing the 50 % reduction goal.

5.2.5.2 Protection of Integral Vistas

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

As no integral vistas were designated by the Land Managers (prior to December, 1985) or the Department, integral vista protection afforded under the Plan is limited to that associated with the control strategies included herein. Given that the Plan represents a strong commitment by the State of Oregon to achieve significant improvements in Class I area visibility, benefits of the Plan are expected to extend to potential integral vistas within Oregon.

5.2.5.3 Best Available Retrofit Technology

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

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

5.2.5.4 New Source Review & Prevention of Significant Deterioration

The New Source Review rule (OAR 340-20-220 through 280) contains requirements for visibility impact assessment and mitigation associated with emissions from major new and modified stationary sources. The rule describes mechanisms for visibility impact assessment and review by the Department and Land Managers; Land Manager-Department coordination procedures, impact modeling methods and requirements. In conducting these reviews, the Department will ensure that new source emissions do not prescriptibly impair visibility within Class I areas, thereby providing an important element of the control strategy; that of assuring that future visibility impairment

caused by new stationary sources is mitigated prior to facility construction.

The New Source Review Rule is attached as Appendix C.

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

5.2.5.5 Maintenance of Control Equipment

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

5.2.5.6 Interstate Visibility Protection

In recognition of the importance of interstate transport of pollutants which can impair visibility within Oregon's Class I areas, the Department will continue to work with neighboring States to coordinate visibility protection plans as required under Section 126 of the Clean Air Act. This coordination will attempt to ensure that economic and social effects of controls are administered fairly and as uniformly as possible. Affected Land Managers and state agencies within the State of Washington, and other states, as necessary, will be invited to participate in the periodic Plan reviews. To assure that the State of Washington Visibility Protection Plan provides a comparable level of visibility protection to that afforded under this Plan, the Department will work with the Washington Department of Ecology to improve the current Washington Interstate Protection Plan which is only directed toward summer weekend protection.

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

Field Burning Elements

A reduction in weekend burning upwind of Washington Class I areas during the July 4 to Labor Day weekend on "visibility important", clear weather days will result in a potential reduction in burning of 15,000-35,000 acres. Although it is unlikely that Willamette Valley field burning is a major contributor to visibility impairment within Washington's Class I areas, this element of the Oregon strategy may be beneficial.

Prescribed Burning Elements

The summer prohibition on Western Oregon Cascade prescribed burning will result in an 1,800 ton TSP emission reduction during the July 4-Labor Day weekend period. In addition, prescribed burning conducted on the coast range will be managed such that Class I areas in Washington will be protected as "Smoke Sensitive Areas" under the Smoke Management Plan. Combined emission reduction and smoke management elements provided under this Plan should provide a significant benefit to Washington Class I area visibility.

5.2.5.7 Emission Reductions Due To On-Going Control Programs

The Oregon Revised Statutes (ORS) Chapter 468 authorize the Oregon Environmental Quality Commission to adopt programs necessary to meet and maintain state and federal ambient air quality standards. The mechanisms for implementing these programs are the Oregon Administrative Rules (OAR). A summary of provisions of the OAR which assure emission reduction benefiting Class I visibility are noted below.

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

In addition, the provisions of the Intergovernmental Review (A95) Process, charged the Department with the responsibility of insuring that environmental (e.g. visibility) impacts projected as a result of federally funded projects are reviewed and approved prior to implementation. USDA Forest Service Forest Management Plans and Bureau of Land Management Environmental Impact Statements are reviewed by the Department to insure that such plans are consistent with the requirements of the Clean Air Act and State of Oregon SIP. Air quality impacts associated with prescribed burning are reviewed within this process in relation to Prevention of Significant Deterioration Class I increments and conformance to this Plan.

----END----

Table

Field Burning Visibility Protection Strategies

(a) SHORT-TERM STRATEGY (1-5 yrs)	Visibility BENEFITS	LIMITATIONS OR NEGATIVES	CONTROL COSTS	IMPACT REDUCTION
1. <u>Encourage Early Season Burning (July)</u> : Potential for additional 10-15,000 acres, depending on weather. Requires grower education.	Significantly reduced emissions from early maturing smokey varieties for less overload on mid to late season burn days. Better utilize early season days with better ventilation. Makes reduced weekend burning more feasible.	Increases fire escape and liability risks. Fields need 7-10 days drying after harvest.	Potential costs from delays and conflicts with harvest operations. Savings from less late-season field prep (fluffing, cutting etc.).	Class 1 and urban areas (especially in August/September)
2. <u>Smoke Management Improvement (on-going)</u> : Better forecasting and decision making especially under marginal or risky conditions.	Reduced frequency, intensity and duration of intrusions by reduced overload on high-risk days.	Concentrates more burning during low-risk periods. May increase Class 1 impacts on good ventilation days.	Potential costs for more farm personnel and equipment because of increased response to fewer opportunities.	Class 1 and urban areas (especially east Valley).
3. <u>Improve Burning Methods (general)</u> : Rapid-ignition, lighting equipment, fluffers etc. Requires grower education.	Reduced ground level emissions and impacts.	None.	Some investment costs for equipment.	Class 1 and urban areas.
4. <u>Evening Burning Program (currently experimental)</u> : Potential additional 15,000 acres. Requires grower certification and coordination by industry.	Reduced ground-level impacts by removing high-risk acreage from Westerly flow burn regimes. Makes reduced weekend burning more feasible.	Requires strict grower compliance and increased administrative burden. Precise limits and effect on Class 1 areas not fully known.	Some costs for equipment and crews to qualify.	Class 1 and urban areas.
5. <u>Reduce Weekend Burning Upwind of Class 1 Areas on "Visibility Important" Days (July 4-Labor Day)</u> : Potential loss of 15-35,000 acres. a) Develop/implement practical and flexible criteria b) Phase-in 3 yrs.	Reduced impacts during high use "Visibility Important" periods.	Critically dependent on advance forecasts. Possible resultant increased burning and risk on good ventilation weekdays.	Requires equipment and crews to burn more in less time on weekdays (same as #2). Some savings from less stand-by time on weekends.	Class 1, urban, and rural east-Valley residential/recreation areas.
(b) LONG-TERM STRATEGY (5-15 yrs)	Visibility BENEFITS	LIMITATIONS OR NEGATIVES	CONTROL COSTS	IMPACT REDUCTION
1. <u>Develop New Crops Not Requiring Burning (Meadowfoam, Rapeseed etc)</u> : Potential for replacing up to 50,000 or more acres in long term.	Reduced acres burned. *	None, except long-term commitment needed from all parties.	Substantial funding required for market and agronomic development (long term)	Class 1 and urban areas.
2. <u>Straw utilization Development (i.e. fuel)</u> : Potential for up to 50,000 acres in long term.	Reduced acres burned. *	Long-term economic and technical limits difficult to control and predict.	Substantial costs of straw removal/storage/processing must be off-set by value of straw. Tax credit offsets available.	Class 1 and urban areas.
3. <u>Research and Development Program (on-going) and Feasibility Study</u> : Continue to seek, develop, and promote viable alternatives. Do Feasibility Study to define the costs/benefits and program goals. Potential for significant acreage reduction.	Reduced acres burned. *	None, except long-term rate of progress difficult to control & predict.	Potential for substantial costs for employing some alternatives. Tax credit offsets available.	Class 1 and urban areas.

Table III
 PRESCRIBED BURNING CONTROL STRATEGIES

	<u>LONG-TERM AIR QUALITY BENEFITS</u>	<u>COST FACTORS</u>	<u>IMPACT REDUCTION</u>
A.	Research to improve wood residue utilization	Breakthroughs to make forest residue more valuable as a by-product therefore reducing emissions	Research funding, marketing costs; Increased residue utilization may impact soil productivity
	1. Encourage high volume residue utilization for energy co-generation		
	2. Increased firewood removal		
	3. Process to separate bark from small pieces		
	4. Long-term chip storage		
	5. Test, evaluate, & implement smoke dispersion computer models to improve smoke management	More accurate forecasts & unit approval/disapproval process; less chance of risk on marginal days	More manpower, high-tech. equipment needs; Training for smoke management personnel
B.	Test & verify emission reduction ignition methods including hardwood conversion burning		Virtually eliminate significant impairment of visibility
C.	Look for incentives for fuel removal		
	1. Reduced transportation costs		
	2. Tax credits		
	3. Incentive for co-generation		
D.	Reduce fuel loading	Reduce emissions through reduction of residues burned	Combination of economic & environmental costs; Increase in brush & weed control needs; Not all feasible; Certain wildlife habitat sacrificed;
	1. Firewood cutting	Less emissions during high recreation use periods	Less TSP Visibility improvement through achievement of significant reductions achieved
	2. Whole tree yarding	Fewer units needing to be burned	Less soil protection from big chunks left on ground; Delayed reforestation due to brush competition;
	3. Maximize recovery through felling & bucking procedures	Fewer units needing to be burned	Fewer smoke plumes

<u>LONG-TERM AIR QUALITY BENEFITS</u>		<u>COST FACTORS</u>	<u>IMPACT REDUCTION</u>
4. Chipping	Reduced residue to be burned	Increased fire hazard & re-resulting costs; Reduced net timber sale receipts due to high logging costs	
5. YUM yarding	Piles can be burned during more favorable weather conditions		
E. Fuel management	Reduce acres burned & thereby reduce emissions	Substantial costs in dollars & time	Improve overall visibility & reduce intrusions
1. Chemicals		Note potential increase in problems from rodents, insects, & forest pathogens	
2. Use of explosives			
3. Mechanical site preparation		Increased fire hazard & suppression costs Reduced stumpage value	
F.	Based on the preceeding strategies becoming feasible and practical, establish emission reduction goal of <u>50%</u> from the 1976-1979 baseline by the year 2000		

SMOKE MANAGEMENT PLAN ADMINISTRATIVE RULE

(Including Visibility)

Smoke Management Plan

629-43-043 (1) Objective: To [keep] prevent smoke resulting from burning on forest lands from being carried to or accumulating in designated areas (exhibit 2) or other areas sensitive to smoke[.], and to provide maximum opportunity for essential forest land burning while minimizing emissions, to coordinate with other state smoke management programs, and to conform with state and federal air quality and visibility requirements.

(2) Definitions:

(a) "Deep mixed layer" extends from the surface to 1,000 feet or more above the designated area ceiling.

(b) "Smoke drift away" occurs where projected smoke plume will not intersect a designated area boundary downwind from the fire.

(c) "Smoke drift toward" occurs when the projected smoke plume will intersect a designated area boundary downwind from the fire or when wind direction is indeterminate due to wind speed less than 5 mph at smoke vent height.

(d) "Smoke vent height" - level, in the vicinity of the fire, at which the smoke ceases to rise and moves horizontally with the wind at that level.

(e) "Stable layer of air" - a layer of air having a temperature lapse rate of less than dry adiabatic (approximately 5.5°F, per 1,000 feet) thereby retarding [either] upward [or downward] mixing of smoke.

(f) "Tons available fuel" - an estimate of the tons of fuel that will be consumed by fire at the given time and place. [Low volume is less than 75 tons per acre, medium volume 75 to 150 tons per acre, and high volume over 150 tons per acre.]

(g) "Residual smoke" - smoke produced after the initial fire has passed through the fuel.

(h) "Field administrator" - a forest officer or federal land administrator who has the direct responsibility for administering burning permits on a unit of forest land within the boundaries of an official fire district.

(i) "Restricted area" - that area delineated in Exhibit 2 for which permits to burn on forest land are required year round, pursuant to rule 629-43-041.

(j) "Designated area" - those areas delineated in Exhibit 2 as principal population centers.

(k) "Heavy use" - unusual concentrations of people using forest land for recreational purposes during holidays, special events.

