

**OREGON  
ENVIRONMENTAL QUALITY  
COMMISSION MEETING  
MATERIALS 10/11/1990**



**State of Oregon  
Department of  
Environmental  
Quality**

This file is digitized in **color** using Optical Character Recognition (OCR) in a standard PDF format.

Standard PDF Creates PDF files to be printed to desktop printers or digital copiers, published on a CD, or sent to client as publishing proof. This set of options uses compression and downsampling to keep the file size down. However, it also embeds subsets of all (allowed) fonts used in the file, converts all colors to sRGB, and prints to a medium resolution. Window font subsets are not embedded by default. PDF files created with this settings file can be opened in Acrobat and Reader versions 6.0 and later.

**Blank Sheet Have Been Removed, which is the reason  
for any discrepancies in the page numbers**

State of Oregon  
ENVIRONMENTAL QUALITY COMMISSION

A G E N D A

SPECIAL WORK SESSION -- October 11, 1990  
Room 110, Memorial Union Building  
Oregon State University Campus  
Corvallis, Oregon

- 3:30 p.m. - 1. Discussion of Hazard Ranking System
- 4:00 p.m. - 2. Update on the Development of the Comprehensive Air Fee  
Legislative Proposal
- 4:30 p.m. - 3. Discussion of the Proposed Deputy Director Position

*The primary purpose of the work session is to provide an opportunity for informal discussion of the above items.*

*The Commission expects to have dinner together at O'Callahan's, 1550 N. W. 9th Avenue, Corvallis, following this special work session.*

*The next Commission meeting will be Friday, November 2, 1990, at DEQ offices in Portland, Oregon. There will be a brief work session at the same location on November 1, 1990.*

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

**State of Oregon**  
**ENVIRONMENTAL QUALITY COMMISSION**

**A G E N D A**

**SPECIAL WORK SESSION -- October 11, 1990**  
Room 110, Memorial Union Building  
Oregon State University Campus  
Corvallis, Oregon

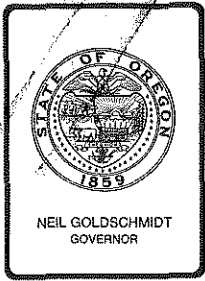
- 3:30 p.m.** - 1. Discussion of Hazard Ranking System
- 4:00 p.m.** - 2. Update on the Development of the Comprehensive Air Fee Legislative Proposal
- 4:30 p.m.** - 3. Discussion of the Proposed Deputy Director Position

*The primary purpose of the work session is to provide an opportunity for informal discussion of the above items.*

*The Commission expects to have dinner together at O'Callahan's, 1550 N. W. 9th Avenue, Corvallis, following this special work session.*

*The next Commission meeting will be Friday, November 2, 1990, at DEQ offices in Portland, Oregon. There will be a brief work session at the same location on November 1, 1990.*

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



## Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

### INTEROFFICE MEMORANDUM

DATE: October 2, 1990

TO: Environmental Quality Commission  
FROM: Fred Hansen, Director *Ful*  
SUBJECT: Hazard Ranking Rule

Attached are background materials on the Hazard Ranking Rule for discussion at our 11 October 1990 work session.

LP:m  
SA\SM3256

## HAZARD RANKING RULE

### Background

The draft hazard ranking rule implements provisions of Oregon's Environmental Cleanup Law, ORS Chapter 465, which establishes a program to identify and clean up sites contaminated by hazardous substances. The pre-remedial portion of the statute, as amended by the legislature in 1989, provides for:

- (1) a program to identify any release or threat of release of a hazardous substance from a facility that may require remedial action (ORS 465.220);
- (2) a process for the evaluation and preliminary assessment of releases identified (ORS 465.245);
- (3) a process for publishing a statewide list of confirmed releases (ORS 465.215) and an inventory of sites requiring further investigation, removal or remedial action (ORS 465.225); and
- (4) a procedure for ranking facilities on the inventory based on the short-term and long-term risks they pose to present and future public health, safety, welfare, or the environment (ORS 465.410).

In June of 1990, the Environmental Quality Commission adopted rules providing the criteria and procedures necessary to conduct site evaluations and preliminary assessments and to list sites on the confirmed release list and inventory as mandated by this statute. OAR 340-122-410 et seq. The draft hazard ranking rule, OAR 340-122-450 and Appendix A, the Oregon Hazard Ranking System, establishes the procedures required to rank facilities on the inventory (rule without Appendix A is attached).

The OHRS is a scoring system to assess the relative threat associated with actual or potential releases of hazardous substances from a site. An HRS score is determined for a site by evaluating exposure routes or "pathways", such as surface water, air, and ground water. The score for each route is obtained by evaluating a set of data elements or "factors" that characterize the potential of the facility to cause harm via that route. The data elements, such as toxicity of the substances at a site, waste quantity, and population, are each assigned a numerical value according to instructions in Appendix A. The data element numerical values are then combined within "data categories" or modules, such as source characteristics, migration potential, and targets; the total scores for the data categories are combined to develop a score for the relevant route. Finally, the route scores are combined according to a mathematical equation to produce a public health score, an environmental score and an overall OHRS score for the site. The overall site score is used to rank facilities on the inventory.

The OHRS was designed to be applied uniformly to each site, enabling sites to be evaluated relative to each other with respect to actual or potential hazards. It was not designed as a quantitative or qualitative risk assessment to measure absolute risk.

### **Pre-remedial process**

The Department will use the OHRS to score facilities placed on the inventory at the conclusion of its pre-remedial site activities. The pre-remedial, or site discovery, program is intended to identify those sites that require further investigation or cleanup.

During initial site discovery, the first step in the pre-remedial process, sites are evaluated, and possible releases of hazardous substances are placed in the Department's site discovery database. A preliminary site assessment or equivalent is then conducted to develop as complete a picture of the site as possible primarily from existing information. If necessary, a limited number of samples may be collected for chemical analysis to identify the substances present at the site. The purpose of the preliminary assessment is to determine if the site poses a potential threat to public health or the environment and if it poses an immediate threat to people in the area.

Sites are placed on the inventory if, based on this preliminary assessment, the Department determines the site requires further investigation, removal, remedial action, or related long-term environmental or institutional controls to protect public health, safety, welfare, and the environment. Facilities placed on the inventory are scored using OHRS to identify the relative risks those sites pose to public health, safety, welfare, or the environment. Prior to publishing a facility score on the inventory, the Department will notify owners and operators of the facility of the proposed score and provide an opportunity for them to comment on the score and supporting documentation.

The Department will consider facility scores, among other factors, in prioritizing sites for further investigation, removal, or remedial action at the conclusion of the preliminary assessment or its equivalent.

To inform the public, the Department will publish facility OHRS scores on the inventory, with prior notice to facility owners and operators, if known. The Department will use the relative risk information provided by the model in setting priorities for further investigation or remedial action on inventory sites.

Both because the model is used to rank sites at the conclusion of the pre-remedial process and in order to focus resources on investigation and cleanup activities, the Department designed

e/

the OHRS to use the data developed during these initial studies -- the preliminary assessments and equivalents. These studies, which are used to screen large numbers of sites to identify the need for further action, are relatively modest in scope and cost compared to the detailed remedial investigation and feasibility studies subsequently performed on sites to characterize the full nature and extent of contamination and projected levels of exposure. This decision placed certain constraints on the complexity of the OHRS. The data required for OHRS is information that, for most sites, is already available or can be collected in a single site visit or with limited sampling. Typically, limited amounts of quantitative data will be available regarding the types, quantities or concentrations of hazardous substances on site, the receptors actually at risk, or other factors to measure threats. In addition, the OHRS has been designed so that it can be applied consistently to a wide variety of sites. These constraints affected the data elements selected for the model as well as the definition of those data elements.

Also to minimize implementation costs, the model has been designed for use by individuals with scientific training and experience with hazardous substances site investigations; it requires limited consultation with specialists, such as hydrogeologists and limited interpretation of sophisticated data. Standard references have been designated for most data elements and a toxicological database has been compiled to promote consistent application and to reduce the time required to score individual sites.

The OHRS was designed to assist in setting priorities at the conclusion of the pre-remedial phase of site assessment. The data limitations inherent in the model limit its continued usefulness as an indicator of relative risk for establishing cleanup priorities following more detailed site investigations and feasibility studies.

Moreover, unlike the Environmental Protection Agency's federal Hazard Ranking System, the OHRS does not determine whether a site is placed on the Department's inventory. All sites on the inventory are ranked.



27 September 1990

Draft Hazard Ranking Rule

Hazard Ranking

340-122-450(1)(a) The Department will score facilities placed on the Inventory in accordance with the Oregon Hazard Ranking System set forth in Appendix A of these rules. The OHRS scores sites based on the short-term and long-term risks they pose to present and future public health, safety, welfare or the environment.

(1)(b) The Department will place facilities in the following categories on the Inventory based on their status in the remedial process:

- Class I: Facilities where remedial investigation and feasibility studies have not been initiated.
- Class II: Facilities where a remedial investigation or feasibility studies are underway.
- Class III: Facilities where the remedial investigation and feasibility study have been completed and remedial design, removal or remedial action is underway.
- Class IV: Facilities where all necessary removal and remedial action have been completed except for continuing operation and maintenance or other environmental or institutional controls related to removal or remedial required to assure protection of public health, safety, welfare, or the environment.

The Department will update facility classifications in quarterly publications of the Inventory.

(2) Prior to publishing a facility score on the Inventory, the Department will notify the owners and operators of a facility, if known, and provide an opportunity for them to comment on the facility score and supporting documentation as described in OAR 340-122-440(4).

(3) The Department will consider facility scores, among other factors, in prioritizing sites for further investigation, removal, or remedial action at the conclusion of the preliminary assessment or its equivalent. Prior to initiating such action, the Department may rescore a facility if the Department receives additional information that may significantly change a facility's score.

28 September 1990

Draft Amendments to Inventory Listing Rule

Development of Inventory

340-122-440(3)(a) At least sixty (60) days before a facility is added to the Inventory the Director shall notify the owner and operator, if known, of all or any part of the proposed facility of the proposed listing by certified mail or personal service. The notice shall include a copy of the preliminary assessment[, ] on which the listing is based, and the documentation used to calculate a hazard ranking score for the facility in accordance with OAR 340-122-450(1)(a). The notice may reference these documents if they have been previously provided. [and t]The notice shall inform the owner and operator of their opportunity to comment on the information contained in the preliminary assessment and on the proposed hazard ranking score within forty-five (45) days after receiving the notice. For good cause shown, the Department may grant an extension of up to forty-five (45) days for comment.