(l) "Major recreation area" - areas of the state subjected to concentrations of people for recreational purposes.

(m) "State Forester" means the State Forester or delegated Department of Forestry employe representative.

(n) "Instructions" means the specific burn authorizations and weather discussions issued and disseminated as needed by the State Forester.

(o) "Smoke Management Plan" means the administrative rule approved by the State Forester and the Department of Environmental Quality and administered by the State Forester to control prescribed burning on forest lands.

(p) "Smoke Management Directive 1-4-1-601", as approved by the Department of Environmental Quality, is the Department of Forestry's operational guidance for administration of the Oregon Smoke Management Program.

(q) "Other Areas Sensitive to Smoke" are intended to consider specific recreation areas during periods of heavy use by the public such as coastal beaches on special holidays, federal mandatory Class I areas during peak summer use, special events. All Oregon and Washington Class I areas shall be considered as areas sensitive to smoke during the visibility protection period, defined in the Oregon Visibility Protection Plan, OAR 340-20-047, Sec. 5.2.

(3) Control:

(a) The State Forester is responsible for the coordination and control of the smoke management plan. The plan applies [statewide] to the restricted area set forth in Exhibit 2 with full interagency cooperation with the U.S.D.A., Forest Service, Bureau of Land Management, U. S. Fish and Wildlife Service, Bureau of Indian Affairs, private forest [industry] landowners, and the Department of Environmental Quality. The smoke management plan, Department of Forestry Directive 1-4-1-601 and

the Smoke Management instructions (and authorized variances) issued pursuant to the plan, shall be strictly complied with.

(b) Certain "designated areas" are established in consultation with the Environmental Quality Commission. [The major objective of smoke control efforts will be to keep smoke from forest land burning out of these designated areas.]

Exhibit 2 delineates designated areas and specified ceilings.

(c) During periods of heavy use, major recreation areas in the state shall be provided the same consideration as "designated areas". Other areas sensitive to smoke shall be provided the same consideration as designated areas.

(d) The Smoke Management Plan shall be operated in a manner consistent with the requirements of the Oregon Visibility Protection Plan for Class I areas (OAR 340-20-047, Sec. 5.2).

(4) Administration:

(a) The State Forester, in developing instructions, and each field administrator issuing burning permits under this plan [will] shall manage the prescribed burning on forest land in connection with the management of other aspects of the environment in order to maintain a satisfactory atmospheric environment in designated areas (Exhibit 2). Likewise, this effort [may] shall be applied in special situations where local conditions warrant and that are not defined as designated areas but nevertheless are sensitive to smoke. The development of instructions and [A] accomplishment of burning will entail consideration of air quality conditions and weather forecasts (including burning forecasts and plans of the Department of Environmental Quality and the Washington Department of Natural

Resources), acreages involved, amounts of material to be burned, evaluation of potential smoke column vent height, direction and speed of smoke drift, residual smoke, mixing characteristics of the atmosphere, and distance from the designated area of each burning operation. [Designated areas are outlined and vertical extents or ceilings are indicated in Exhibit 2).]

(b) The State Forester and [E] each field administrator [will] shall evaluate downwind conditions prior to implementation of burning plans. When the State Forester or a field administrator determines that visibility in a designated area, or other area sensitive to smoke is already seriously reduced or would likely become so with additional burning, or upon notice from the State Forester through the Protection Division [of Fire Control], or upon notice from the State Forester following consultation with the Department of Environmental Quality that air in the entire state or portion thereof is, or would likely to become adversely affected by smoke, the affected field administrator [will] shall terminate burning. Upon termination, any burning already under way will be completed, residual burning will be mopped up as soon as practical, and no additional burning will be attempted until approval has been received from the State Forester.

(5) Reports: Field administrators [will] shall report daily at such times and in such manner as required by the State Forester covering their daily burning operations. Any wildfire that has the potential for smoke input into a designated or smoke sensitive area [will] shall be reported immediately to

the State Forester's office. The State Forester shall report to the Department of Environmental Quality each day on a timely basis its forecast, planned and accomplished burning, and smoke intrusions.

(6) Key to Smoke Drift Restrictions:

(a) Smoke drift away from designated area: No specific acreage limitation will be placed on prescribed burning when smoke drift is away from designated area. Burning should be done to best accomplish maximum vent height and to minimize nuisance effect on any segment of the public.

(b) Smoke drift toward designated area:

(A) Smoke plume height below designated area ceiling.

Includes smoke that for reasons for fire intensity, location, or weather, will remain below the designated area ceiling. Also included are fires that went into layers of air, regardless of elevation, that provide a downslope trajectory into a designated area:

(i) Upwind distance less than 10 miles outside designated areas. No new prescribed fires will be ignited.

(ii) Upwind distance 10-30 miles outside designated area boundary. Burning limited to 1,500 tons per 150,000 acres on any one day.

(iii) Upwind distances 30-60 miles outside designated area boundary. Burning limited to 3,000 tons per 150,000 acres on any one day.

(iv) Upwind distances more than 60 miles beyond designated area boundary. No acreage restriction unless otherwise advised by the Forester.

(B) Smoke will be mixed through the deep layer at the designated area. This section includes smoke that will be dispersed from the surface through a deep mixed layer when it reaches the designated area boundary:

(i) Upwind distance less than 10 miles from designated area boundary. Burning limited to 3,000 tons per 150,000 acres on any one day.

(ii) Upwind distance 10-30 miles from designated area boundary. Burning limited to 4,500 tons per 150,000 acres on any one day.

(iii) Upwind distances 30-60 miles outside designated area boundary. Burning limited to 9,000 tons per 150,000 acres on any one day.

(iv) Upwind distances more than 60 miles beyond designated area boundary. No acreage restriction unless otherwise advised by the Forester.

(C) Smoke above a stable layer over the designated area. Smoke in this group will remain above the designated area, separated from it by a stable layer of air:

(i) Upwind distance less than 10 miles outside designated area. Burning limited to 6,000 tons per 150,000 acres on any one day.

(ii) Upwind distance 10-30 miles outside designated area. Burning limited to 9,000 tons per 150,000 acres on any one day.

(iii) Upwind distances 30-60 miles outside designated area. Burning limited to 18,000 tons per 150,000 acres on any one day.

(iv) Upwind distances more than 60 miles beyond designated area boundary. No acreage restriction unless otherwise advised by the Forester.

(D) Smoke vented into precipitation cloud system. When smoke can be vented to a height above the cloud base from which precipitation is falling, there will be no restrictions to burning[.], unless otherwise advised by the Forester.

(c) Changing conditions: When changing weather conditions, adverse to the Smoke Management objective, occur during burning operations, aggressive mop-up [will] shall be initiated as soon as practical[.] and no additional burning shall be initiated.

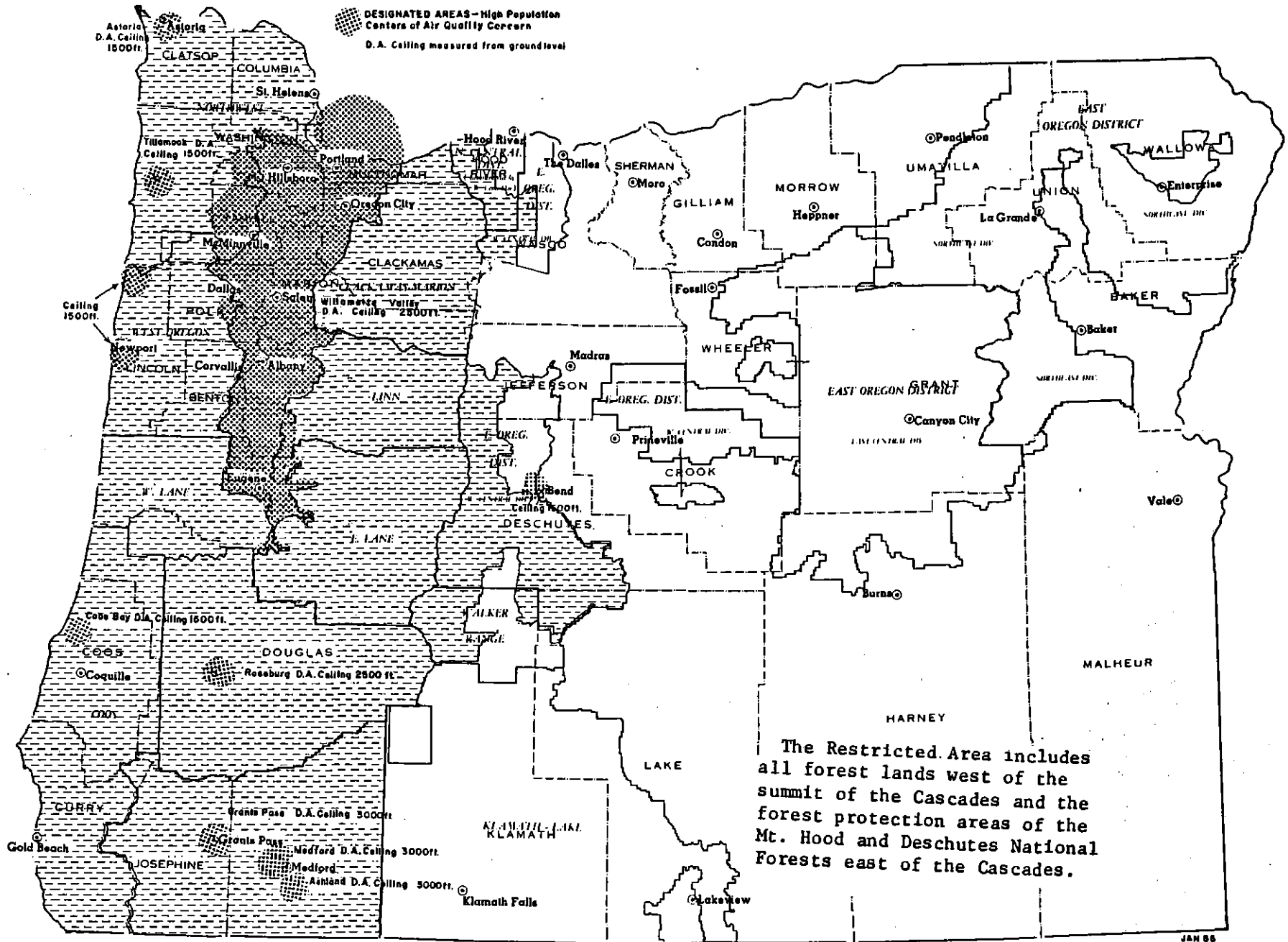
(7) Analysis and Evaluation: The State Forester [will] shall be responsible for the annual analysis and evaluation of [state-wide] burning operations under this plan. Copies of the summaries will be provided to all interested parties.

(8) The Department of Environmental Quality, in cooperation with the State Forester, federal land management agencies, and private forest landowners shall develop maximum annual and daily emission limits in accordance with federal PSD (Prevention of Significant Deterioration) regulations.

LEGEND

RESTRICTED AREA - Burning
Permits Required Year Round as per O.A.R. 43-041

DESIGNATED AREAS - High Population
Centers of Air Quality Concern
D.A. Ceiling measured from ground level



The Restricted Area includes
all forest lands west of the
summit of the Cascades and the
forest protection areas of the
Mt. Hood and Deschutes National
Forests east of the Cascades.

Protection
5/19/86 - P.N.

FINAL DRAFT DIRECTIVE
1-4-1-601 p. 1

OPERATIONAL GUIDANCE FOR THE OREGON
SMOKE MANAGEMENT PROGRAM
(Including Visibility)

PURPOSE. This directive sets forth the operational guidance for the Oregon Smoke Management Program. Contained herein are the objective, concept of operations, organizational guidance, and instructions for administration of the Oregon Smoke Management program.