STATUTORY AUTHORITY

ORS 465.410

THE ENVIRONMENTAL QUALITY COMMISSION SHALL ADOPT BY RULE A PROCEDURE FOR RANKING FACILITIES ON THE INVENTORY BASED ON THE SHORT-TERM AND LONG-TERM RISKS THEY POSE TO PRESENT AND FUTURE PUBLIC HEALTH, SAFETY, WELFARE OR THE ENVIRONMENT

### MODEL OBJECTIVES

1. PROVIDE A CONSISTENT, OBJECTIVE, REPRODUCIBLE SYSTEM FOR PRIORITIZING SITES BASED ON LONG AND SHORT-TERM THREATS TO PUBLIC HEALTH, SAFETY, WELFARE, AND THE ENVIRONMENT (\*);
2. MINIMIZE ASSESSMENT COSTS AND MAXIMIZE CLEANUP RESOURCES;
3. PROVIDE A SIMPLE SYSTEM THAT CAN BE APPLIED WITH DATA APPROPRIATELY DEVELOPED AND DOCUMENTED DURING THE PRELIMINARY ASSESSMENT (\*\*);
4. CONSIDER NON-HUMAN ENVIRONMENTAL AS WELL AS PUBLIC HEALTH EFFECTS; AND
5. BE LOGICALLY AND TECHNICALLY DEFENSIBLE.

\* A RELATIVE RISK MODEL

\*\* THE RANKING IS PERFORMED DURING THE LISTING PROCESS

RANKING PROJECT MILESTONES

1. REVIEW OF AVAILABLE MODELS, FALL 1989
2. CONTRACTOR HIRED TO REVIEW SPECIFIC MODELS AND ASSIST WITH OHRs MODEL DEVELOPMENT, 1/90
3. DECISION TO MODIFY WASHINGTON RANKING METHOD, 3/90
4. FIRST FIELD TEST OF MODEL COMPLETED, 5/90
5. MODIFICATIONS TO MODEL COMPLETED, 6/90
6. SECOND FIELD TEST OF MODEL COMPLETED, 7/20/90
7. COMPLETE RULE DEVELOPMENT, 7/20/90 - 10/16/90
  - DRAFT OHRs MANUAL AND RULE
  - DISCUSS WITH ECAC
  - PREPARE STAFF REPORTS FOR INTERNAL REVIEW
  - SUBMIT DRAFT RULE FOR EQC
8. REQUEST EQC TO AUTHORIZE HEARING, 11/2/90

OHRs: OREGON HAZARD RANKING SYSTEM  
ECAC: ENVIRONMENTAL CLEANUP ADVISORY COMMITTEE

PROPOSED MODEL STRUCTURE

THREE SITE SCORES GENERATED BY MODEL

<u>SITE SCORES</u>	<u>MAXIMUM VALUE</u>
PUBLIC HEALTH SCORE	200
ENVIRONMENTAL SCORE	200
*OVERALL SITE SCORE	200

\*Score used to rank facilities on the Inventory

PROPOSED MODEL STRUCTURE

SIX PATHWAYS CONSIDERED

	<u>MAXIMUM SCORE</u>
AIR, HUMAN HEALTH	100
AIR, ENVIRONMENTAL	100
SURFACE WATER, HUMAN HEALTH	100
SURFACE WATER, ENVIRONMENTAL	100
GROUND WATER, HUMAN HEALTH	100
DIRECT CONTACT, HUMAN HEALTH	100

PATHWAY NOT CONSIDERED

GROUND WATER, ENVIRONMENTAL\*

\*Contamination of ground water is assumed to be primarily a human health drinking water problem. Only when ground water surfaces to surface water or air does it become a threat to sensitive environments, as defined in the rule.

PROPOSED MODEL STRUCTURE

FOUR DATA CATEGORIES CONSIDERED WITHIN EACH PATHWAY

	<u>WEIGHT IN MODEL</u>
SOURCE CHARACTERISTICS	50%
MIGRATION POTENTIAL -----	-----
TARGETS -----	
KNOWN RELEASE TO PATHWAY -----	



*updated with model*

TABLE I  
Data Elements Contributing to Each  
Route Score in the Model

MODULE	AIR ROUTE		SURFACE WATER ROUTE		GROUNDWATER ROUTE	DIRECT CONTACT ROUTE
	Human Health	Environmental	Human Health	Environmental	Human Health	Human Health
1. Source Characteristics	Human Toxicity	Environmental Toxicity	Human Toxicity	Environmental Toxicity	Human Toxicity	Toxicity
	Mobility	Mobility	Source Quantity	Source Quantity	Mobility	
	Source Quantity	Source Quantity			Source Quantity	Source Quantity
	Containment	Containment	Containment	Containment	Containment	
2. Migration Potential			Surface Soil Permeability	Surface Soil Permeability	Net Precipitation	Accessibility
			Total Annual Precipitation	Total Annual Precipitation	Subsurface Hydraulic Conductivity	
			2-yr, 24-hr Rainfall	2-yr, 24 hr Rainfall	Vertical Depth to Aquifer	
			Flood Plain	Flood Plain		
			Terrain Slope	Terrain Slope		
3. Targets	Nearest Population	Nearest Sensitive Environment	Distance to Surface Water	Distance to Nearest Fish. Resource	Aquifer Usage	Residences on adjacent property
	Population within 1/2 mile		Population Served by Intakes	Distance to Nearest Sensitive Environment	Distance to Nearest Drinking Water Well	Other indications for sensitive population located on adjacent property
					Population Served by Wells within 2 miles	
				Area Irrigated by Wells within 2 miles		
4. Release	Evidence	Evidence	Evidence	Evidence	Evidence	

PROPOSED MODEL STRUCTURE

BASIC EQUATION FOR CALCULATING EACH ROUTE SCORE

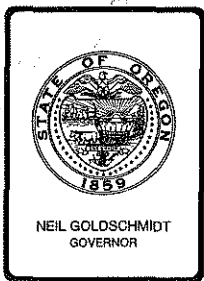
$$\text{ROUTE SCORE} = \left( \begin{array}{c} \text{SOURCE} \\ \text{(CHARACTERISTICS)} \end{array} \right) \times \left( \begin{array}{c} \text{MIGRATION} \\ \text{(POTENTIAL + TARGETS + RELEASE)} \end{array} \right)$$

PROPOSED MODEL STRUCTURE

CALCULATION OF ROUTE SCORES

<u>SCORE CATEGORY</u>	<u>EQUATION</u>
HUMAN HEALTH	MAX + (AVERAGE OF THREE REMAINING SCORES)
ENVIRONMENTAL	SW + A + BONUS POINTS FOR DIRECT CONTACT ENVIRONMENTAL RISK
OVERALL SITE	MAX + (AVERAGE OF FIVE REMAINING SCORES) + BONUS POINTS FOR DIRECT CONTACT ENVIRONMENTAL RISK

MAX: MAXIMUM ROUTE SCORE  
SW: SURFACE WATER ENVIRONMENTAL ROUTE SCORE  
A: AIR ENVIRONMENTAL ROUTE SCORE



## Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

DATE: September 27, 1990

TO: Environmental Quality Commission

FROM: Director

SUBJECT: Comprehensive Emission Fee Legislation Status Report

As background for discussion at your October 11 meeting I am providing you with this status report on our efforts to develop a comprehensive emission fee bill.

### Objective

Developing a comprehensive emission fee program is the number one priority of our air quality program in order to meet the current and future challenges of providing the purity of air we all want to see while accommodating anticipated growth. This innovative and market driven program offers the opportunity to motivate and provide financial assistance to the public and industry to prevent and reduce air pollution in contrast to the alternative of continuing to pursue further tightening down on our traditional regulatory programs.

### Concept Support

The Governor has supported the Departments request to proceed with drafting a bill for the '91 legislature and including the program in the agencies proposed '91-'93 budget.

The Joint Legislative Committee on Environment, Energy and Hazardous Materials has held three public meetings on the emission fee concept and in July appointed an air quality work group to draft a comprehensive air quality bill. This group has five legislators including Senator Dick Springer and Representative Ron Cease, and twelve representatives of various interest groups (see attachment 1 for full membership) plus DEQ. This group began meeting in August. The Department has generated considerable material for the workgroup and has held individual meetings with several of the interest groups to work towards a consensus approach. While serious negotiations are expected to occur in October, general reaction to the concept has been encouraging. The following attachments represent some of the most important information generated in the bill development process so far.

expected to occur in October, general reaction to the concept has been encouraging. The following attachments represent some of the most important information generated in the bill development process so far.

### **Potential Program Accomplishments**

Attachment 2 presents the statewide sources of air pollutant emissions unweighted and weighted to potential environmental impact. In both cases the five major source classes for which emission fees are proposed are dominant (vehicles, woodheating, slash-burning, industry and field-burning).

Attachment 3 presents potential revenue from various fee schedules. Scenario 5 is the most favored by the Department, and might raise in the range of \$20 million per year in fee revenue. This is based on extending the \$25/ton emissions fee concept for industries expected to be imposed by the new Clean Air Act to the four other emission sources of interest.

Attachment 4 presents the potential achievements of the comprehensive emission fee program. Notably a potential 40% reduction in statewide emissions might be achieved in as short as a 5 to 10 year period. Several potential projects are listed that might be supported from the air quality improvement fund created by the emission fees.

### **Program Objective and Principles**

Attachment 5 presents the program objectives and principles which the Department believes would form the framework for an effective and equitable program and legislative bill. Notably the program should be uniformly applicable to major sources statewide, some fee revenue should be utilized to enhance the Air Quality Program staff resources and most of the fee revenue should be used for full scale air quality improvement projects.

### **Program Elements**

Attachment 6 presents the various program elements the Department believes should be incorporated into the program. Notably the Department is proposing that the Commission will manage the fee revenue by approving through public hearing process air quality improvement projects on a prioritized basis.

### **Status of Developing Program Elements**

Attachment 7 presents a status report the Department prepared for the Oct. 2 meeting of the Air Quality Workgroup. This

Memo to: Environmental Quality Commission  
September 27, 1990  
Page 3

report summarizes the status of developing detailed fee requirements for the five major source classes. Currently the industrial sector is deliberating on mitigating the very large fees that would be imposed on largest emission sources in the state. A combination of several fee collection approaches is being pursued for the vehicle sector in order to meet all objectives of the comprehensive fee concept. The woodheating sector is considering whether to support use of potential revenue from a cord wood fee for low income woodheater conversion programs similar to modest programs now being operated in the Medford and Klamath Falls areas. A state wide low/no interest loan program is also being considered. The slash burning sector has some objection being subject to a uniform fee given there feeling that air quality impacts from slash burning are not as significant as other sources. It is not clear at this time what if any issues the field burning sector will raise.

#### Future Actions

By the end of October it is hoped that a consensus will be reached on the major program principles. A bill should be drafted shortly thereafter. Conceivable there could be a DEQ and/or Legislative committee bill depending on how close a consensus is reached and/or views of the new Governor.