SCOPE.

The Smoke Management Directive is:

1. Developed in cooperation with Federal and State agencies, landowners, and organizations which will be affected by the Smoke Management Program.
2. Jointly approved by the State Forester and (the Director of) DEQ.
3. Applicable to all prescribed burning on forests in western Oregon and selected portions of central Oregon as defined on Exhibit 2, OAR 629-43-043, Smoke Management Program.

SITUATION.

1. **Authority:**

ORS 477.515(3)(a) states:

"For the purpose of maintaining air quality, the State Forester and the Department of Environmental Quality shall approve a plan for the purpose of managing smoke in areas they shall designate."

ORS 477.515(3)(b) states:

"The State Forester shall promulgate rules to carry out provisions of the Smoke Management Plan..."

ORS 468.275 through 468.355 provides authority to DEQ to establish air quality standards including emissions standards for the entire state or an area of the state.

ORS 468.450 through 468.495 gives DEQ the authority to regulate field burning.

2. **Under this authority:**

a. **The State Forester:**

- (1) Coordinates the administration and operation of the plan.
- (2) Issues additional restrictions on prescribed burning in situations where the air quality of the entire state or any part thereof is, or would likely become, adversely affected by smoke.

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- (3) Issues daily burning instructions when needed.
 - (4) Annually, analyzes and evaluates state-wide burning operations under the plan and provides copies of the summary to interested parties.
- b. The Department of Environmental Quality:
- (1) Maintains a real-time air quality monitoring network that is used by OSDF.
 - (2) Provides information on field burning activity.
 - (3) Establishes criteria for air pollution emergencies and notifies OSDF of episode stages such as alerts, warnings, and emergencies.
 - (4) Regulates the emission of air pollutants to ensure compliance with adopted standards, limits, and control strategy plans.
 - (5) Notifies the Department of Forestry when the air in the entire State or portions thereof is or would likely become adversely affected by smoke.
3. Prescribed Burning in Oregon: An average of 104,000 acres is burned annually in western Oregon on 3,300 units. Tonnage burned has varied between a low of approximately 1.6 million in 1984 and a high of approximately 4.5 million in 1976. Burning activity varies according to seasonal weather and fuel conditions, and reforestation and land management needs.
4. Cooperating Agencies: The policies and resources of many public and private agencies and organizations have substantial influence on the administration of the Smoke Management Program. The entities and their responsibilities are:
- a. State Agencies
- (1) Department of Environmental Quality: policy, information and resources.
 - (2) Washington Department of Natural Resources: information.
- b. Federal Agencies
- (1) USDA, Forest Service: resources.
 - (2) Bureau of Land Management: resources.
 - (3) Bureau of Indian Affairs: information.
 - (4) U. S. National Park Service: information.
 - (5) U. S. Fish & Wildlife Service: information.
 - (6) National Weather Service: information and resources.
- c. Other
- (1) Regional air pollution authority: information.
 - (2) Oregon Forest Industries Council: information.

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5. Program Resources: The State Forester maintains a staff of four personnel in Salem and a field force of 65 foresters throughout western Oregon and central Oregon who participate in the Smoke Management Program to accomplish the inspection, enforcement, monitoring, and reporting tasks.

In addition, the USDA Forest Service and the BLM maintain field forces of approximately 80 supervisory personnel and professional foresters trained in the techniques of prescribed burning and the elements of the Smoke Management Program.

ASSUMPTIONS.

The Smoke Management Program is premised on the assumptions that:

1. Prescribed burning is a silvicultural technique of forest management that is beneficial to reforestation, forest stand improvement, wildlife habitat and the reduction of insect and disease problems.
2. Significant reductions in the cost and damages resulting from wildfire are achieved by burning slash residues following harvesting operations.
3. Smoke resulting from prescribed burning can be managed meteorologically to minimize the air quality impacts on populated areas and other areas sensitive to smoke.

DEFINITIONS. See OAR 629-43-043 (2a - p).

POLICY.

The policy of the State Forester is to:

1. Regulate prescribed burning operations on forest land recognizing the need to maintain forest productivity and the need to maintain air quality in populated areas and areas sensitive to smoke.
2. Achieve strict compliance with the Smoke Management Plan, Directive and instructions.
3. Encourage cost-effective utilization of forest residues as a means to reduce burning.

OBJECTIVE. To prevent smoke, resulting from burning on forest lands, from being carried to or accumulating in designated areas and other areas sensitive to smoke; to provide maximum opportunity for essential forest land burning while minimizing emissions; to coordinate with other state smoke management programs; and, to conform with state and federal air quality and visibility requirements.

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PROGRAM ELEMENTS.

1. The Smoke Management Plan: The Smoke Management Plan (OAR 629-43-043) provides a specific framework for the administration of the Smoke Management Program as administered by the State Forester.

The plan instructs the State Forester and each Field Administrator to maintain a satisfactory atmospheric environment in designated areas and other areas sensitive to smoke consistent with the plan objectives and smoke drift restrictions.

In administering the Smoke Management Program, the Forester and the Field Administrators are required to continually monitor weather factors and air quality conditions in designated areas and other areas sensitive to smoke.

The plan establishes a set of limitations applicable to specified burning and mixing conditions. These limitations relate to tonnage of fuel per 150,000 acres which, ideally, may be burned under various sets of mixing conditions. Experience has shown that these standards are adequate to protect designated areas only under ideal conditions. Frequently, in order to meet air quality objectives, more specific restrictions must be applied through issuance of Smoke Management instructions by the State Forester.

2. Operator's Written Plan: OAR 629-43-045 requires that prior to prescribed burning, a forest landowner or operator shall, in cooperation with the State Forester, develop a written plan which shall include consideration of "air quality".
3. Smoke Management Forecasts: The Salem and Medford Forestry Fire Weather offices provide smoke management forecasts daily. The forecast is for the following day (the forecast period) with an update as necessary on the morning of the forecast period (Salem only). An extended forecast may be provided depending on the weather influences involved at any given time.

The forecasts include reference to transport winds and mixing for the restricted area and other areas sensitive to smoke. Burning will be conducted in accordance with the current forecast information, including updated forecasts, when issued.

4. Smoke Management Instructions

Smoke Management Instructions will be issued only by the Salem Forestry Fire Weather Center and only during periods when weather is favorable for significant amounts of burning (usually late May through October). The instructions provide constraints on burning in areas where the restrictions, set forth in the Smoke Management Plan, may be inadequate to protect designated areas or other areas sensitive to smoke.

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The instructions are based upon an analysis of the atmospheric conditions affecting smoke transport, dispersion, and air quality and visibility conditions in designated areas and other areas sensitive to smoke.

5. Priority Burning System: The Forest Land Burning Priority Rating System was initiated to reduce the amount of forest land burning during the time when the maximum acreage of grass seed fields are being burned in the Willamette Valley. There are approximately 60 days during mid-summer when field burning has been given a high priority for use of the air shed in the valley for smoke dispersal. The Priority Burning System was developed by the Department of Forestry in coordination with the Department of Environmental Quality and with the cooperation of public and private forest land managers.

The priority burning period is established by the Department of Forestry upon the recommendation of the Department of Environmental Quality. The exact period varies from year to year and may extend for more or less than 60 days.

The Priority Burning System limits forest land burning during the 60-day period to units which must be burned during that time to meet the burning objectives. Only units with a high priority rating will be burned when the Priority Burning System is in effect. The Forester will provide notice to all Field Administrators when the Priority Burning System is initiated and rescinded.

The procedures for rating and prioritizing burn units are included in Appendix 3 of this directive. These procedures will apply to all units which may be burned when priority burning restrictions are in effect.

6. Enforcement: All forest land prescribed burning will be done in accordance with the daily Smoke Management Instructions and this directive:
- a. On private land: Violations of the Smoke Management Plan, Directive or the daily instructions issued by the State Forester are subject to enforcement action by the State Forester:
 - (1) Burning without a permit is a violation of ORS 477.515.
 - (2) Burning not in compliance with the Smoke Management Plan and Directive is a violation of OAR 629-24-301(7).
 - b. On Federal forest land:

Violations of the Smoke Management Plan Directive or the daily instructions issued by the State Forester are subject to federal enforcement action under Section 118 of the Clean Air Act, as amended in 1977.

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Section 118 states that "Each...agency...of the Federal Government...engaged in any activity resulting...in the discharge of air pollutants...comply with all Federal, State, interstate, and local requirements,...respecting the control and abatement of air pollution in the same manner, and to the same extent as any nongovernmental entity."

7. Air Stagnation Advisories: Air stagnation advisories are issued by the National Weather Service Forecast Office in Portland when atmospheric conditions are such that the potential exists for air pollutants to accumulate for an extended period. During such times smoke and other pollutant sources within designated areas will create substantial air quality deterioration without the addition of smoke from outside sources. This condition is recognized in the administration of the Smoke Management Plan.

Smoke Management Instructions issued during an Air Stagnation Advisory will limit forest land burning to units which will not contribute smoke to a designated area covered by an Air Stagnation Advisory or an Air Pollution Alert issued by DEQ. Burning during such periods will be closely controlled.

8. Monitoring: The State Forester will monitor prescribed burning operations periodically by aircraft and other means:
 1. to insure compliance with the Smoke Management Program; and,
 2. to determine the effectiveness of smoke management procedures.

Real-time air quality monitoring data is available to the State Forester through computer link with DEQ. This information will be used in the preparation and validation of daily Smoke Management Instructions as appropriate.

9. Reporting and Analysis:

Information is needed from the Field Administrators to provide for analysis of the program procedures. Reporting will be accomplished in accordance with Appendix 1, Detailed Instructions for the Oregon Smoke Management Reporting System.

10. Annual Report: The State Forester will prepare an annual report of statewide forest land prescribed burning, wildfire and smoke management activities. The report will summarize burning activities of the previous year and intrusion events and make pertinent observations toward improved operational efficiency in the program.

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STANDARDS.

1. Quantification of Forest Residues: The consistent estimation of the tons of fuel consumed in each prescribed burn is important to the development and equitable operation of the Smoke Management Program. To determine the fuel consumed by a prescribed burn:
 - a. Determine total pre-burn fuel tonnage load.
 - b. Calculate woody fuel consumption using 1000-hour timelag fuel moisture and algorithm developed to predict large fuel consumption.
 - c. Calculate and add duff consumption.

Estimation by Field Administrators of the total pre-burn fuel tonnage will be through the application of the "planer transect method" of inventorying forest residue. The planer transect method may be applied by the actual measurement of fuels, or by use of the publication "Photo Series for Quantifying Forest Residue", or through supplemental photographs developed by following appropriate procedures.

Instructions for the actual measurement of fuels are contained in the "Handbook for Inventorying Downed and Woody Material", U.S.D.A. Forest Service General Technical Report INT-16, 24p, Intermountain Forest and Range Experiment Station, Ogden, Utah.

Instructions for using the "Photo Series" are included in Appendix 4. A publication has been developed for western Oregon and eastern Oregon fuel types.

Instructions for fuels inventory and consumption procedures and utilization of 1000-hour fuels data are contained in Appendix 4.

2. Intrusions Defined: A smoke intrusion occurs when smoke from prescribed burning enters a Designated Area or other smoke sensitive area at ground level. When measurements or observations are available, intrusions are characterized as light, moderate, or heavy based on hourly nephelometer measurements of less than 1.8×10^{-4} B-scat, between 1.8×10^{-4} and 4.9×10^{-4} B-scat, and 5.0×10^{-4} B-scat and greater, respectively, above the clean air background. The clean air background is the average nephelometer reading for the 3 hours prior to the intrusion.

When no nephelometer data are available, the following visibility table will be used when visibility data are available. Standard National Weather Service visibility observation criteria will be used for reporting purposes. (See Appendix 2.)

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INTRUSION CLASSIFICATION BASED ON VISIBILITY
(For instructions on use see Appendix 2)

Background Visibility (Miles)*	INTRUSION INTENSITY**		
	LIGHT	MODERATE	HEAVY
<u>REDUCED VISIBILITY - RV (MILES)</u>			
> 50	RV > 11.4	11.4 < RV > 4.6	RV < 4.6
25-50	RV \geq 10.5	10.5 < RV \geq 4.4	RV < 4.4
20-24	RV \geq 8.1	8.1 < RV \geq 4.1	RV < 4.1
15-19	RV \geq 7.5	7.5 < RV \geq 3.8	RV < 3.8
10-14	RV \geq 6.2	6.2 < RV \geq 3.5	RV < 3.5
5-9	RV \geq 3.7	3.7 < RV \geq 2.5	RV < 2.5
3-4	RV > 2.5	2.5 < RV > 1.8	RV < 1.8
1-2	RV \geq 1	1 < RV \geq 0.5	RV < 0.5
0	RV \geq -	-	0

* Background based on 3-hour average visibility prior to reduction due to activity smoke. Visibility changes during naturally occurring periods of change, may have to be factored into the classification on a case-by-case basis (i.e., from daylight to dark, during a rain shower, etc.).

** Reduced visibility must be determined to be predominantly from prescribed burning in order to determine intensity class.

Intrusions will be reported to the Smoke Management Program Administrator who will notify DEQ on a timely basis. See Appendix 2, Smoke Intrusion Report Form 1-4-1-601.

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3. Daily and Annual Maximum Tonnage: The Department of Environmental Quality, in cooperation with the State Forester, federal land management agencies, and private forest land owners shall develop maximum annual and daily emission limits in accordance with federal PSD (Prevention of Significant Deterioration) regulations.

SPECIAL GUIDANCE.

1. Instructions: Smoke Management Instructions will be issued from Salem at approximately 3:15 PM daily for the entire restricted area. By 7:00 AM each day a message will be placed on an automatic answering phone only if the previous 3:15 PM instructions will be updated. If the 3:15 PM instructions are still valid at 7:00 AM they will remain on the recording. If there is to be an update, burning shall not be initiated in the affected area until updated instructions are issued. Any amended instructions (either written or verbal) that are issued during the working day shall be strictly complied with.

The instructions shall be considered as directives from the State Forester. The authority for approving prescribed burning is delegated to the District Forester for burning regulated directly by the State Forester (private and BLM forest land), and to the Forest Supervisor for the U.S.D.A., Forest Service, and the Park Superintendent for the National Park Service for burning coordinated with the State Forester. These delegates and their designated field personnel are "Field Administrators". Any planned variances from the daily burning instructions will be discussed with the Smoke Management Duty Forecaster. If the Smoke Management Duty Forecaster and District Forester cannot agree on deviation from the instructions, the Deputy State Forester will discuss the situation and provide final resolution. If the Forest Supervisor or Park Superintendent and the Smoke Management Duty Forecaster cannot agree on deviation from the instructions, the Deputy State Forester will discuss the situation and make final resolution.

Variances or revisions to the instructions shall be recorded by the Protection Division.

2. Requests for Information: The State Forester's Office will provide more specific information to Field Administrators when requested by telephone. The following telephone numbers will be used in regards to the Smoke Management Instructions:

378-2800: "Automatic Answering Phone" recording with Smoke Management Instructions. Instructions will be recorded by approximately 7:00 AM (as needed) and 3:15 PM.

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- 378-2153: Smoke Management Duty Forecaster. Call this number for forecasts, instructions, and other daily operations. Do not call between 2:30 PM and 3:15 PM, or prior to 8:30 AM. These times are used to prepare instructions.
- 378-2509: Salem Fire Weather Forecast Service. Use this for fire weather needs; not smoke management.
- 378-2518: Salem Communications. For assistance in getting unit numbers, planning and resulting units or other daily data needs. Do not use for daily decision-making assistance.
3. Reduction of Emissions: The Department of Forestry will encourage private forest landowners to burn only those units that must be burned to achieve the landowners' objectives. Forest Practices Foresters, through the administration of the Forest Practices Act, will encourage utilization of residue, fuel reduction measures, and alternate treatment practices that are consistent with the purposes of the Forest Practices Act. The Department of Forestry supports efforts to reduce prescribed burning emissions and will strive to achieve emissions reduction goals established within the Oregon Visibility Protection Plan.
- Burning during time periods when 1000-hours and larger fuels (3 inches in diameter or larger fuels) have relatively high fuel moistures, such as during spring, will be promoted where such burning is within the prescription necessary to achieve the objectives of the landowner.
- Mass ignition methods will be encouraged to help reduce emissions where such techniques are economical and practical.
- To minimize impacts from residual smoke, mop-up will be initiated on all units consistent with atmospheric and wind conditions. Within this context, during periods of observed or forecast low level transport toward the designated areas, mop-up shall begin immediately.
4. Monitoring of smoke behavior will be intensified on marginal days. This will be done by use of lookouts, aerial observation, and on-site observation of smoke behavior.
5. Any wildfire that has the potential for smoke input into a designated area or other area sensitive to smoke will be reported immediately to the State Forester's Fire Operations Section who will advise DEQ on a timely basis.
6. Test Burn Project: In order to determine the feasibility of alternative schedules in burning to minimize smoke impacts while maintaining burning accomplishments, a test project will be established during 1986-88. Special strategies will be employed in burning, and assessment will be made for impacts on air quality and burning accomplishment.

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7. Tonnage limits will be reviewed by the DEQ and the Department of Forestry for possible update and revision, as necessary, as uniform fuel loading estimation and consumption procedures are developed and tested.
8. A statewide forest fuels inventory procedure will be developed by the Department of Forestry in cooperation with the Department of Environmental Quality. The new procedure will be implemented in 1987.

RESPONSIBILITIES.

1. State Forester: The State Forester is responsible for the coordination of the Smoke Management Plan and the Operating Details between the National Weather Service, U.S.D.A. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service, forest landowners, Department of Environmental Quality, National Park Service, Bureau of Indian Affairs, Washington State Department of Natural Resources, and regional air quality authorities. In addition, the State Forester, through the Forest Protection Division, has the responsibility to issue additional restrictions on prescribed burning in situations where the air quality of the entire state or any part thereof is, or would likely become, adversely affected by smoke.
2. Forest Protection Division: The Forest Protection Division is directly responsible for:
 - a. Providing weather forecasting services for Smoke Management purposes.
 - b. Issuing Smoke Management Instructions to Field Administrators.
 - c. Coordinating with Department of Forestry's Area and District offices, cooperating agencies, and forest land owners in identifying training needs and in developing training programs.
 - d. Monitoring the Smoke Management Program.
 - e. Providing on-the-ground assistance to Field Administrators as requested.
 - f. Maintaining liaison with Field Administrators through the Smoke Management Meteorologist and normal staff/line relationships.
 - g. Maintaining the Smoke Management Record System.
3. Field Administrators: Oregon Department of Forestry field administrators will administer prescribed burning according to the Smoke Management Plan, Operational Guidance for the Oregon Smoke Management Program (Directive 1-4-1-601), and the daily Smoke Management Instructions.

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U.S.D.A., Forest Service (USFS), Bureau of Land Management (BLM), National Park Service (NPS), U. S. Fish and Wildlife Service (USFWS), and the Bureau of Indian Affairs (BIA). Federal land management agencies are required by law to follow the directions of the Forester for the protection of air quality in conducting prescribed burning operations in the restricted area. They will follow the smoke management weather forecasts, smoke management instructions, and priority burning restrictions as provided by the Oregon Smoke Management Plan and the Operational Guidance for the Oregon Smoke Management Program (Directive 1-4-1-601).

- o Make daily reports relating to burning operations.
- 4. Department of Environmental Quality (DEQ): The State Forester and the DEQ are required by ORS 477.515 to approve a plan for the purpose of managing smoke in areas they shall designate. The Oregon Smoke Management Plan is the product of this statutory requirement.
- 5. Private Forest Landowners: It is the responsibility of private forest landowners under Oregon Forest Laws to do forest land prescribed burning according to the Oregon Smoke Management Plan. They are responsible to burn according to directions from State Forestry Field Administrators and to do mop-up of prescribed burns necessary to maintain air quality and visibility in designated areas and areas sensitive to smoke.

CONTROL.

Review: The Smoke Management Plan and Directive shall be reviewed at least every three years. The review will be conducted jointly by the State Forester and the Director of Environmental Quality and will include representatives of affected agencies and parties.

AGREEMENT:

In witness whereof, the parties have agreed to the guidelines set forth in this Directive.

State of Oregon
Department of Forestry

State of Oregon
Department of Environmental Quality

by: _____

by: _____

Title: _____

Title: _____

Date: _____

Date: _____

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DIRECTIVE
1-1-3-411 p. 1

OPERATIONAL DETAILS FOR THE OREGON SMOKE MANAGEMENT PLAN

PURPOSE. This directive provides guidelines and constraints necessary to the successful accomplishment of forest land management objectives and to the maintenance of a satisfactory atmospheric environment in designated areas.

SITUATION. Prescribed burning to reduce hazardous fuel accumulations and prepare logged or brushy areas for reforestation is applied on an average of 111,000* acres of Oregon's forest land each year. The burning is done on approximately 3,400 separate parcels (units) of forest land.

Some units are burned for hazard reduction only; however, most burning is done to reduce hazard and to improve the chances for successful reforestation of logged sites and brush fields. A reduction in the use of herbicides has increased the importance of fire as a silvicultural tool, particularly in the highly productive forest lands in western Oregon where brush competition can severely reduce the chances for successful reforestation on many sites.

Along with the recognition of the critical role fire has in the successful management of Douglas fir forests has come a critical awareness of the problems smoke from these fires can cause for residents of the state. This awareness has resulted in the development of the Oregon Smoke Management Plan. The original plan for managing smoke from forest lands was first developed by the Department of Forestry in coordination with other forest land management agencies and the forest industry. It was later made into law by the Oregon Legislature.

The Smoke Management Plan consists of the original plan (Directive 1-1-3-410) as defined by Administrative Rule and refinements developed by the Department of Forestry as new knowledge and skills have developed in the science of predicting atmospheric conditions relative to smoke movement.

AUTHORITY. Substantial authority is granted to the Forester by ORS 477.515 to develop a plan for the management of smoke produced by forest land burning. This statute provides that the Department of Forestry and the Department of Environmental Quality shall approve a plan for managing smoke in areas they will designate. The statute also specifies a variety of control measures the Forester may use to administer the plan.

ORS 477.515 also states that the Smoke Management Plan shall be developed by the State Forestry Department in cooperation with federal and state agencies, landowners and organizations that will be affected by the plan. The plan is filed with the Secretary of State and is promulgated as Administrative Rule OAR 629-43-043. The State Forester has administrative authority to develop operating policies, procedures and practices to meet the objectives of the plan.

OBJECTIVE. The objective of the Smoke Management Program is to keep smoke resulting from burning on forest lands from being carried to, or accumulating in designated areas, or accumulating in other areas sensitive to smoke; and to provide maximum opportunity for essential forest land burning consistent with this objective.

*This is a running average for the five year period ending in 1980.

OPERATIONAL DETAILS FOR THE OREGON
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POLICY. It is the policy of the Forester to manage prescribed burning on forest land with concern for all aspects of the environment and with particular consideration for the need for continuous forest production on Oregon's forest lands. It is also the policy of the Forester that the Smoke Management Plan, directives and guidelines issued relative to the plan be strictly complied with.

STANDARDS.