JFK:a  
PLAN\AH10916

AIR QUALITY WORKING GROUP

MEMBERSHIP ROSTER

Rep. Ron Cease, Chair  
2625 N.E. Hancock  
Portland, OR 97212  
282-7931

Sen. Dick Springer  
7624 S.E. 13th Avenue  
Portland, OR 97210  
226-3232

Sen. Bob Kintigh  
38865 E. Cedar Flat Road  
Springfield, OR 97478  
726-2519

Rep. Phil Keisling  
*6016 SE 21st Street*  
Portland, OR 97202  
236-6622

Rep. Bob Pickard  
19190 Pinehurst Road  
Bend, OR 97701  
389-6067

Thomas C. Donaca  
Associated Oregon Industries  
PO Box 12519  
*Salem, OR 97309 - 0519*

Lavinia Wihtal  
Oregon Environmental Council  
2637 SW Water Street  
Portland, OR 97201  
222-1963

Liz Frenkel  
Sierra Club  
1431 NW Vista Place  
Corvallis, OR 97330  
754-6790

Don Arkell  
Lane Regional Air  
Pollution Authority  
225 N. Fifth, Suite 501  
Springfield, OR 97477  
726-2514

Phil Fell  
League of Oregon Citites  
PO Box 928  
Salem, OR 97308  
588-6550

Gordon G. Fultz  
Association of Oregon Counties  
PO Box 12729  
Salem, OR 97309  
585-8351

Ward Armstrong  
Oregon Forest Industries Council  
1140 Court St NE  
Salem, OR 97301  
371-2942

Jim Craven  
American Electronics Association  
707 13th Street  
Salem, OR 97301  
362-7611

James R. Irvine  
Wood Heating Alliance  
3140 SE Hawthorne  
Portland, OR 97214  
232-2887

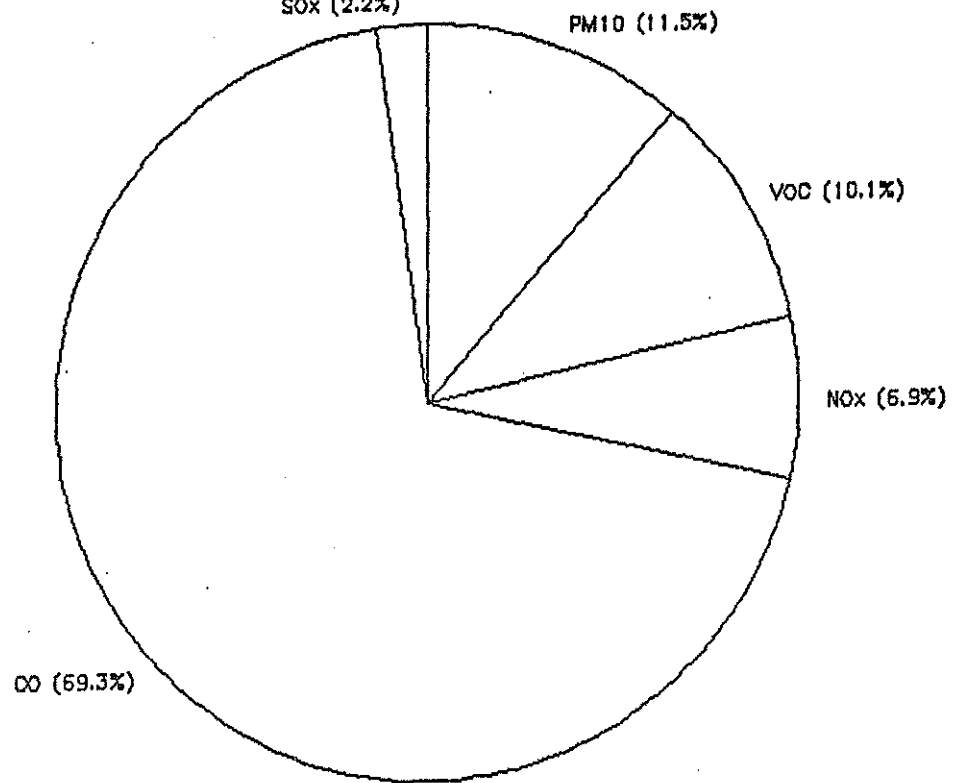
Dell Isham  
Oregon Automobile Association  
3231 W. Devils Lake Rd.  
Lincoln City, OR 97367  
994-5330/994-3446

Dave Nelson  
Oregon Seed Council  
866 Lancaster Dr SE  
Salem, OR 97301  
585-1157

Vera Morrell  
Coalition to Improve Air Quality  
3196 Dark Hollow Rd  
Medford, OR 97501  
773-6644

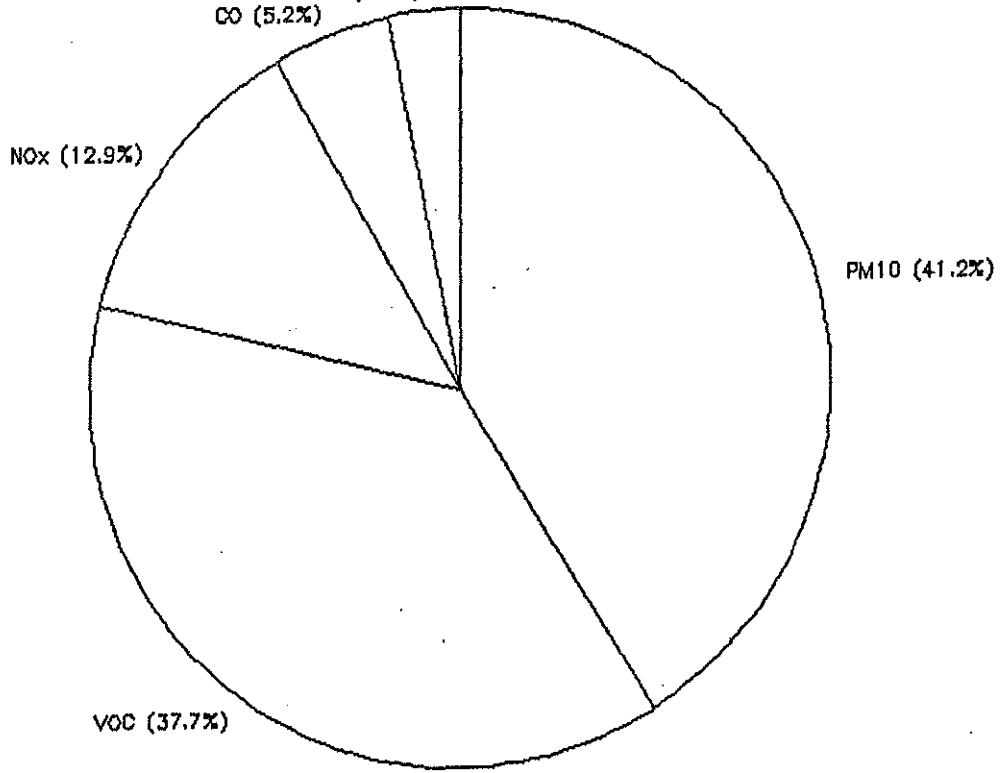
### MAJOR AIR POLLUTANTS

STATE AVERAGE UNWEIGHTED EMISSIONS  
SOx (2.2%)



### MAJOR AIR POLLUTANTS

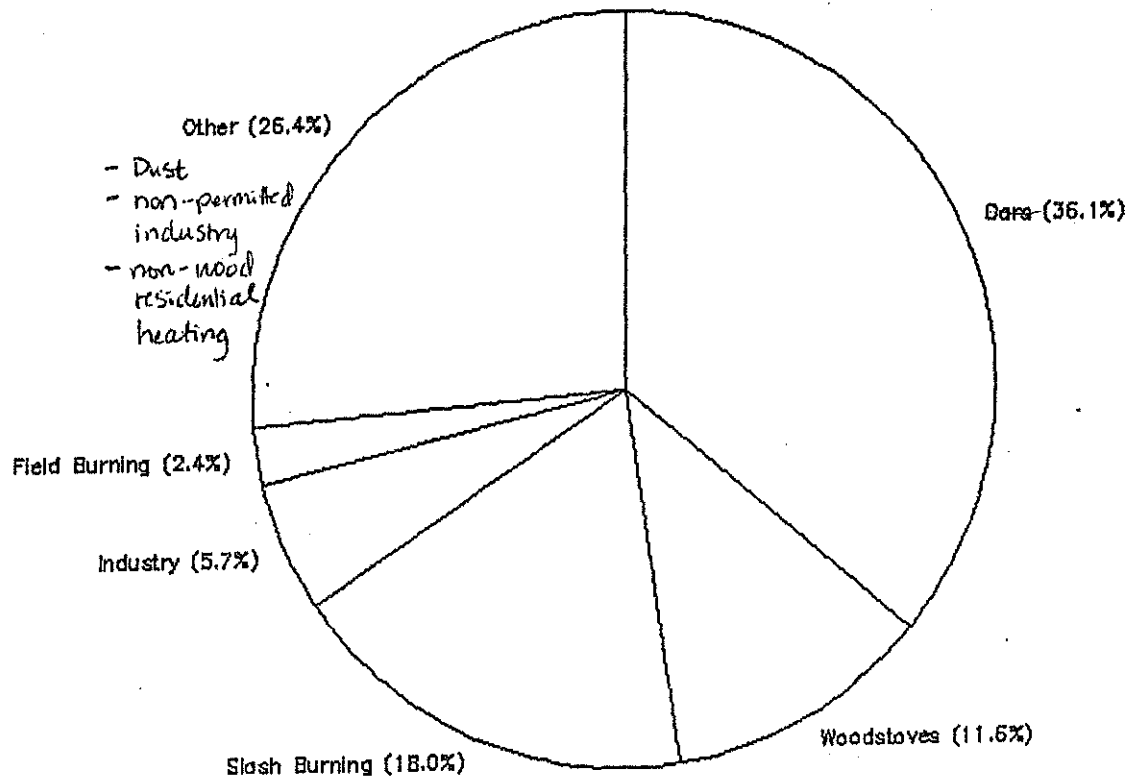
STATE AVERAGE WEIGHTED TO ENVIRONMENTAL IMPACT  
SOx (3.1%)  
CO (5.2%)





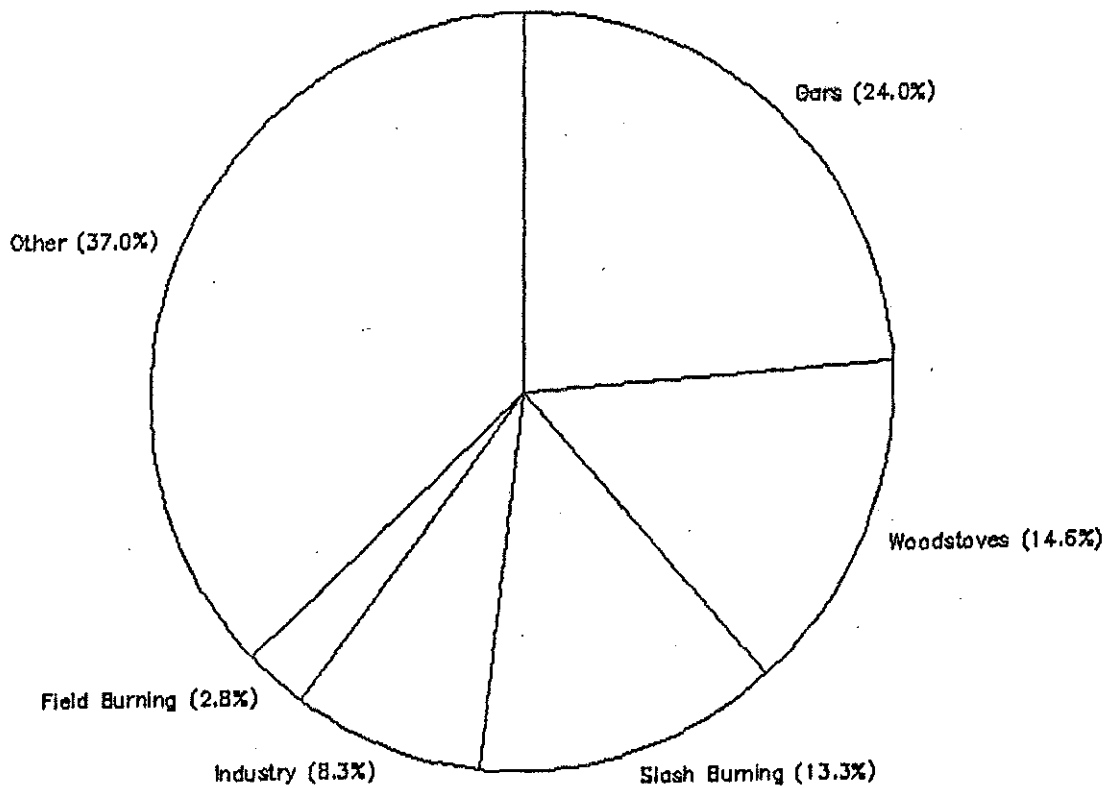
# MAJOR SOURCES OF AIR POLLUTANTS

STATE AVERAGE UNWEIGHTED EMISSIONS



# MAJOR SOURCES OF AIR POLLUTANTS

STATE AVERAGE WEIGHTED BY ENVIRONMENTAL IMPACT



File: FTABLE3

AIR EMISSIONS FEE SCENARIOS

FAVORED BY DEC



	(1) Federal Clean Air Industry only Excludes CO	(2) Federal Clean Air for 5 Sources Excludes CO	(3) Federal Clean Air for 5 Sources Includes CO	(4) Fees Weighted By Envir. Impact for 5 Sources Excludes CO *	(5) Fees Weighted By Envir. Impact for 5 Sources Includes CO *	(6) Fees Weighted By Envir. Impact for 5 Sources With SOx = \$25	
<b>Price Per Unit Of Pollutant</b>							
- VOC	\$/ton VOC	25.00	25.00	25.00	35.21	43.71	65.79
- PM10	\$/ton PM10	25.00	25.00	25.00	33.80	41.96	63.16
- NOx	\$/ton NOx	25.00	25.00	25.00	17.61	21.86	32.90
- SOx	\$/ton SOx	25.00	25.00	25.00	13.38	16.61	25.00
- CO	\$/ton CO	n/a	n/a	25.00	n/a	0.87	1.32
<b>Revenue By Source</b>							
- RWC	\$mm	n/a	2.7	8.0	3.8	4.7	7.1
- Slash B	\$mm	n/a	2.4	12.4	3.5	4.3	6.5
- Field B	\$mm	n/a	0.5	1.7	0.7	0.9	1.3
- Trans	\$mm	n/a	5.8	24.9	6.3	7.8	11.7
- Industry	\$mm	2.0	2.0	3.9	2.2	2.7	4.1
<b>Total Revenue</b>	<b>\$mm</b>	<b>\$2.0</b>	<b>\$13.4</b>	<b>\$50.8</b>	<b>\$16.4</b>	<b>\$20.4</b>	<b>\$30.7</b>
<b>Price Per Unit By Source</b>							
- RWC	\$/cord	0.00	3.83	11.40	5.46	6.77	10.19
- Slash B	\$/acre **	0.00	23.98	124.07	34.62	42.98	64.69
- Field B	\$/acre **	0.00	2.57	8.27	3.60	4.47	6.73
- Trans	\$/car **	0.00	2.40	10.37	2.61	3.24	4.88
- Industry	\$/ton of VOC	25.00	25.00	25.00	35.21	43.71	65.79

Note:

\* Overall average pollutant fees = \$25

\*\* Average fee. Actual fee would be adjusted to actual emissions

## DEQ Views on Potential Achievements of a CEF Program

### Assumptions

Fee - average \$25/ton for PM10, SOx, NOx, VOC and CO  
Sources - Woodstoves, motor vehicles, field burning, slash burning, permitted industry

### Accomplishments

Approximately 40% reduction in State wide emissions within a 5-10 year time frame.

### CEF Program Emission Reduction Estimates

<u>Source</u>	<u>Total Statewide Emissions Tons/Y</u>	<u>Estimated Reduction %</u>
Woodstoves	319,132	75
Motor Vehicles	996,287	10-20
Field Burning	56,169	50-75
Slash Burning	423,282	40-60
Industry	84,325	10-20

### Projects Potentially Funded from Air Quality Improvement Fund

- o Upgrade and weatherization of low income woodheating systems and low/no interest loan programs for others
- o Capitol funding for major mass transit projects
- o Subsidy to build/operate power plants to burn grass straw and forest slash
- o Assist industry in developing and applying continuous emission monitoring systems to more accurately measure emissions subject to fees
- o Rebates for lowest polluting new motor vehicles
- o Projects associated with the emission source that will have other related environmental benefits related to DEQ programs
- o Support for local and state government efforts to control air pollution

*Handwritten notes:* ... of the ... provided

## DEQ Objectives and Principles for a CEF Program

### Objectives

1. To develop an awareness that air resources of the state are not a free dumping ground for air pollutants.
2. To enhance efforts to prevent air pollution through application of a comprehensive system of economic disincentives for major sources or air pollution in the state.
3. To enhance efforts to control air pollution through establishment of a fund dedicated to a comprehensive system of economic incentives for public and private sector projects and programs that will substantially improve air quality.
4. To provide authority to impose air pollution emission fees expected to be required by the reauthorized Clean Air Act.

### Principles

1. Program should be statewide to be equitable.
2. Program should be applicable to all major source of air pollution to be comprehensive and equitable.
3. Fees should be uniformly applied to each pollutant and not adjusted for each source category to be equitable.
4. Fees should be related to the extent practical to actual emissions to enhance the pressure of economics to reduce emissions.
5. Fees should be weighted to the environmental impact of the specific pollutant (proportional to the ratio of ambient air quality standards).
6. Fees need not be high enough in all cases to apply substantial pressure to reduce emissions if revenue generated is adequate to fund major air pollution control projects.
7. There will be an intrinsic benefit to reduce emissions from any reasonable emission fee provided the collection mechanism is directly obvious to the source.
8. Revenue from a CEF program should be sufficient to cover DEQ base program enhancement needs (\$730,000/yr), full costs of the DEQ air contaminant discharge permit program (\$1.5 million/yr), collection and administration of the CEF program (\$1.2 million/yr) with substantial funds remaining to fund several multimillion dollar air quality improvement projects.

9. Some air quality improvement funds or discounts in fees should be allowed for programs that provide environmental benefits for other programs administered by DEQ.

10. Some limited portion of fees for a source class could be dedicated to air quality improvements funds for sources in that class with the remainder going into a pot for any worthy and eligible project.

11. Air quality improvement funds should be principally dedicated to full scale air quality improvement projects with only a small portion made available for research and development projects.

Major CEF Program Elements and Alternatives

a. Potential sources subject to fees

- o Permitted industries
- o Residential Woodheating
- o Slash burning
- o Field burning
- o Motor vehicles

b. Potential air pollutants subject to fees

- o PM10
- o SOx
- o NOx
- o VOC
- o CO
- o Toxics (surcharge certain VOC's and PM10's)
- o CO2\* (Control of other combustion source pollutants will provide some benefit in reducing CO2 emissions)

\* DEQ does not support this alternative

c. Alternative Fee Structures and possible revenue (See attached fee matrix on next page). Note: alternative 1 is an expected requirement of the new Clean Air Act. Alternatives 2 and 3 extend the Clean Air Act requirement to woodstoves, slash and field burning, motor vehicles and CO. Alternatives 4, 5 and 6 apply different emission fees to different pollutants in proportion to their environmental impact but maintain the \$25/ton fee concept.

- 1. \$25/ton on industry excluding CO - \$2 million/yr
- 2. \$25/ton on top 5 source classes excluding CO - \$13 million/yr
- 3. \$25/ton on top 5 source classes including CO - \$51 million/yr
- 4. \$25/ton average weighted to impact of each pollutant on top 5 source classes excluding CO - \$16 million/yr
- 5. \$25/ton average weighted to impact of each pollutant on top 5 source classes including CO - \$20 million/yr
- 6. \$25/ton SO2 other pollutants weighted to impacts on top 5 source classes including CO - \$31 million/yr

d. Fee Collection Options

- o DEQ directly collect all
- o Utilize other agencies existing collection mechanisms
- o Motor vehicles
  - EPA emission rating and reported mileage through DMV registration
  - Parking fees
  - Tire fee on treadwear rating
- o Woodheating
  - Cordwood fee through cutting permit agencies (would cover 80-90% of wood burned)
  - Annual license for woodstove
- o Slash burning
  - Dept of Forestry Permits
- o Field Burning
  - DEQ permits in Willamette Valley
  - Fire marshall permits in other areas
- o Industry
  - Sources subject to ACD permits

e. Revenue Use- Options

- o Local/state governments, industry, individual citizens
- o Research and Development Grants
- o Low/No interest loans
- o Capital improvement grants
- o Operating subsidies
- o DEQ base program enhancement
- o Fee Collection
- o AQ Improvement fund administration
- o Education (DEQ, local Governments, Citizen groups)
- o Resource Conservation fund\*

- o Offset DEQ Air Permit Compliance Fee

- o Discount for fee or use of Funds for source actions that have environmental benefits for other DEQ programs

\* DEQ does not support this alternative

#### Revenue Management Options

- o EQC

- o Legislatively appointed committee or committees

- o Annual Priority ranking

- o No specific allocation of funds to specific source class

- o Some or all of funds from source category fee dedicated to that category

#### Effective Date

- o FY 92

- o FY 93.



## STATUS REPORT ON COMPREHENSIVE EMISSION FEE PROGRAM DEVELOPMENT

## Department of Environmental Quality

September 27, 1990

## Overview

Since the first meeting of the legislatively appointed air quality working group, DEQ has spent considerable time exploring and developing details on programs and alternatives for applying the comprehensive emission fee concept to the five major source categories of interest. Following is a very brief report on the status of this effort.

## Industry

Congressional staffers have reached agreement on the form of Title IV, the permitting section of the new Clean Air Act (CAA). It is very similar to the House and Senate Bill versions we have all seen. It will require states to fund all portions of their federal permitting program from funds generated from permit fees that in the aggregate total not less than \$25/ton of emissions. A lower fee is allowed only if a convincing case can be made to the EPA that it takes less revenue to adequately fund the program.