The Oregon Smoke Management Plan (Directive 1-1-3-410) provides a specific legal framework for the administration of the forest smoke management program for Oregon.

The State Forester is responsible for the coordination and control of the Oregon Smoke Management System. The plan applies to western Oregon. It is administered with full interagency cooperation with the U.S. Forest Service, Bureau of Land Management, Bureau of Indian Affairs, the Department of Environmental Quality and private forest industry.

The plan instructs each Field Administrator to maintain a satisfactory atmospheric environment in designated areas. The plan requires the Forester and the Field Administrator to continually monitor weather factors, advisories and air quality conditions in designated areas in conducting the burning program.

The plan establishes a set of limitations applicable to specified burning and mixing conditions. These limitations relate to tonnage of fuel per 150,000 acres which, ideally, may be burned under various sets of mixing conditions. Experience has proven these standards are adequate to protect designated areas only under ideal conditions. Frequently, more specific restrictions must be applied to meet air quality objectives.

The various standards used in the administration of the Smoke Management Plan follow:

A. Weather Forecasts

The Salem, Portland and Medford Fire Weather Offices provide twice daily smoke management forecasts. Each forecast provides a general discussion of meteorological conditions that influence air movement and atmospheric mixing conditions which will affect smoke movement and dispersion in the atmosphere.

Specific weather predictions are given for climatic zones within the area. A section of the forecast is devoted to the smoke mixing and dispersion characteristics of the atmosphere within the forecast area. This is determined by the stability of the air mass and the speed and direction of transport winds. Sections of the forecast provide information relative to burning conditions as well as air movement.

An outlook for the day following the forecast period is provided. The period of time covered by the outlook will depend upon the weather influences involved at any given time. Burning will be conducted in accordance with current forecast information.

OPERATIONAL DETAILS FOR THE OREGON
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B. Smoke Management Advisory

Smoke Management Advisories will be issued by the Salem Smoke Management Section during periods when weather is favorable for significant amounts of burning. The advisories provide constraints on burning in areas where the basic Smoke Management Plan may be inadequate to protect Designated Areas.

The advisories are based upon an analysis of the atmospheric conditions affecting smoke transport and dispersion and of the air quality conditions in designated areas which might be affected by forest land burning.

The advisories will be issued immediately after the Portland, Salem and Medford weather forecasts, usually at 8:30 am and 4:00 pm. The morning advisory will regulate the current day's burning. The afternoon advisory will state the next day's expected constraints, and is primarily to assist field units in planning.

Field units planning early morning ignitions (prior to 8:30 am) should use the prior afternoon's advisory for smoke management considerations. Ignitions planned after 8:30 am should adhere to the current morning's advisory.

Field Administrators are encouraged to discuss plans for early morning or night time ignitions with the Smoke Management Coordinator.

A smoke management "Hot Line" is in operation in the Salem Fire Weather Forecast Office. This line provides recorded weather information to any caller at any time. Recorded weather information is updated as follows:

1. During the period when the Priority Burning System is in effect, the previous day's 3:00 PM forecast will be updated at 6:30 AM.
2. At 8:00 AM and 3:00 PM the most current forecast will be recorded.

This information can be obtained by calling 378-2800.

C. Priority Burning System (See Appendix 3)

The Forest Land Burning Priority Rating System (Priority Burning System), was initiated to reduce the amount of forest land burning during the time when the maximum acreage of grass seed fields are being burned in the Willamette Valley. There are approximately 60 days during mid-summer when field burning has been given a high priority for use of the air shed in the valley for smoke dispersal. The Priority Burning System was developed by the Department of Forestry in coordination with the Department of Environmental Quality and with the cooperation of public and private forest land managers.

The Priority Burning System limits forest land burning during the 60-day period to units which must be burned during that time to meet the burning objectives. Only units with a high priority rating will be burned when the Priority Burning System is in effect. The Forester will provide notice to all Field Administrators when the Priority Burning System is initiated and rescinded.

OPERATIONAL DETAILS FOR THE OREGON
SMOKE MANAGEMENT PLAN

The priority burning period is established by the Department of Forestry upon the recommendation of the Department of Environmental Quality. The exact period varies from year to year and may extend for more or less than 60 days.

The procedures for rating and prioritizing burn unit is included in Appendix 3 of this directive. These procedures will be used on all units which may be burned during the summer months.

D. Air Stagnation Advisories

Air stagnation advisories will be issued by the Weather Service Forecast Office in Portland when atmospheric conditions are such that the potential exists for air pollutants to accumulate in designated areas for an extended period. During such times smoke and other pollutant sources within the designated area will create substantial air quality deterioration without the addition of smoke from outside sources. This condition is recognized in the administration of the Smoke Management Plan.

Smoke management advisories issued during an Air Stagnation Advisory will limit forest land burning to units which will contribute no smoke to a designated area covered by an Air Stagnation Advisory or an Air Pollution Alert. Burning during such periods will be closely controlled.

E. Measurement of Fuel Tonnage

The correct estimation of fuel tons that will be consumed by a burn is very important to the development and improvement of the smoke management program. It is essential that a reasonably accurate estimate of tons of fuel that will be consumed by a fire be reported in the burning plan.

The publication "Photo Series For Quantifying Forest Residues" will be used for making fuel tonnage estimates. Instructions for the use of this publication in estimating tonnage are included in Appendix 4.

A publication has been developed for western Oregon and eastern Oregon forest types.

F. Reporting

Three basic information items are essential to the administration of the burning program. These items are: (1) unit descriptions, (2) planned burns, and (3) accomplished burns. Additional information is needed to provide data for analysis, reporting and evaluation of the program procedures. Reporting will be accomplished in accordance with Appendix 1, Detailed Instructions for the Oregon Smoke Management Reporting System.

RESPONSIBILITY.

- A. State Forester. The State Forester is responsible for the coordination of the Smoke Management Plan and the Operating Details between the National Weather Service, United States Forest Service, Bureau of Land Management, Oregon Forest Protection Association, Department of Environmental Quality, and any regional air quality

OPERATIONAL DETAILS FOR THE OREGON
SMOKE MANAGEMENT PLAN

authorities. In addition, the State Forester, through the Forest Protection Division, has the responsibility to issue additional restrictions on prescribed burning in situations where the air quality of the entire state or any part thereof is, or would likely become, adversely affected by smoke.

- B. Forest Protection Division - Fire Operations Section. The Fire Operations Section is directly responsible for providing weather forecasting services for smoke management purposes.

Burning advisories will be issued in concurrence with weather forecasts and in coordination with the Department of Environmental Quality (DEQ) when the priority burning restriction is in effect or during air pollution alerts. Burning advisories will be written in clear and concise terms. The Operations Section will provide more specific information when requested by telephone.

The Operations Section will monitor the burning program currently. Monitoring will be intensified on marginal days and will involve aircraft observation and telephone calls to the districts relative to local conditions.

The Operations Section will work with the areas and districts in identifying training needs and in developing training packages.

Operations Section staff will provide assistance on the ground wherever needed. They will maintain a close liaison with field operations through the Smoke Management Meteorologist and normal staff-line relationships.

The Operations Section will maintain a smoke management records system. They will produce an annual summary of burning and smoke management activities. They will also provide available data to meet the immediate needs of staff and line personnel upon request.

- C. Area Directors and District Foresters. Each Field Administrator issuing burning permits under the Smoke Management Plan will manage prescribed burning on forest land with respect to other aspects of the environment in order to maintain a satisfactory atmospheric condition in designated areas. This effort will also be applied to special situations where local conditions warrant in areas not defined as designated areas but which are sensitive to smoke. Accomplishment will involve a consideration of weather forecasts, burning advisories, acreages involved, amounts of material to be burned, evaluation of potential smoke column vent height, direction and speed of smoke drift, residual smoke, mixing characteristics of the atmosphere, and distance from the designated area of each burning operation.

Each Field Administrator will evaluate down-wind conditions prior to implementation of burning plans. Upon notice from the Forest Protection Division that air in the entire state or portion thereof is, or would likely become, adversely affected by smoke, the affected Field Administrator will terminate burning. Upon termination, any burning already under way will be completed; residual burning will be mopped up as soon as practical; and no additional burning will be attempted until approval has been received through the burning advisory.

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Field Administrators will make daily reports covering burning operations. Monitoring of smoke behavior will be intensified on marginal days. This will be done by use of lookouts, aerial observation and on-site observation of smoke behavior.

Any wildfire that has the potential for smoke input into a designated area will be reported immediately to communications in the Fire Operations Section.

- D. Department of Environmental Quality (DEQ). The State Forester and the DEQ are required by ORS 477.515 to approve a plan for the purpose of managing smoke in areas they shall designate. The Oregon Smoke Management Plan is the product of this statutory requirement.

The DEQ cooperates with the Department of Forestry in all phases of the administration of the Smoke Management Plan. Particularly important is current and timely information on air pollution levels in designated areas and priority burning periods.

- E. United States Forest Service (USFS), Bureau of Land Management (BLM), and the Bureau of Indian Affairs (BIA). The USFS, BLM and BIA have signed agreements with the Department of Forestry and the DEQ to comply with the Oregon Smoke Management Plan. These agencies have agreed to follow the direction of the Forester in conducting burning operations. They follow the smoke management weather forecasts, smoke management advisories and priority burning restrictions.

National Forests within the state will coordinate currently with the Forester on smoke management and burning plans. The State Director of the Bureau of Land Management has directed BLM field people to comply with the Smoke Management Plan as administered by the State Forester.

- F. Private Forestry Operations. It is the responsibility of private forest operators under Oregon Forest Laws to burn according to the Oregon Smoke Management Plan. They are responsible to burn according to directions from State Forestry field personnel and to do mop-up of the burns necessary to prevent smoke intrusion into designated areas and to prevent fire escape.

Summary:

The State Forester is responsible for the administration of the Smoke Management Plan in Oregon. He does this in coordination with the Department of Environmental Quality and with the cooperation of the public land management agencies.

The Smoke Management Plan places the specific responsibility for making day-to-day decisions upon Field Administrators. The Forest Protection Division is responsible for providing meteorological and technical assistance to Field Administrators and for monitoring the program.

REPORTING SYSTEM
SMOKE MANAGEMENT PLAN

Objective: The Department of Forestry's communications center operates a computer program to record and process smoke management data. Data is received and transmitted through the State Forestry and U.S. Forest Service teletype systems.

The objectives of the reporting system are to provide a record of:

1. Locations and amounts of planned burning for the current day.
2. Locations and amounts of burning accomplished the previous day.
3. Smoke intrusions, including source, area affected, duration, and information relative to the cause of the intrusion.
4. Annual summaries of data.

Area Included:

The reporting system includes all of western Oregon, plus those parts of Hood River and Wasco Counties within the boundary of the Mt. Hood National Forest, and the part of Klamath County within Crater Lake National Park. Data is grouped by Administrative Units, i.e., each National Forest, Crater Lake Park, and each State Forest Protection District.

Types of Burning to be Included:

All burning related to forest management activities should be included in the reporting system. Some examples are slash and brush disposal after logging, road building, scarification, or burning of brush fields for reforestation. Other examples which should be included are underburning, or brush field burning for stand improvement or wildlife habitat.

Types of Burning That Should Not be Included:

Burning for debris disposal or burning related to *agricultural activities should not be included in the reporting system. Some examples are household or yard maintenance debris such as paper, leaves, lumber, etc., and grass or grain stubble. Small piled slash areas such as for a homesite should not be included if the amount to be burned is less than 5 tons.

While these examples would not be reported in the Smoke Management Data System, any western Oregon burning subject to permit under ORS 477.515 must conform to the Smoke Management Plan. Also, in some areas "backyard" and stubble burning must be done in compliance with Department of Environmental Quality rules, rather than the Oregon Smoke Management Plan.

- * The range burning on Class III (Grazing) lands, common in Coos and Douglas Districts, should not be included in the Oregon Smoke Management System (OSMS) Data System. This burning should be reported to Salem daily as a separate item following "Accomplishment Report". For each permit exceeding 5 acres, report township, range, section and acreage burned.

REPORTING SYSTEM
SMOKE MANAGEMENT PLAN

Procedure:

Three basic steps are involved in the reporting system:

1. A "Unit Description" is submitted to Salem for each "burn unit"* as provided on Reporting System Coding Sheet (Part I, Form 1-1-3-400). This results in a "Unit Number" assigned to the specific burn unit, usually months or weeks before burning is to be done.
2. "Unit Numbers" of planned burns are submitted by field offices on the day burning is to be done. This results in "Planned Burns" (Part II of Form 1-1-3-400). Planned Burns are listed daily on the teletype network to all users and to DEQ.
3. An "Accomplishment Report" is submitted by field offices the day after burning, again using the "Unit Number" as a reference (Part III of Form 1-1-3-400). The Accomplishment Report is listed daily on the teletype along with Planned Burns.

Detailed instructions for Reporting System Coding Sheet (Form 1-1-3-400)
(Also see instructions on back of form.)

Part I - Unit Description and Number Assignment.

Example entry for Part I, Form 1-1-3-400 (Unit Description).

Raw Data: This is the information needed from a field office to begin a record for a specific area to be burned. The data may be entered on the form and mailed or sent by teletype. Forms mailed should be addressed to:

Department of Forestry
Attn: Communications Section
2600 State Street
Salem, OR 97310

* Unit--this term is used to describe a contiguous area which will be burned at the same time. This could include a right-of-way containing piled slash if the area is considered one project and will be burned at one time.

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REPORTING SYSTEM
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Field No.
Data Entry

1	This example is located in: West Oregon District	WO
2	This example is located in: Benton County	2
3	This example is located in: Township 11S, Rng. 7W, Sec. 12	11S-7W-12
4	Average elevation of the Unit is 1,500 feet above sea level	1500
5	Distance from Designated Area, to nearest mile, is 12 miles	12
6	Type of burn will be broadcast	B
7	Acreage in unit to nearest acre is 15	15
8	Estimated <u>tonnage that will be consumed by fire</u> is 150	150
9	Burn is rated high priority. (See Priority Rating System, this directive and instructions, Part I, Field 9, on back of Form 1-1-3-400)	H
10	The unit is privately owned	P

Summarized for teletype transmittal, this data would appear as follows:

WO,2,11S-7W-12,1500,12,B,15,150,H,P

Teletype transmittal of numerous entries allows a tape of field data to be made as the data is received. This tape allows direct data entry into the computer. Therefore, it is critical that each element of data (field 1, 2, 3, etc.) be separated by a comma. Also, the Township, Range and Section must be separated by a hyphen. When the last data entry (field 10) is entered, do not use a comma. Start a new line by using line feed, carriage return. (On USFS teletypes, it is helpful if the "rubout" key is also used after line feed and carriage return.)

If an error is made at any point in a line of data, type three "X's" (XXX). The computer will recognize "XXX" and ignore the data in that line. Use line feed, carriage return, etc., and start the entry again.

Number Assignment

The Salem Communications Clerk enters the unit description into the computer, then sends a "Unit Verification and Number Assignment" on the teletype, to the appropriate field office(s).

The teletype will appear as follows:

SMOKE MANAGEMENT
UNIT VERIFICATION AND NUMBER ASSIGNMENT FOR 02/01/81

	WEST OREGON			BENTON						
*Unit No.	Twp	Rge	Sec	Elev.	Dist.	**Type	Acres	Tons	***Tons/Ac.	Owner
912	11S	07W	12	1500	12	B-H	15	150	10	P

- * Automatically assigned by computer.
- ** Type and priority are both listed, i.e., B = Broadcast, H = High priority.
- *** Automatically calculated by computer.

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REPORTING SYSTEM
SMOKE MANAGEMENT PLAN

Field offices should review these as soon as possible. If any errors are found, contact the Communications Clerk to correct the data.

This completes the entry process, Part I of Form 1-1-3-400.

PART II. Planned Burns

Example entry background: The field has decided to burn Unit No. 912 (the number assigned by the computer in Part I above) today, July 20, 1981. Estimated ignition time is noon. The entire unit will be burned.

Data to be sent to Salem by teletype:

<u>Field No.</u>		<u>Data Entry</u>
1	Unit Number 912	912
2	Estimated ignition time	1200
3	Tonnage to be burned	150

The teletype data line will appear as follows:

912,1200,150

If an error is made at any point on a line of data, three X's should be entered, then use line feed and carriage return, and enter the correct data.

Do not plan right-of-way burns. (See Form 1-3-4-420)

When all planned burns have been received from the field, the Communications Clerk enters the data into the computer, which results in a teletype listing as follows:

SMOKE MANAGEMENT

PLANNED BURNS FOR 07/20/81

Unit No.	WEST OREGON			BENTON		Acres	Tons	**Time	
	Twp	Rge	Sec	Elev.	Dist.				Type
912	11S	07W	12	1500	12	B-H	15	150	1200

** Estimated ignition time. This replaced tons/acre shown on Planned Burns, beginning January 1, 1981.

PART III. Accomplishment Report

Example entry background: Unit 912 was ignited as planned in the above example. However, only half the unit burned. Smoke from the burn entered Corvallis.

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Data to be sent to Salem by teletype on July 21.

<u>Field No.</u>		<u>Data Entry</u>
1	Unit Number	912
2	Actual Ignition Time	1200
3	Actual tonnage burned	75
		*Yes

The teletype data line will appear as follows:

912,1200,75, Yes (Same instructions as above for errors, etc.)

* Report a smoke intrusion by adding YES at the end of the data field.

When a smoke intrusion occurs, Form 1-1-3-410, Smoke Intrusion Report, also must be completed as soon as practical. Usually, preliminary information can be telephoned. See Appendix 2 Smoke Intrusion Report.

All planned burns must be "accomplished" the following day or on the next business day if the Communications Center is not operational on a weekend or holiday. If no burning was done, the data line would appear as follows:

912,0,0

Units burned during weekends or holidays when the Communications Center is closed should be reported in groups by the date burning was done.

Use Form 1-3-4-420 to report right-of-way burns.

The accomplishment report sent out from Salem Communications Center will appear as follows:

SMOKE MANAGEMENT
RESULTS SUMMARY FOR 7/21/81*

Unit No.	WEST OREGON			BENTON		Acres	Tons	**Time	
	Twp	Rge	Sec	Elev.	Dist.				Type
912	11S	07W	12	1500	12	B-H	15	75	1200

* Burning actually occurred 7/20

** Actual Ignition Time. This replaced tons/acre beginning January 1, 1981.

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REPORTING SYSTEM
SMOKE MANAGEMENT PLAN

Additional Instructions - "Available Tons" and "Tons Burned":

Background:

Tons of fuel burned is a critical element in the data system. It is used to estimate emissions from forest burning. It is important to private, state, and federal land managers, and air quality enforcement agencies. Therefore, the reporting of this information must be as accurate as possible. There is no advantage to be gained by knowingly reporting amounts smaller or larger than actually available or actually burned.

Entering Data:

When entering data in Part I, Field 8, the tons should be the amount expected to be burned under ideal burning conditions, not the total fuel loading. For example, old growth slash may total 150 tons/acre before burning. After burning it is not uncommon to have as much as 100 tons/acre (usually the larger material) remaining. In this case, 50 tons/acre should be the basis for estimating the "available tons". If the unit area was 10 acres, then $10 \times 50 = 500$ tons - the amount which should be entered in Part I, Field 8, of Form 1-1-3-400.

Planning a Burn:

The data system was modified in 1979 to allow planning all, or part, of a unit on a given day. If only part of a unit will be burned, the tons to be burned that day should be entered. (Part II, Field 3, Form 1-1-3-400.) The computer will list that amount on the "Planned Burn" list for that day.

Resulting a Burn:

Report the tons that actually burned.

Summaries Available:

In addition to the daily planned burns and results listings, several summary printouts are available. At approximately 3-month intervals, the Communications Clerk will send each field administrative unit the following summaries. Also, they may be obtained at any time by calling the Communications Clerk:

REPORTING SYSTEM
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1. Available Units. Lists all units that have not been reported as 100% burned. Last item shown is percent of tonnage unburned.

Available Units Format:

SMOKE MANAGEMENT
AVAILABLE UNITS

WEST OREGON							
Unit	Twp-Rng-Sec	Elev.	Distance	Type	Acres	Tons	Left
912	11S-07W-12	1500	12	B-U-M	15	75	50%
					15*	75*	-

*Total acres and tons by District.

2. Accomplishment Report. Lists all units that have had any burning done. Tons is the cumulative amount burned prior to the printout date.

Accomplishment Report Format:

SMOKE MANAGEMENT
ACCOMPLISHMENT REPORT

WEST OREGON						
Unit	Twp-Rng-Sec	Elev.	Distance	Type	Acres	Tons
912	11S-07W-12	1500	12	B-H-M	15	75
1*					15*	75*

* Total units, acres and tons by District.

3. Problem Summary Report. This lists all burns from which an intrusion was reported. The last item shown is month and day the burn was conducted.

REPORTING SYSTEM
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Reporting Schedules

Unit Descriptions

These may be transmitted any time during office hours; however, field offices should avoid periods when the teletype is scheduled for other data such as incoming weather or fire reports. Also, waiting to submit unit descriptions until the day the unit is to be burned places unreasonable demands on the data system. Whenever possible, these should be sent well before the day burning will occur.

Accomplished and Planned Burns

These are to be sent at 9:30 AM. The Salem Communications Clerk will transmit "Smoke Management Accomplished and Planned Please" at approximately 9:30 AM, after which field units should report in the following format: (Also see Reporting System pages 4-5 this Appendix)

District Identifier, Accomplished (yesterday's burning)

Unit No., Actual Ignition Time, Tons Burned, YES (only if intrusion occurred)

(use a new line for each unit number)

Planned (for today)

Unit No., Estimated Ignition Time, Tons Planned,

(use a new line for each unit number)

End - District Identifier

Smoke Management (Daily summaries from Salem)

As soon as Accomplished and Planned reports are processed in Salem, the Communications Clerk will transmit the summaries to field units and Department of Environmental Quality. Contents of these summaries are shown on pages 4 & 5 of this appendix.

SMOKE INTRUSION REPORT FORM 1-1-3-410

Definition

A smoke intrusion occurs when any visible or monitored smoke from prescribed forest burning enters a Designated Area below that Designated Area's ceiling.

Background

Smoke intrusions vary greatly in duration, concentration and effect on a Designated Area. For example, a smoke layer well above the surface would not affect the monitored air quality in a Designated Area, but is still an intrusion under the Oregon Smoke Management Plan. Smoke accumulating at the surface, and remaining overnight adversely affects air quality more than if smoke drifts through, clearing in an hour or two.

Purpose

This report provides a descriptive record of smoke intrusions, supplemental to the "Problem Burns" reported in the Smoke Management Data System. Reports are annually summarized in the "Smoke Management, Annual Report" compiled by the Smoke Management Section.

Responsibilities

Field units, i.e., State Districts or National Forests, are responsible for monitoring smoke from their burns, and reporting intrusions to the Smoke Management Coordinator:

1. On the burning "Accomplishment Report" given daily, and,
2. Through the use of form 1-1-3-410.

The Salem Smoke Management Coordinator is responsible for:

1. Combining field reports into one intrusion summary when more than one field unit is involved.
2. Liaison with Department of Environmental Quality to develop mutually acceptable descriptive reports of smoke intrusions within 3 days of the occurrence.
3. Completion of Form 1-1-3-410A, summary of meteorological information.
4. Preparing an annual summary of intrusions.