DEQ has been meeting with an AOI committee to develop details of a bill that would provide DEQ with the authority to meet the new CAA permitting requirements as well as mesh with the comprehensive fee concept. While the total revenue to be generated by the new CAA requirements is clear and fixed (\$25/ton applied to the aggregate of total emissions), there is flexibility in how fees may be assessed on individual sources. Under a strict \$25/ton application to individual sources, large emitters would face permit fee increases (above DEQ's current fee schedule) averaging about a factor of 20. Some of the largest emitters would face increases considerably above this average. Smaller emitters would face permit fee increases averaging about a factor of 2. The AOI committee has asked DEQ to explore fee application in direct proportion to permit work for an individual source. This could raise all current fees an average of about a factor of 10. This issue and others relating to emission fee caps, and providing contributions to the comprehensive emission fee air quality improvement fund, hopefully, will be resolved by mid-October.

## Vehicles

### Highway Trust Funds

Any fees collected from an assessment on vehicles or their use, by State Constitution, are dedicated to the highway trust fund. In discussions with Department of Transportation and Metro staff (agencies most involved with highway fund use) they indicated it is theoretically possible to earmark some existing funds to an air quality improvement fund for highway/air quality projects considered of high priority from an air quality standpoint. Projects would have to be strictly related to highways such as HOV lanes and computerized traffic signalization. No projects relating to mass transit would be allowed. It was pointed out that there is a major shortage of funds to meet existing highway construction and maintenance needs and that legislation will be pursued to substantially increase this fund. It was staff opinion that because of this shortfall there would be substantial resistance at all levels of government to tapping the existing trust for any other use. Staff did indicate that new revenue could be legislatively authorized for highway/air quality related purposes under programs that may have some support. Notably mentioned was the new vehicle excess emission assessment being considered by the California legislature. This is discussed in more detail below under the Drive + program.

### Drive +

Assessing a fee at the time of sale on new vehicles that are higher than average emitters (and generally higher than average fuel users) appears to have support from many interest groups. Such a fee accomplishes one of the objectives of the comprehensive fee program of being conspicuous to users of airsheds. If such a fee were incorporated in the comprehensive fee bill, funds would be restricted to highway/air quality related projects. A second step, however, could be pursued through a vote on a constitutional amendment to allow this revenue to be used as proposed in California (as a revenue neutral program returning funds as rebates to lower than average emitting (and fuel using) new vehicles).

### Tire Fee

It has been brought to our attention that HB 3055 which passed the House but failed in the Senate in the '89 session would have established a tire and battery tax to be used for transit purposes. A tire fee would have a clear relationship to vehicle miles travelled and emissions, and would meet one of DEQ's objectives of making the air quality improvement funds available for transit. Pursuing this alternative may gain some of the supporters of HB3055. This alternative could also provide an efficient means of fee collection by including the emission fee

## Vehicles

### Highway Trust Funds

Any fees collected from an assessment on vehicles or their use, by State Constitution, are dedicated to the highway trust fund. In discussions with Department of Transportation and Metro staff (agencies most involved with highway fund use) they indicated it is theoretically possible to earmark some existing funds to an air quality improvement fund for highway/air quality projects considered of high priority from an air quality standpoint. Projects would have to be strictly related to highways such as HOV lanes and computerized traffic signalization. No projects relating to mass transit would be allowed. It was pointed out that there is a major shortage of funds to meet existing highway construction and maintenance needs and that legislation will be pursued to substantially increase this fund. It was staff opinion that because of this shortfall there would be substantial resistance at all levels of government to tapping the existing trust for any other use. Staff did indicate that new revenue could be legislatively authorized for highway/air quality related purposes under programs that may have some support. Notably mentioned was the new vehicle excess emission assessment being considered by the California legislature. This is discussed in more detail below under the Drive + program.

### Drive +

Assessing a fee at the time of sale on new vehicles that are higher than average emitters (and generally higher than average fuel users) appears to have support from many interest groups. Such a fee accomplishes one of the objectives of the comprehensive fee program of being conspicuous to users of airsheds. If such a fee were incorporated in the comprehensive fee bill, funds would be restricted to highway/air quality related projects. A second step, however, could be pursued through a vote on a constitutional amendment to allow this revenue to be used as proposed in California (as a revenue neutral program returning funds as rebates to lower than average emitting (and fuel using) new vehicles).

### Tire Fee

It has been brought to our attention that HB 3055 which passed the House but failed in the Senate in the '89 session would have established a tire and battery tax to be used for transit purposes. A tire fee would have a clear relationship to vehicle miles travelled and emissions, and would meet one of DEQ's objectives of making the air quality improvement funds available for transit. Pursuing this alternative may gain some of the supporters of HB3055. This alternative could also provide an efficient means of fee collection by including the emission fee

with DEQ's present tire fee collection for it's tire disposal program.

### Parking Fee

There continues to be some support for application of the emission fee concept to parking. In order to be practical and effective, some form of assessment on employer provided parking which is limited to areas with transit service may be a feasible alternative. The emerging Bay Area Smog fee program (interesting summary article in attachment 1) includes a multifaceted fee program which includes an employer parking fee on single occupant vehicles. Such a fee could provide equity between central city and suburban development. Currently parking fees in central cities are viewed as encouraging suburban sprawl which, of course, increases vehicle miles travelled and emissions. An employer or employee parking fee for parking above certain parking/square foot ratios (which were conducive to a balanced vehicle and transit systems) has also been discussed. There are some other parking fee scenarios that need to be explored.

### Multi-Vehicle Fee

The three emission fee concepts discussed above (Drive +, Tire Fee, Parking Fee) all have some different program benefits with respect to the comprehensive fee program. As in the Bay Area Smog Fee, it may be worthy of considering a multifaceted Oregon vehicle emission fee program.

### Residential Wood Heating

DEQ is exploring options with the woodheating industry for use of cordwood fee revenue in funding woodheating emission reduction programs. We have discussed use of funds for direct support of local government education and curtailment operation programs and use of funds for conventional woodheating system upgrade programs. We have focused on low income total buy-out programs with cost effective weatherization in PM10 problem areas similar to the current modestly funded programs in Medford and Klamath Falls, and a general statewide program providing low/no interest loans for woodheating system upgrades regardless of income level. We have discussed the concept of providing equal financial incentive for replacement with cleaner, more efficient wood heating systems and conventional-energy high-efficiency heating systems. In all cases, we have maintained that the conventional woodheater being replaced must be destroyed (to prevent increasing the number of woodheaters in the state) and that local programs must maintain the ability to curtail even the cleaner burning woodheating systems that may be financed under this program if air quality degrades to above air quality standards. We are hopeful of coming up with a specific proposal that DEQ can support by mid-October.

### Forest Slash Burning

Discussions with some forest land managers indicate a feeling that the emission fee approach should be limited to health related impacts and that slash burning does not contribute much to air quality/health related problems in the state. (According to DEQ data, slash burning emissions have the greatest impact on regional visibility reduction and also to a lesser extent impact some areas exceeding health standards). There also is a feeling that slash burning is achieving emission reductions and that further restricting burning will inhibit forest productivity.

DEQ has recently obtained the latest emission data from slash burning in the state (through 1989) and it would appear that emissions may currently be about 20-25% less than in the data provided the Working Group (which was based on DEQ's latest inventory of 1986). These emission reductions are calculated on changes in emission factors for higher utilization, better burning practices, and switches to burning under spring-like moisture conditions. Total acreage burned in Oregon over the last 5-10 years, however, has not changed much. In contrast acreage burned in Washington appears on a significant downward trend over the last 5 years (see attachment 2).

As a result of the slash burning emission reductions achieved to date, potential slash burning fees under the comprehensive fee program would be correspondingly less, down from an average of about \$40/acre to \$30/acre. Land owners now practicing all better burning practices and those who may convert to these practices in the future, would find fees significantly lower than \$30/acre thereby easing the potential fiscal impact of the comprehensive fee program on this source class.

### Field Burning

Under CAA and EPA requirements for visibility protection in wilderness areas, enforceable smoke management programs for field burning in Jefferson (Central Oregon) and Union County (Eastern Oregon) are needed and are under development. Incorporating these programs into a permit fee based system will cover most grass field burning in the state (the Willamette Valley burning is already covered under such a program). This event will make it easier to administer an emission fee program.

A press article by an agricultural journalist is attached (attachment 3) which provides some interesting views on the concept of an emission fee program.

### Other DEQ Thoughts on the Comprehensive Emission Fee Approach

As we further study and develop the comprehensive emission fee concept, we become further convinced that our vision of the program truly should address the entire state air resources, not just from a human health standpoint, and not just from an

Discussions with some forest land managers indicate a feeling that the emission fee approach should be limited to health related impacts and that slash burning does not contribute much to air quality/health related problems in the state. (According to DEQ data, slash burning emissions have the greatest impact on regional visibility reduction and also to a lesser extent impact some areas exceeding health standards). There also is a feeling that slash burning is achieving emission reductions and that further restricting burning will inhibit forest productivity.

DEQ has recently obtained the latest emission data from slash burning in the state (through 1989) and it would appear that emissions may currently be about 20-25% less than in the data provided the Working Group (which was based on DEQ's latest inventory of 1986). These emission reductions are calculated on changes in emission factors for higher utilization, better burning practices, and switches to burning under spring-like moisture conditions. Total acreage burned in Oregon over the last 5-10 years, however, has not changed much. In contrast acreage burned in Washington appears on a significant downward trend over the last 5 years (see attachment 2).

As a result of the slash burning emission reductions achieved to date, potential slash burning fees under the comprehensive fee program would be correspondingly less, down from an average of about \$40/acre to \$30/acre. Land owners now practicing all better burning practices and those who may convert to these practices in the future, would find fees significantly lower than \$30/acre thereby easing the potential fiscal impact of the comprehensive fee program on this source class.

### Field Burning

Under CAA and EPA requirements for visibility protection in wilderness areas, enforceable smoke management programs for field burning in Jefferson (Central Oregon) and Union County (Eastern Oregon) are needed and are under development. Incorporating these programs into a permit fee based system will cover most grass field burning in the state (the Willamette Valley burning is already covered under such a program). This event will make it easier to administer an emission fee program.

A press article by an agricultural journalist is attached (attachment 3) which provides some interesting views on the concept of an emission fee program.

### Other DEQ Thoughts on the Comprehensive Emission Fee Approach

As we further study and develop the comprehensive emission fee concept, we become further convinced that our vision of the program truly should address the entire state air resources, not just from a human health standpoint, and not just from an

existing problem standpoint. A related point is made in a recent advertisement for the new Portland convention center (attachment 4) which is marketing the use of the facility on the visibility of Mt. Hood. Needless to say, all major sources of air pollution we are considering for the comprehensive fee program to some extent cause restriction of visibility of Mt. Hood and other vistas of the state and could cause even greater restriction if long term growth is not met with sufficient tools and resources to address maintenance and improvement of the State's air resources.

As we further study the issue, it also becomes apparent that virtually all of the emission reduction pressures and projects which may result from the Comprehensive Emission Fee program have a direct benefit to energy and resource conservation. This issue is certainly regaining interest and such dual benefits of the program should enhance its acceptability.

The State of Washington Department of Ecology (DOE) is also pursuing a statewide comprehensive fee program similar to Oregon's as part of their legislative agenda. As a result of the state's long range study (Environment 2010), it has been concluded growth will result in increases in air pollution in the decades ahead. DOE strongly feels new initiatives are needed to deal with this threat which include non regulatory approaches.

As the discussion of the principles for the Comprehensive Fee program develops, we hope these thoughts can be kept in mind. We are hopeful that some specific bill language can be developed in October.

JFK:a  
PLAN\AH10906



# AIR CURRENTS

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

## MTC Presents Emissions Reduction Plan

### *District To Evaluate Transportation Control Measures*

Another milestone on the road to achieving the goals set forth in the California Clean Air Act of 1988 was reached this month when the District Board of Directors received the Metropolitan Transportation Commission's (MTC) proposed transportation control measures. The District staff will review the plan and bring recommendations to the Board of Directors in September.

The California Clean Air Act specifies that each region in the state must develop a plan by June 30, 1991 which will enable it to achieve state air quality standards which are significantly more stringent than existing federal standards. The legislature also enacted AB 3971 (Cortese) which provides for a cooperative process between the Bay Area Air Quality Management District (BAAQMD) and MTC in the development of transportation control measures necessary to help achieve state standards by 1997. The legislative process provides that MTC propose transportation strategies by the end of June, 1990 for review by the District. In essence the legislation provides for a cooperative multi-agency process leading to adoption of a plan next year.

One of the main precursors to the formation of ground level ozone pollution is airborne hydrocarbon (HC). The District estimates that human activities in the region generated approximately 473 tons of HC per day in 1987. Of this, 149 tons, or 31.5%, come from motor vehicles. The District projects HC will be reduced to approximately 384 tons by 1997. Of this total, 71 tons, or 18.5%, will come from motor vehicles. To achieve state standards in 1997, however, it is estimated that an additional 25 tons per day HC reduction is necessary. This remaining reduction is expected from transportation control measure (TCM) strategies.

The MTC proposed plan includes:

### **MOBILITY IMPROVEMENTS**

#### **Access to Rail Systems**

Expanding access to existing mass transit systems by increased parking, increased feeder bus services to rail and ferries, development of private shuttles to employment centers, and improved bicycle access.

#### **Improved Areawide Bus Service**

Improvements to provide additional ridership (both commute and all day service), explore possibilities for private subscription bus service, and measures to promote more convenient service.

#### **Expedite Regional Rail Agreement**

Various rail extension projects involving BART, CalTrain and Muni Metro.

#### **Ferry Service**

Additional funding and a local financial commitment for ferry service from Alameda, Oakland, Berkeley, Richmond and Vallejo to San Francisco. Local bus service should be coordinated to feed the ferry terminals.

#### **Carpool/Bus Lanes**

The HOV lane plans in the future are: construct HOV-to-HOV freeways connectors, increase express bus service on HOV lanes, provide carpool priority treatment on selected local arterial streets, increase HOV occupancy.

---

*"The legislative process provides that MTC propose strategies by the end of June, 1990 for review by the District. In essence, the legislation provides for a cooperative multi-agency process leading to adoption of a plan next year."*

---



**Bicycle Access Improvements**

Increase the number of bike routes, bikes lanes, and/or bike paths; expand carrying capability on buses, ferries, and rail systems for bikes; provide means for bicycles to cross all existing bay bridges.

**Pedestrian Access Improvements**

Similar issues as those for bicycles apply to pedestrian facilities.

**Youth Transportation**

Expand distribution of youth transit tickets through the schools at a continuing discount.

**Freeway Incident Management Program**

Traffic surveillance, ramp metering and traffic advisory signs to remove stalled cars, accidents, and truck spills from the freeways quickly to alleviate chronic backups.

**USER INCENTIVES**

**Transit Fare Incentives**

Eliminate fares for feeder buses to rail and ferry mass transit; implement alternative fare concepts.

**Carpool/Vanpool Incentives**

Public and private employers could issue carpool vouchers, redeemable in cash, after completion of prescribed number of trips to work in a carpool or vanpool; preferential parking wherever possible.

**Vanpool Liability Insurance**

Establish an umbrella liability insurance program to cover companies and individuals that wish to provide vanpool service.

**Indirect Source Review**

Under this proposal, the BAAQMD would require all cities and counties to include an Air Quality Element in their General Plan.

**Public Education**

This measure would establish a high visibility air quality campaign directed at changing personal thinking and behavior.

**Employer Assistance Programs**

Build on the voluntary approach and provide new information and options to different sizes and types of Bay Area employers.

**TECHNOLOGY DEMONSTRATION**

**Electronic License Plate/HOV Lane Project**

Use of electronic license plate technology to identify carpools using HOV lanes. While carpools would use the lanes at no cost, electronic detection would simplify HOV lane monitoring and enforcement.

**Low Emission Vehicles for Access to BART**

Develop a pilot demonstration project for auto access to BART stations using low emission vehicle technology — electric or compressed natural gas. These vehicles would receive preferential parking spaces at BART stations and include electric recharging stations.

**Telecommuting**

This measure would consist of a demonstration project involving a partnership with the business community to answer questions about overall travel behavior and corporate management concerns about telecommuting.

**REVENUE MEASURES**

**Bridge Tolls** - increase to \$2 on all seven state-owned bridges.

**Registration Fee** - increase registration fees by \$5 per year.

**Gas Tax** - or Equivalent Fee Mechanism equal to 15¢ per gallon.

**VEHICLE INSPECTION AND MAINTENANCE (SMOG CHECK) PROGRAM**

- Cars of pre-1980 vintage would undergo annual smog inspections.

- Repair costs ceilings would be raised to \$175 (1975-79 cars) and \$125 (1972-1974 cars)

- Additional sources of funding to provide low interest loans for repairs exceeding the above cost ceilings.

- Penalties for failure to register vehicles and participate in the smog check program.

*"The development of new, cleaner burning conventional gasoline fuels could provide short-term air quality benefits in the timeframe of the 1997 Clean Air Plan."*

NOT

**Bicycle Access Improvements**

Increase the number of bike routes, bikes lanes, and/or bike paths; expand carrying capability on buses, ferries, and rail systems for bikes; provide means for bicycles to cross all existing bay bridges.

**Pedestrian Access Improvements**

Similar issues as those for bicycles apply to pedestrian facilities.

**Youth Transportation**

Expand distribution of youth transit tickets through the schools at a continuing discount.

**Freeway Incident Management Program**

Traffic surveillance, ramp metering and traffic advisory signs to remove stalled cars, accidents, and truck spills from the freeways quickly to alleviate chronic backups.

**USER INCENTIVES**

**Transit Fare Incentives**

Eliminate fares for feeder buses to rail and ferry mass transit; implement alternative fare concepts.

**Carpool/Vanpool Incentives**

Public and private employers could issue carpool vouchers, redeemable in cash, after completion of prescribed number of trips to work in a carpool or vanpool; preferential parking wherever possible.

**Vanpool Liability Insurance**

Establish an umbrella liability insurance program to cover companies and individuals that wish to provide vanpool service.

**Indirect Source Review**

Under this proposal, the BAAQMD would require all cities and counties to include an Air Quality Element in their General Plan.

**Public Education**

This measure would establish a high visibility air quality campaign directed at changing personal thinking and behavior.

**Employer Assistance Programs**

Build on the voluntary approach and provide new information and options to different sizes and types of Bay Area employers.

**TECHNOLOGY DEMONSTRATION**

**Electronic License Plate/HOV Lane Project**

Use of electronic license plate technology to identify carpools using HOV lanes. While carpools would use the lanes at no cost, electronic detection would simplify HOV lane monitoring and enforcement.

**Low Emission Vehicles for Access to BART**

Develop a pilot demonstration project for auto access to BART stations using low emission vehicle technology — electric or compressed natural gas. These vehicles would receive preferential parking spaces at BART stations and include electric recharging stations.

**Telecommuting**

This measure would consist of a demonstration project involving a partnership with the business community to answer questions about overall travel behavior and corporate management concerns about telecommuting.

**REVENUE MEASURES**

**Bridge Tolls** - increase to \$2 on all seven state-owned bridges.

**Registration Fee** - increase registration fees by \$5 per year.

**Gas Tax** - or Equivalent Fee Mechanism equal to 15¢ per gallon.

**VEHICLE INSPECTION AND MAINTENANCE (SMOG CHECK) PROGRAM**

· Cars of pre-1980 vintage would undergo annual smog inspections.

· Repair costs ceilings would be raised to \$175 (1975-79 cars) and \$125 (1972-1974 cars)

· Additional sources of funding to provide low interest loans for repairs exceeding the above cost ceilings.

· Penalties for failure to register vehicles and participate in the smog check program.

**"The development of new, cleaner burning conventional gasoline fuels could provide short-term air quality benefits in the timeframe of the 1997 Clean Air Plan."**

NOT

## OPPORTUNITIES FOR ADDRESSING SHORTFALL

### Retirement of High-Emission Older Vehicles.\*

A wide range of measures could be considered to reduce the number of older cars currently on the road. These might include buy-back arrangement, low interest loans for replacement vehicles, or other measures.

## VEHICLE TECHNOLOGY AND FUELS

### Conversions of Corporate Fleets to Clean Fuel\*

Incentive programs to ensure that corporations acquiring fleets would purchase the cleanest vehicles available. Vehicles using reformulated ("designer") gasoline, compressed natural gas, and gasoline-methanol blend are options.

### Reformulated Gasoline\*

The development of new, cleaner burning conventional gasoline fuels could provide short-term air quality benefits in the time frame of the 1997 Clean Air Plan. The State Air Resources Board Staff is currently considering specific compositional regulations for gasoline such as: 1) lower Reid Vapor pressure — a measure of gasoline's tendency to evaporate and therefore release ozone producing chemicals directly into the air. 2) inclusion of deposit control additives — deposits can interfere with fuel flow and disturb the air/fuel ratio, leading to increase emissions.

\* Not a Transportation Control Measure as defined in federal and state legislation.

## MARKET-BASED APPROACH

In contrast to regulatory approaches, the economic approach generates revenue to address the root of the problem — smog fees directed to lowering emissions from mobile sources and congestion fees to develop mobility improvements on an areawide or corridor basis — e.g., more HOV lanes, transit, or traffic operations equipment. Fees could also be directed to encourage drivers to keep their cars maintained, use older, dirtier cars less frequently, or adjust their driving habits to consume less fuel.