Detailed Instructions

When to report:

Any intrusion is to be reported as soon as possible. If 7-day operations are not in progress at Salem, then report on the first workday after the incident.

SMOKE INTRUSION REPORT FORM 1-1-3-410

It is also helpful to report potential intrusions, as soon as it appears that smoke may enter a Designated Area. This allows the Smoke Management Coordinator to obtain monitoring data prior to and during the incident. It also facilitates public relations work resulting from an incident.

Data Entries (See sample form page 4 of this appendix.)

Smoke Origin

1. The unit number(s) of burns contributing to the intrusion.
2. Date ignition occurred.
3. Name of State District, National Forest (or Crater Lake Park).
4. Wind direction and speed at burn site at time of ignition.
5. Time ignition began, use 24 hour clock time.

Intrusion Description

6. Brief description, including name(s) of communities, and extent of area affected. (For example, smoke entered Willamette Valley near Dallas, drifted SE through Monmouth to Albany.) Check yes if smoke entered city of 10,000 including 3-mile radius around city limits.
7. Date intrusion entered Designated Area (This may be later than date of ignition).
8. Time (24 hour clock) smoke entered Designated Area.
9. Number of hours smoke was present in Designated Area.
10. Check proper box. Main plume refers to smoke produced during active or convective phase of burn. Residual smoke is that which is produced after fire dies down to smoldering phase. Drift smoke is that which accumulates in one area, later moving into a Designated Area, or is split off from a main plume.
11. If smoke in Designated Area was at ground level, enter "surface" or "0" for base elevation. If smoke did not reach the ground, enter best estimate of distance between ground and bottom of smoke cloud.

For depth, enter best estimate of distance from bottom to top of smoke layer.
12. Check box which best describes smoke behavior in the Designated Area. Other descriptive phrases may be substituted if field reporter wishes.
13. Best estimate of visibility in miles in the Designated Area. (Airports are often the best source of information.)

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SMOKE INTRUSION REPORT FORM 1-1-3-410

14. Leave blank if no other visibility impairment was present or several may be checked.
- 15.&16. Self-explanatory.
17. Name of field person reporting the intrusion.

SMOKE INTRUSION REPORT

OREGON SMOKE MANAGEMENT PLAN

This information must be telephoned to Salem, 378-2518, no later than the next workday after intrusion.

Smoke Origin: Unit Number(s) 1 Date Burned 2
District/Forest 3 Mo. Day Year
Surface Wind Direction & Speed 4 at ignition time 5.

Intrusion Description

Area affected (Portion of DA where smoke was visible or monitored)

6

Did smoke affect populated area? (cities over 10,000 population, plus Lebanon, Tillamook) Yes No

Date 7 Time 8 smoke entered area. Duration 9 hrs.

Smoke Type: Main Plume Residual Drift Smoke

Vertical Characteristics: Base elevation (above terrain) _____ ft.
Depth _____ ft.

Behavior: Smoke remained at same level Smoke rose
Smoke subsided Smoke layered & maintained identity
Smoke dispersed, lost identity

Prevailing Visibility (at time smoke entered area) 13 miles

Other visibility restricting sources present (check those which apply)

- | | |
|---|--|
| 1. Field Smoke <input type="checkbox"/> | 5. Fog <input type="checkbox"/> |
| 2. Wildfire Smoke <input type="checkbox"/> | 6. Other (specify) <input type="checkbox"/> |
| 3. Dust <input type="checkbox"/> | 7. Unable to Identify <input type="checkbox"/> |
| 4. Resident Emmissions <input type="checkbox"/> | |

Cause (Your explanation of reason smoke intrusion occurred)

15

Comments: (Any additional information which may clarify report)

16

Reported by 17
Name

FOREST LAND BURNING PRIORITY RATING SYSTEM

The Forest Land Burning Priority Rating System (Priority Burning System) identifies units* which require burning during the summer months to meet silvicultural and reforestation objectives. It provides a means for prioritizing units selected for summer burning into "high", "moderate", and "low", categories.

The objective of the Priority Burning System is to more closely regulate forest land burning during the approximately 60 mid-summer days when field burning is being accomplished in the Willamette Valley. The system insures that only forest units which must be burned during the hotter, drier mid-summer period will be burned while field burning is taking place.

The area covered by the system is that part of western Oregon north of the North Fork and main stem of the Umpqua River, excluding the Steamboat and Diamond Lake Districts of the Umpqua National Forest.

Rating forms for the Cascade and Coast Ranges were developed and field tested by two interagency-industry task force groups. The system is designed to identify those units which, because of the nature of the site, fuel and silvicultural requirements, must be burned during the hotter, drier mid-summer period.

The Priority Burning System is closely coordinated with the Department of Environmental Quality. The start and ending of the priority period** will be determined by the Forester with the advice of the DEQ on field burning levels. The priority burning systems will not be in effect when field burning is stopped, or at very low activity levels. Also, non-priority burning may be allowed in specified areas when the Forester determines that such burning will not impact the Willamette Valley.

Notification of the beginning, ending, and any areas exempt from the Priority Burning System will be included with daily smoke management advisories issued from Salem.

* Unit: A term used to describe a contiguous area of forest land with specific boundaries upon which some activity or activities will be conducted.

** Priority Burning Period: It is a period of time when only "high priority" forest land units will be burned. The 60 days is an approximate span of time; the period will generally begin in mid-July when heavy field burning has begun and will end when conditions no longer permit this level of burning in early September.

FOREST LAND BURNING PRIORITY RATING SYSTEM

Certain special areas will be classed as high priority without use of the priority rating procedure. Such areas are characterized by special or unique management objectives which make use of a rating system impractical. Such units include:

- Vegetation management areas, such as huckleberry fields.
- Visual management areas which must be burned under very restrictive prescriptions.
- Special watershed areas requiring burning.
- Game habitat improvement burning.
- Campground development.
- Special reseach projects.
- Right-of-way burning which must be done during the summer.
- Prescribed under-burning.
- *High elevation units.

-
- * High elevation units in the Cascades which may be burned with no risk of impact on the designated area will be considered high priority under the following circumstances:
- a. High elevation units must be at least 1000 feet in elevation above the designated area ceiling (designated area ceiling is 2500 feet). Thus, any unit must be at or near 3500 feet elevation to fall into this category.
 - b. In no event will any unit burned in this category be less than 1000 feet above a stable layer above the designated area.
 - c. There must be a sustained westerly air flow in the vicinity of the unit with no probability of a wind shift toward the designated area within 12 hours of ignition time.
 - d. All units must be at least 40 miles from the designated area.
 - e. All units must be cleared through the Smoke Management Coordinator prior to ignition.

FOREST LAND BURNING PRIORITY RATING SYSTEM

Instructions For Using Priority Rating Forms For Evaluating Forest Land Burning Units

The Preliminary Priority Burning Chart will be used for all units which are desirable to burn during the summer months. This chart is used to indicate the treatment objective for the site and whether burning is needed. If burning is needed, the season when burning objectives can best be met are identified. If summer burning is required or desirable, the appropriate Coast Range or Cascade Range Prioritizing Rating Form is used.

Using the Preliminary Priority Burning Chart Form 1-1-3-403

Listed under "treatment objective" are seven of the most common treatment objectives. More than one treatment objective may be present for any single unit. Additional space is provided for treatment objectives not listed.

When treatment objectives have been identified, the "Burning Required?" column is used to indicate whether or not burning is required to meet the objective.

If the "Burning Required?" column is checked "yes", the "When Can Burning Best Be Accomplished" column is checked as to when burning should be accomplished to meet the treatment objective. Where "Summer" is checked, the Coast or Cascade Range form is to be used to further evaluate the unit.

The "Comments" column is available for any special considerations such as special objectives, pre-treatment efforts required or other factors.

Burning Priority Rating Form for the Cascade Range Form 1-1-3-402

This form is adapted for the westside of the Cascade Range north of the North Fork and mainstream of the Umpqua River.

The "Slope" column is used to evaluate the way the steepness of the terrain will affect fire behavior on the unit. Fire will spread and broadcast much more readily on steep slopes than on gentle slopes or flat ground. Points are assigned for each slope class.

The "Special Considerations" column includes a variety of factors which relate to the need to burn during the summer months or to the risk of down-canyon winds advecting smoke into the designated area.

The "Aspect" column is used to consider exposure as it affects drying of fuels and fire behavior. For example, south exposure units receive much more direct sunlight and will be dry enough to burn many more days than north slopes.

The "Silvicultural Consideration" column include things such as pre-treatment requirements before burning, availability of essential planting stock or cost and potential for success of alternative treatments.

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FOREST LAND BURNING PRIORITY RATING SYSTEM

The "Soil Consideration" relates to soil which may be damaged if too dry, or too moist soils which preclude burning except during mid-summer drought periods. Also included are areas where excessive soil damage will result from mechanical piling activity.

The points are totaled. Any unit scoring 50 points or more is a high priority unit which may be burned during the Priority Burning Period. Units with less than 50 points will not be burned while the priority burning restriction is in effect.

Burning Priority Rating Form For the Coast Range Form 1-1-3-401

The "Plant Community" column relates to the plant community on the site and the difficulty of reforesting the site with desirable species. For example, the Salmonberry-Thimbleberry plant community is extremely difficult to reforest without burning or repeated chemical applications. The most difficult plant community to reforest receives the highest point values.

The "Fuels Overstory" relates to the fuel type that will remain after logging or treatment. Fuel types which will burn readily are rated lower than the Alder-Salmonberry combinations that are difficult to burn under ideal conditions.

The "Location" column relates primarily to marine air influence on drying and the probability of summer fog intrusions. Point values increase as the coastline is approached and in fog influx corridors.

The "Aspect" column uses the same consideration as the Cascades form. North slopes may be burned on much fewer days than can south slopes.

The "Fuel Treatment" column relates to the difficulty and effectiveness of alternate treatments and the pre-treatment essential to achieving the burning objectives. Units requiring mass ignition with explosive fuses are given a high point score because it is essential to fire such units at the earliest burn day following installation of the ignition equipment. Such units normally fall into a high category for other reasons also.

As in the Cascades, a score of 50 points or more is needed to place a unit in the priority burn category. Units with less than 50 points will not be burned during the Priority Burning Period.

FORM 1-1-3-411

UNIT _____

Priority Rating _____

A SLASH BURNING PRIORITY RATING FORM FOR THE COASTAL RANGE - WESTERN OREGON

SERIAL COMMUNITY (UNDERSTORY)	FUELS (OVERSTORY)	LOCATION	ASPECT (DOMINANT)	FUEL TREATMENT NECESSARY TO ACHIEVE SUCCESSFUL BURNING
Salmonberry, thimbleberry, red huckleberry, sword fern, vine maple <u>15</u>	Alder with a salmonberry salal undercover or a brush dominant site or predominately hemlock stand <u>15</u>	Strong marine influence of coastal strip up to 10 miles inland generally and 15 miles in fog influx* corridors or areas west of the coast range where the fog persists late in the day. <u>15</u>	NORTH NE NW <u>20</u>	Unit to be treated with dessicant or herbicide or hand slashed to meet vegetation control objective, and/or unit must be burned during dry period to reduce competing vegetation <u>18</u>
Salal, bracken fern, ocean spray, vine maple <u>8</u>	Spruce/hemlock or alder with 10-30% fir <u>12</u>	West of summit of the Coast Range <u>8</u>	E SE <u>8</u>	Unit can be mechanically bunched or slashed, or dessicant or herbicide applied to produce burn which will reduce competing vegetation. <u>12</u>
	Second growth fir and alder. Fir is 30% or more of the stand. <u>10</u>	East of the summit of the Coast Range <u>6</u>	SW W <u>6</u>	Unit has some hand slashing. No dessicant or herbicide used. Sufficient heavy slashing present to carry broadcast fire. <u>6</u>
Sword fern, Oregon oxalis <u>4</u>	Second growth or mature fir stand. 50% or more of stand is fir <u>4</u>	Valley fringe type <u>4</u>	SOUTH <u>4</u>	Burning will meet the vegetation control objective with little or no fuel treatment <u>4</u>

Point system: 50+ High
35-50 Medium
Under 35 Low

*Fog influx corridors are areas where marine air flows through a drainage into the Valley--included are the Nestucca, Salmon, Siuslaw, Yaquina, Alsea, Columbia and Umpqua Rivers.