## OPPORTUNITIES FOR ADDRESSING SHORTFALL IN STATE TARGET

### Mandatory Employer Based Programs

This measure would require employers with more than 100 employees and operators of large employment complexes to implement a specific set of mobility-oriented measures. Charge for parking: Parking for drive-alone autos would be assigned a price that is at least commensurate with its underlying resource costs, but in no case less than \$30.00 per month.

- Subsidize transit passes and carpools and vanpools.
- Provide preferential parking.
- Provide on-site ridematching programs, include all employees in regional ridematching databases, and provide guaranteed ride home for those who rideshare or,
- Develop their own plan and set of measures to meet the same occupancy goals.

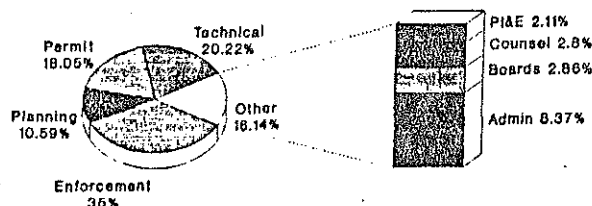
### Land Use Strategies

Examine the air quality planning efforts in relation to specific recommendations concerning the magnitude and distribution of growth that is projected to take place over the long-term.

## Approved 1990-91 Budget:

\$24,317,755

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
BASE LEVEL OPERATIONS  
Fiscal Year 1990-91



Percentages include applied costs for Building Maintenance, Information Sys, Personnel and Vehicle Maintenance

← NOTE



*"In contrast to regulatory approaches, the economic approach generates revenue to address the root of the problem — smog fees directed to lowering emissions from mobile sources and congestion fees to develop mobility improvements on an areawide or corridor basis."*

# AIR CURRENTS

published monthly by  
**BAY AREA AIR QUALITY  
 MANAGEMENT DISTRICT**  
 939 Ellis Street  
 San Francisco 94109

## Board of Directors

**Osby Davis, Chairperson**  
 Solano County  
**Paul Cooper, Vice-Chairperson**  
 Contra Costa County  
**Anna Eshoo, Secretary**  
 San Mateo County

**Albert Aramburu**  
 Marin County  
**Harry Britt**  
 San Francisco County  
**Edward R. Campbell**  
 Alameda County  
**Martha Clevenger**  
 Santa Clara County  
**Chuck Corica**  
 Alameda County  
**Rod Diridon**  
 Santa Clara County

**Jim Gonzalez**  
 San Francisco County  
**Jim Harberson**  
 Sonoma County  
**M. Patricia Hillgoss**  
 Sonoma County  
**Robert H. Hughan**  
 Santa Clara County  
**Sunne Wright McPeak**  
 Contra Costa County  
**Gus J. Nicolopoulos**  
 San Mateo County  
**Frank Ogawa**  
 Alameda County  
**Tom Powers**  
 Contra Costa County  
**Bob White**  
 Napa County  
**Susanne Wilson**  
 Santa Clara County

**GENERAL BUSINESS**  
 415-771-6000

**DAILY REPORT**  
 415-673-SMOG

**FAX**  
 415-928-8560



**1990-91 Board Officers (l to r) Secretary: San Mateo County Supervisor, Anne Eshoo; Chairperson: Solano Supervisor Osby Davis; Vice-Chairperson: Pleasant Hill Councilperson, Paul Cooper.**

## Schedule of Public Hearings

August 1, 1990  
 Consideration of Amendments to Regulation 11, Rule 2 regarding asbestos, and Regulation 3 regarding asbestos fees.

August 1, 1990  
 Consideration of Amendments to Regulation 11, Rule 9 regarding ethylene oxide sterilizers.

September 5, 1990  
 Consideration of Amendments to Regulation 8, Rule 5 regarding storage of organic liquids.

September 5, 1990  
 Consideration of Amendments to Regulation 8, Rule 17 regarding petroleum dry cleaning operations.

September 5, 1990  
 Consideration of Amendments to Regulation 8, Rule 27 regarding perchloroethylene dry cleaning operations.

## BAAQMD ACTIVITIES

june

ENFORCEMENT	This Month	Last Month
Total Inspections	2544	2772
Complaints Processed	782	902
Violation Notices	339	304
Total Penalties	\$43,219	\$32,022

## LEGAL

Violation Notices Received	22	13
Violation Notices Pending	450	436
Total Penalties	\$11,300	\$19,289

## TECHNICAL

Max. Ozone	83	75
Max. CO	54	39
Max. Particulates	48	44
Number of Alerts	0	0
Source Tests	31	28

## PERMIT SERVICES

Authorities to Construct Granted	129	1
Permits to Operate Granted	207	285

## PLANNING

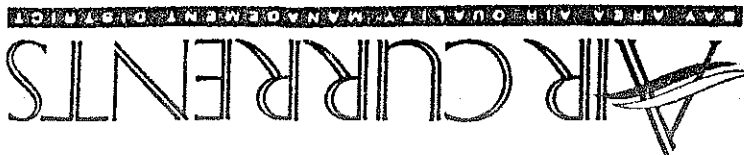
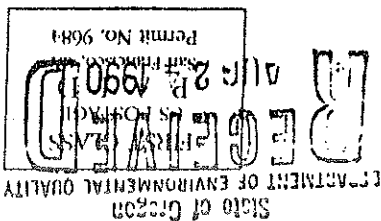
Environmental Documents Processed	59	60
-----------------------------------	----	----

Pollutant values are expressed according to the Pollutant Standards Index Scale. 0-50 Good (G); 50-100 Moderate (M); 101-200 Unhealthful (U); 201-300 Very Unhealthful (VU); over 300 Hazardous (H).



Dept of Environmental Quality  
 811 SW Sixth Avenue  
 Portland, OR 97204

AIR QUALITY CONTROL



939 Ellis Street, San Francisco, California 94109

# AIR CURRENTS

published monthly by  
**BAY AREA AIR QUALITY  
 MANAGEMENT DISTRICT**  
 939 Ellis Street  
 San Francisco 94109

## Board of Directors

**Osby Davis, Chairperson**  
 Solano County  
**Paul Cooper, Vice-Chairperson**  
 Contra Costa County  
**Anna Esboo, Secretary**  
 San Mateo County

**Albert Aramburu**  
 Marin County  
**Harry Britt**  
 San Francisco County  
**Edward R. Campbell**  
 Alameda County  
**Martha Clevenger**  
 Santa Clara County  
**Chuck Corica**  
 Alameda County  
**Rod Diridon**  
 Santa Clara County  
**Jim Gonzalez**  
 San Francisco County  
**Jim Harberson**  
 Sonoma County  
**M. Patricia Hilligoss**  
 Sonoma County  
**Roberta H. Hughan**  
 Santa Clara County  
**Sunne Wright McPeak**  
 Contra Costa County  
**Gus J. Nicolopoulos**  
 San Mateo County  
**Frank Ogawa**  
 Alameda County  
**Tom Powers**  
 Contra Costa County  
**Bob White**  
 Napa County  
**Susanne Wilson**  
 Santa Clara County

**GENERAL BUSINESS**  
 415-771-6000

**DAILY REPORT**  
 415-673-SMOG

**FAX**  
 415-928-8560



**1990-91 Board Officers (l to r) Secretary: San Mateo County Supervisor, Anne Esboo; Chairperson: Solano Supervisor Osby Davis; Vice-Chairperson: Pleasant Hill Councilperson, Paul Cooper.**

## Schedule of Public Hearings

- August 1, 1990  
 Consideration of Amendments to Regulation 11, Rule 2 regarding asbestos, and Regulation 3 regarding asbestos fees.
- August 1, 1990  
 Consideration of Amendments to Regulation 11, Rule 9 regarding ethylene oxide sterilizers.
- September 5, 1990  
 Consideration of Amendments to Regulation 8, Rule 5 regarding storage of organic liquids.
- September 5, 1990  
 Consideration of Amendments to Regulation 8, Rule 17 regarding petroleum dry cleaning operations.
- September 5, 1990  
 Consideration of Amendments to Regulation 8, Rule 27 regarding perchloroethylene dry cleaning operations.

## B A A Q M D ACTIVITIES

june

<b>ENFORCEMENT</b>	This Month	Last Month
Total Inspections	2544	2772
Complaints Processed	782	902
Violation Notices	339	304
Total Penalties	\$43,219	\$32,022

## LEGAL

Violation Notices Received	22	13
Violation Notices Pending	450	436
Total Penalties	\$11,300	\$19,289

## TECHNICAL

Max. Ozone	83	75
Max. CO	54	39
Max. Particulates	48	44
Number of Alerts	0	0
Source Tests	31	28

## PERMIT SERVICES

Authorities to Construct Granted	129	1
Permits to Operate Granted	207	285

## PLANNING

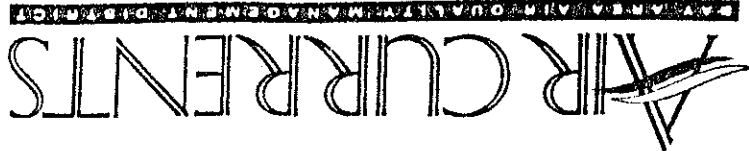
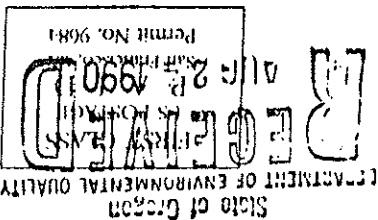
Environmental Documents Processed	59	60
-----------------------------------	----	----

Pollutant values are expressed according to the Pollutant Standards Index Scale. 0-50 Good (G); 50-100 Moderate (M); 101-200 Unhealthful (U); 201-300 Very Unhealthful (VU); over 300 Hazardous (H).



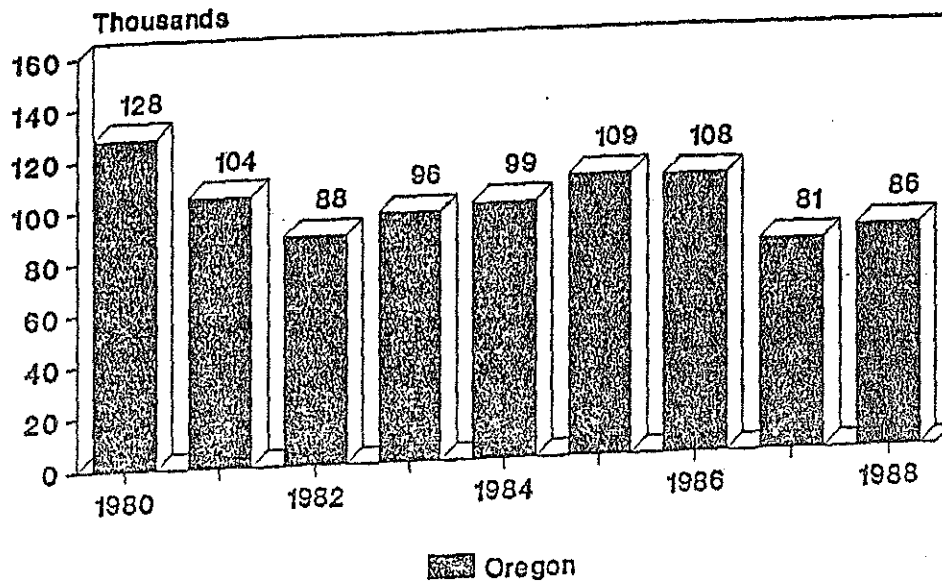
Dept of Environmental Quality  
 811 SW Sixth Avenue  
 Portland, OR 97204

AIR QUALITY CONTROL



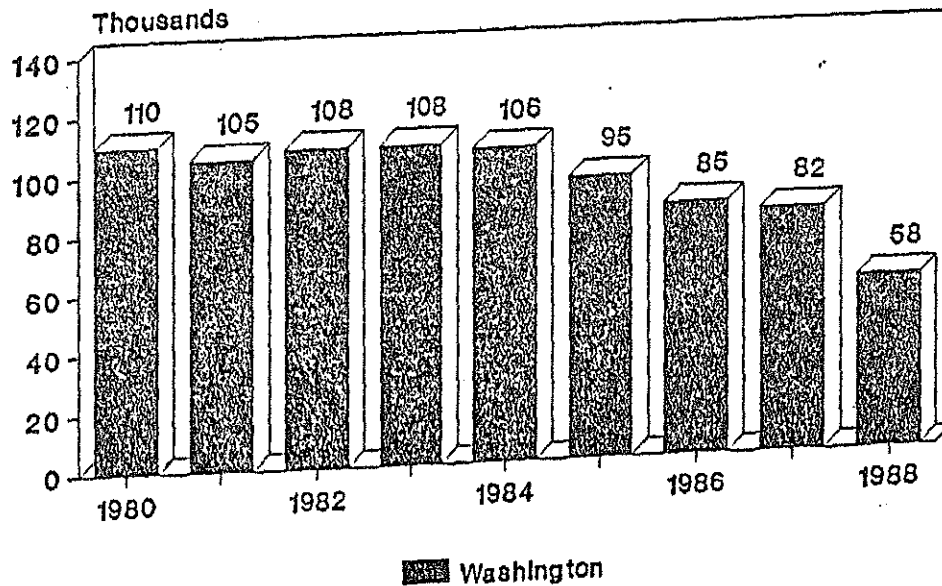
939 Ellis Street, San Francisco, California 94109

### OREGON TRENDS IN PRESCRIBED BURNING ACRES BURNED PER YEAR



Oregon Smoke Management Report, 1988

### WASHINGTON TRENDS IN PRESCRIBED BURNING ACRES BURNED PER YEAR



Washington DNR Smoke Management Report

JUN 1 1990

Est. 1885

# OEC's clean-air proposal deserves grower support

The controversy over field burning is still bubbling in the halls of the Oregon Legislature. This time the stew is a different mix, with other sources of pollution being thrown into the pot as well.

There was a hearing conducted by the joint interim Committee on Environment, Energy and Hazardous Materials on March 23 and again on May 27. The subject of the hearing is a bill concept introduced by the Oregon Environmental Council dealing with a proposed Oregon Clean Air Act.

The Oregon Environmental Council is one of the "moderate" environmental groups. The people that work for this group are well-educated and well-informed. John Charles, who is the principal involved in this particular proposal, is capable of listening

to reason and sensitive economic concerns as well as the environmental hard line.

A brief summary of the proposal is as follows: "This proposal relies primarily on economic incentives and disincentives to accomplish its clean-air goals. The disincentives are in the form of effluent polluters. The incentives include cash grants, tax credits, and research grants to assist them in reducing their polluting activities. This proposal is premised on the 'polluter pays' principle and therefore has no general fund impact on the state of Oregon."

The point made by the experts who testified in the March session is that the federal Clean Air Act of 1970 is not adequate to solve Oregon's air-pollution problems. At least six Oregon cities are currently violating one or more of the



By Irv Jacob

Capital  
Press  
Seed  
Industry  
Writer

federal health standards, and the highest recorded levels of fine-particulate pollution in the entire country have been recorded in Klamath Falls in recent years.

Additionally, the federal law fails to recognize that people make individual decisions

based on perceived economic self-interest. Since air is a free good under current law, it is overused by virtually everyone — to the detriment of all of us.

This proposal attempts to remedy those flaws by assigning a price to clean air that penalizes those who pollute and rewards those who don't.

Included in this omnibus clean-air proposal are major industrial sources of pollution, agriculture burning, slash (forestry) burning, transportation sources and residential wood stoves. These are the major sources of measurable particulates (except for dust).

The concept of putting all polluters into a single management system has a good deal of merit and should be encouraged by Oregonians. A similar bill was introduced in the 1989 Legislature as a sub-

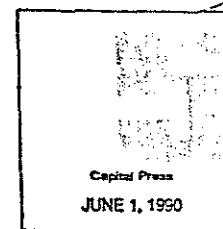
stitute for those bills attempting to ban open field burning. Several representatives promised to give serious consideration to a "combined approach" during the interim, and now they are making good on their promise.

This new proposal includes provisions for development of a Pollution Prevention Fund. Revenue from the fees collected would be used to assist people in making the transition away from the polluting activity whenever possible.

The details of this proposal are necessarily vague. The intent of the hearings was to give legislators material and information from which to draft a bill. The goal expressed — "A 50 percent reduction in statewide emissions of criteria pollutants caused by human activity within 10 years" — is

ambitious but feasible. At the same time, the proponents would be making provisions for future growth and needed economic development.

Field burning of grass fields becomes just one element of this even-handed approach, and that is as it should be. I encourage seed growers to review this proposal and measure their support for candidates in the 1990 election by this fair-minded standard.



State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED  
JUL 06 1990

AIR QUALITY CONTROL

ATTACHMENT 3

ATTACHMENT 4






STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: October 2, 1990

TO: Environmental Quality Commission

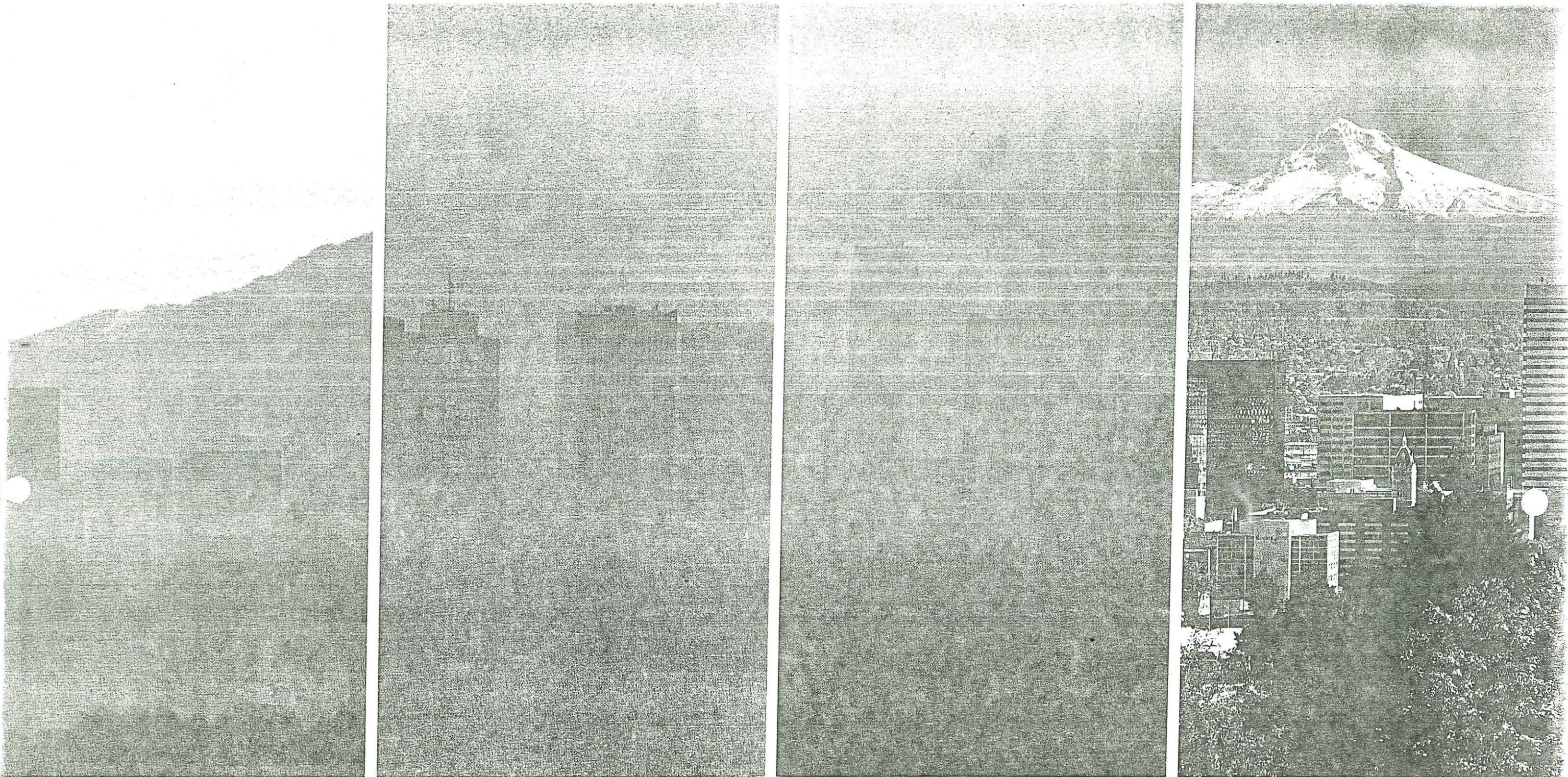
FROM:  Julie Schmitt

SUBJECT: Staff reports for 10/11/90 EQC Work Session

Enclosed are the following:

- o Agenda
- o Work Session Items: #1 and 2

/js  
EQC.Reports



# Can you identify these convention sites from the air?

Lots of cities can offer you more than Portland, Oregon. More traffic. More litter. More smog.

Which is why Portland is indeed a breath of fresh air.

Long ranked as one of

America's cleanest cities by the EPA, Portland passed the nation's first anti-litter bottle bill. And all 365 days in 1989 were well below the federal standards governing ozone

and particulate pollution.

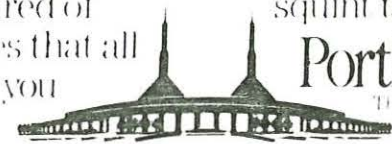
One reason is Portland's light rail system. Trains silently pull up alongside the new Oregon Convention Center 164 times per day to pick up

thousands of visitors. All of whom reap the benefits of our pristine river city: quiet meals in waterfront cafes, and long walks that are easy on the lungs. Some even opt to fish down

town for chinook salmon (and yes, they're safe to eat).

If you're tired of convention sites that all blend together, you really should

look into Portland. And now you know you won't have to squint to see it.



**Portland, Oregon**

Don't see a difference?