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Form 1-1-411

A SLASH BURNING PRIORITY RATING FORM FOR THE CASCADE RANGE IN WESTERN OREGON

(This form is adapted for the west side of the Cascade Range, north of the North Fork and main stream of the Umpqua River)

UNIT _____

Priority Rating: _____

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SLOPE	SPECIAL LOCATION CONSIDERATIONS	ASPECT	SILVICULTURAL CONSIDERATIONS	SOIL CONSIDERATIONS
Less than 15% slope <u>15</u>	High elevation (short burning season) or critical east wind exposure which cannot be reasonably disposed of at other times. *High value at Risk exposure <u>20</u>	N NE NW Slopes <u>20</u>	Site preparation by burning is required. Dessiccant spray required and can only be burned in this summer period or pretreatment already made, or type of planting stock available is critical. <u>18</u>	Summer burning required to achieve low intensity burn, or area with high summer soil moisture. Area cannot be mechanically treated. <u>15</u>
15% to 40% slope <u>10</u>	Moderate east wind exposure, or Access needs to be put to bed before fall rains. *Medium value at risk exposure <u>10</u>	E SE Slopes <u>8</u>	Moderate needs for burning by site preparation - other site preparation measures more expensive; or planting stock availabilities fairly critical <u>10</u>	Critical soils requiring light burn; Mechanical disturbance must be kept to a minimum <u>8</u>
More than 40% slope <u>4</u>	Exposed to down canyon air movement into Designated Area. *Low value at Risk exposure <u>4</u>	S SW W Slopes <u>4</u>	 <u>4</u>	Mechanical treatment possible but undesirable for this site. <u>4</u>

Priority: 50+ points High
 35-50 points Moderate
 Less than 35 points Low

*Value at Risk Exposure defined in "Forest Residues Management Guidelines".

Example: A unit which must be burned on a very specific prescription to protect high values at risk will have to be burned when prescribed conditions occur. This would fall in the High category since the prescribed conditions may occur during the summer burning period.

NO "high elevation units" on reverse side of this

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"High elevation Units" which may be burned with no risk of impact will be considered high priority under the following circumstances:

- a. High elevation units must be at least 1000 feet in elevation above the designated area ceiling (designated area ceiling is 2500 feet). Thus, any unit must be at or near 3500 feet elevation to fall into this category.
- b. In no event will any unit burned in this category be less than 1000 feet above a stable layer above the designated area.
- c. There must be a sustained westerly air flow in the vicinity of the unit with no probability of a wind shift toward the designated area within 12 hours of ignition time.
- d. All units must be at least 40 miles from the designated area.
- e. All units must be cleared through the Smoke Management Coordinator prior to ignition.

PRELIMINARY PRIORITY BURNING CHART

This chart is to be used to indicate the treatment objective and whether or not burning is required to meet that objective. If burning is indicated, the period when that burning can best be accomplished will be indicated. Units which are checked for summer, spring-summer or summer-fall will then be evaluated on the Coast or Cascade Range Slash Burning Priority Status form for assignment of priority

UNIT: _____

TREATMENT OBJECTIVE	Burning Required?		When can burning best be accomplished?			UNIT COMMENTS
	YES	NO	Spring	Summer	Fall	
1. Reduce duff layer, root mat or prepare seed bed						
2. Reduce or eliminate mechanical barrier to planting or seeding						
3. To control competing vegetation						
4. To eliminate or control shading for seeded or planted stock						
5. To control animal habitat, insect or disease						
6. To reduce overall fuel loading in the area to reduce fire hazard						
7. Reduce fire hazard in high risk areas						
8.						
9.						
10.						

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ESTIMATING TONS OF FUEL CONSUMED IN PRESCRIBED BURNS

The Photo Series for Quantifying Residue* provides reasonable means for estimating the tons of fuel per acre that will be consumed by a prescribed burn in residue left after logging. This publication contains 6 series of photographs displaying different forest residue loading levels, by size class, for areas of like timber types and cutting practice.

Information with each photo includes measured weights, volumes and other residue data, information about the timber stand and harvest and thinning actions, and fuel ratings. These photo series provide a fast and easy-to-use means for quantifying existing residues. An evaluation of the portion of each size class of fuel that will remain after burning will provide a reasonable estimate of the fuel which will be consumed by fire. It must be emphasized that this system, while not perfect, will provide reasonable estimates if used consistently. Experience in its use will increase the ease of using it and improve the accuracy of estimates.

Procedures for use of the photo series for estimating fuel tonnage which will be, or has been, consumed by fire follows:

1. Select the loading rank, forest type, forest size class, and cutting practice as explained on page 7 and 8 of the photo series. Selection of the loading rank may best be done by looking at the photo series after selecting the other three characteristics.

Example: Douglas Fir (FD0 type, size class 4 (20 inch dbh), clear cut (CC) will identify the series of photos from which a photo can be selected which is most representative of the slash unit being measured.

2. When the representation photo is selected the Data sheet for that fuel loading can be used to make the fuels estimate.

Using 7-Df-4-CC (page 22) as our example and assuming:

<u>Fuel size class</u>	<u>Weight/Acre</u>	<u>% that will be burned</u>
0.25-1.0	4.9	100%
1.1-3.0	11.3	95%
3.1-9.0	22.0	60%
9.0-20.0	13.9	20%
20.1+	45.0	10%

The following calculations will give a tonnage estimate per acre:

$$\begin{array}{r} (4.9 \times 100\%) + (11.3 \times 95\%) + (22.0 \times 60\%) \\ + (13.9 \times 20\%) + (45.0 \times 10\%) = \text{Tons per acre} \\ 4.9 + 10.7 + 13.2 + 2.8 + 4.5 = 36.1 \text{ tons per acre.} \end{array}$$

Examination of units before and after burning will increase the accuracy of estimating the percentage of each fuel type that will be consumed.

* USDA Forest Service General Technical Report PNW 51, 1976. Photo Series for Quantifying Forest Residues in the coastal Douglas-fir - Hemlock type and the coastal Douglas-fir - hardwood type. Also Technical Report PNW-52, 1976 (same title) for Ponderosa pine types, Ponderosa pine and associated species type and Lodgepole pine type.

A CHANCE TO COMMENT ON.....
PROPOSED VISIBILITY PROTECTION PLAN FOR CLASS I AREAS

NOTICE OF PUBLIC HEARING

WHO IS : Residents, industries and Federal Land Managers
AFFECTED within the State of Oregon.

WHAT IS : The Department of Environmental Quality is
PROPOSED proposing to amend OAR 34-20-047, Section 5.2
of the Oregon State Implementation Plan by adopting
a Visibility Protection Plan for Oregon's Class I
areas. Oregon has 11 wilderness areas and one
national park. Monitoring data collected since 1982
has indicated significant man-made visibility
impairment in the Northern and Central Cascade Class
I areas about one-fourth of the summer daylight
hours, primarily as a result of smoke from forest
prescribed burning and grass field burning.
Adoption of the proposed Visibility Protection Plan
is expected to reduce the frequency of visibility
impairment by more than one-third over the next 5
years during the July 4 weekend-Labor Day period.
Additional improvements are expected over the next
15 years as a result of the long-term strategy.
During the July-August period, Willamette Valley
grass field burning will be reduced on weekends,
Western Cascade forest residue prescribed burning
will be generally prohibited and smoke from coastal
prescribed burning will be managed to ensure that it
is not transported into Oregon and Washington Class
I areas. Estimated annual control strategy costs of
\$450,000 would be incurred by Western Oregon forest
land managers while estimated visibility and
health-related benefits are estimated at \$11.9
million for an overall benefit to cost ratio of 26
to 1. The proposed revisions to the Oregon State
Implementation Plan include prescribed burning and
agricultural field burning control strategies, Best
Available Retrofit Technology, interstate
protection, integral vista and program coordination
elements. The Plan will be implemented primarily
through the Oregon Department of Forestry's Smoke
Management Plan and the Department's field burning
smoke management program. Joint hearings on this
matter will be held in association with Department
of Forestry hearings on amendments to the Oregon
Smoke Management Plan. Public hearings will be held
in Portland (August 5, 1986), Springfield (August 7,
1986), Bend (August 11, 1986); Medford (August
13, 1986) and Newport (August 15, 1986).

*Item F
Corrections
dates + places
of hearings*

WHAT ARE THE Major elements of the proposed Visibility Protection
HIGHLIGHTS Plan include:

* Adoption of Western Oregon short and long-term

prescribed burning and agricultural field burning visibility control strategies. During the July 4 weekend to Labor Day period, Willamette Valley field burning would be restricted on weekends, Western Cascade prescribed burning would be generally prohibited and Western Oregon coastal burning would be managed such that prescribed burning smoke would not be vented into Oregon or Washington Class I areas. Annual costs to forest land managers has been estimated at \$450,000 while visibility and health benefits resulting from strategy implementation have been estimated at \$11.9 million per year.

- * Program coordination commitments between the DEQ and the Federal Land Managers and other interested parties.
- * An Interstate Visibility Protection Plan designed to assure that smoke from Western Oregon prescribed burning does not impair visibility in Washington's Class I areas.
- * Best Available Retrofit Technology Requirements for stationary, industrial sources. Because industrial point sources have not been identified as significant sources of visibility impairment, the installation of BART controls on industrial sources is not required by the Plan.
- * Integral Vista Protection. No integral vistas have been designated by the Federal Land Managers and no special provisions for integral vista protection have been included in the Plan. The Plan should afford, however, a substantial degree of protection to integral vistas.

**HOW TO
COMMENT**

Copies of the complete proposed rule package may be obtained from the Air Quality Division in Portland (522 SW Fifth Avenue) or the regional office nearest you. For further information contact John E. Core at 229-5380.

Public Hearings will be held before a Hearings Officer at:

10:00 AM
August 5, 1986
DEQ Conference Room
1400 Authority Offices
520 SW Fifth Avenue
Portland, Oregon

10:00 AM
August 7, 1986 DEQ
Springfield City Council Chamber
225 N. 5th Street
Springfield, Oregon

10:00 AM
August 13, 1986
Medford City Council Chambers
Medford City Hall
411 W. 8th Street
Medford, Oregon

7:00 PM
August 11, 1986
Bend School District
Administrative Offices, Rm. 314
520 NW Wall St.
Bend, Oregon

10:00 AM
August 15, 1986
Public Service Center
Conference Room
210 SW 2nd Street
Newport, Oregon

Oral and written comments will be accepted at the public hearing. Written comment may be sent to the DEQ Air Quality Division, P.O. Box 1760, Portland Oregon 97207 but must be received by no later than 5:00 PM, August 15, 1986.

**WHAT IS THE
NEXT STEP:**

After public hearing the Environmental Quality Commission may adopt rule amendments identical to the proposed amendment, adopt modified rule amendments on the same matter, or decline to act. The adopted rules will be submitted to the U.S. Environmental Protection Agency as part of the State Clean Air Act Implementation Plan. The Commission's deliberation come at its September 11, 1986 Bend meeting 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.