

3/13/1981

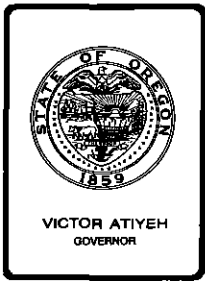
**OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS**



**State of Oregon
Department of
Environmental
Quality**

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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 No. L, March 13, 1981, EQC Meeting

Request for a Variance from General Emission Standards for Volatile Organic Compounds (VOC) at Bulk Gasoline Terminals, OAR 340-22-130(1), for Time Oil Company, Northwest and Bell Terminal

Background

By letter dated January 16, 1981 (Attachment No. 1), Time Oil Company requested a variance to complete the installation of equipment to control the emissions of volatile organic compounds from Time Oil Company's bulk gasoline terminal at 12005 N. Burgard Road, Portland. OAR 340-22-130 established a date of April 1, 1981, by which all bulk gasoline terminals with a daily throughput of greater than 76,000 liters (20,000 gallons) per day of gasoline should limit the emission of volatile organic compounds to 80 milligrams or less of VOC per liter of gasoline loaded into trucks and trailers.

Time Oil Company issued purchase orders to McGill, Inc., Tulsa, Okla., for vapor recovery units for their Portland (St. Helens Road) Terminal on April 7, 1980, and for their Northwest and Bell Terminal (Burgard Road) on July 10, 1980. As outlined in the McGill, Inc., letter of January 6, 1981 (Attachment No. 2), the vapor recovery unit for the Portland Terminal has been received and will be installed and in operation by the compliance date of April 1, 1981. The vapor recovery unit for the Northwest and Bell Terminal is scheduled to be shipped during the week of March 16, 1981. Transportation, installation and shakedown time is estimated to extend until June 1981.

Mr. John Denham, Environmental Coordinator for Time Oil Company, explained that the later purchase date for the VOC control unit for the Northwest and Bell Terminal was the result of a change of marketing plans which originally called for all gasoline truck loading to be concentrated at the Portland Terminal. The plans were changed by customer needs to include gasoline truck loading at both terminals. Hence the later purchase date and the need for a variance.

Oregon Revised Statute 468.345 authorizes the Environmental Quality Commission to grant variances from air contamination rules and standards if it finds that conditions exist beyond the control of the persons granted such variances.

Alternatives and Evaluation

The proximity of the shipping date for delivery of the control equipment to the compliance date leaves no alternative to a variance except possible closure of the facility.

Strict compliance with the compliance date of April 1, 1981, is inappropriate in this case because conditions exist that are beyond the control of Time Oil Company. The purchase order for the vapor recovery unit was issued to the supplier McGill, Inc., on July 10, 1980, specifying the earliest delivery date available, which was March 26, 1981. McGill has since confirmed the shipping date for the week of March 26, 1981, and has listed the additional time required to put the unit into service. These times extend the completion time to June 6, 1981, at the earliest.

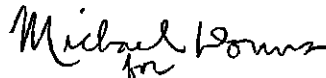
A variance is requested to extend the compliance date to July 1, 1981. The additional time beyond the earliest anticipated date for completion is believed necessary to allow for unexpected delays in delivery, installation and shakedown of the new equipment.

Summation

1. The Environmental Quality Commission has authority under Oregon Revised Statutes 468.345 to grant a variance if it finds conditions exist that are beyond the control of Time Oil Company.
2. Time Oil Company has requested a variance from the compliance date of April 1, 1981, to extend the compliance date to July 1, 1981.
3. Time Oil Company has received confirmation from the supplier of the VOC control equipment that delivery will be made during the week of March 16, 1981.
4. Strict compliance with the established compliance date of April 1, 1981, is inappropriate in this case because conditions exist that are beyond the control of Time Oil Company.

Director's Recommendation

Based upon the findings in the summation, it is recommended that Time Oil Company, Northwest and Bell Terminal, be granted a variance from the compliance date of April 1, 1981, specified in OAR 340-22-130(1) upon the condition that compliance be achieved by no later than July 1, 1981.


for
William H. Young

Attachments

1. Time Oil request for extension (1/16/81)
2. McGill, Inc., letter (1/6/81)

Harry M. Demaray:c
RC93
229-5295
2/24/81

see

SEATTLE
TACOMA
PORTLAND
STOCKTON
RENO
RICHMOND
SAN PEDRO
LOS ANGELES



TIME OIL COMPANY

2737 W. COMMODORE WAY, P.O. BOX 24447, TERMINAL ANNEX, SEATTLE, WA 98124

Dept. of Environmental Quality

R E C E I V E D
JAN 19 1981

January 16, 1981

NORTHWEST REGION

Department of Environmental Quality
Attn: Stephen Carter
522 Southwest 5th Avenue
P.O. Box 1760
Portland, OR 97297

Dear Mr. Carter:

This is in reference to your letter of August 28, 1980 and mine of August 22, 1980, copies attached.

Obtaining copies of purchase orders per your request was no problem since they were initiated from this office. Obtaining a letter from the supplier was another story. It arrived today however and a copy is enclosed along with copies of the purchase orders. Believe this completes your requirements.

We again request an extension of time, from April 1, 1981 to December 31, 1981, to complete vapor recovery installations at terminals.

Sincerely,

A handwritten signature in cursive script that reads "John P. Denham".

John P. Denham
Environmental Coordinator

JPD/mf



McGill Incorporated

5800 West 68th Street
Post Office Box 9667
Tulsa, Oklahoma 74107 U.S.A.
918-445-2431 Telex 79-6434

January 6, 1981

Time Oil Company
2737 West Commodore Way
Seattle, WA. 98199

ATTENTION: Jock Streidl

REFERENCE: Vapor Recovery Unit
for your Portland, OR. terminal
McGill Job No. 70590

Gentlemen:

Confirming our recent telephone conversation, the best shipping date for the above referenced job will be the week of 3-16-81.

Transportation to the jobsite will take 3-5 days. Typical installation time for this equipment is 30-45 days. This obviously can vary depending on the amount of preparation made before the unit arrives. Actual assembly time of the components and tie in of gasoline, vapor lines, circulation lines, electrical power and control lines is about 5-10 days.

McGill will require at least one week's notice that equipment is ready for start-up. Occasionally we will have more requests for start-up in one week than we have people to perform the work, so the earlier you can notify us of your scheduled start-up date, the better, as we work on a first come, first served basis. Start-up and personnel training will take about 5 days.

If you have any questions, or if we can be of any further assistance, please advise.

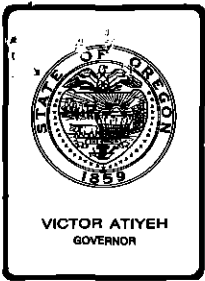
Sincerely,

Mark Agee
Mark Agee
Projects Manager

MA:fh

cc: Brock Easley - Kirkland, WA
Brock Easley - Englewood, CO

3/16/81
+7
23
+7
3/30/81
+45
5/15/81
+10
25
6/1
+5
7/10/81
5am 7/1/81



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 M, March 13, 1981, EQC Meeting
Public Hearing and Consideration of Adopting Proposed Revised
Open Field Burning Regulations, OAR Chapter 340, Section 26-005
through 26-030.

1. Background

As stated in the January 30, 1981, staff report, revisions to the rules regulating open field burning are proposed to address 1) problems of illegal over-burning as evidenced by a recent independent sampling analysis commissioned by the Department, 2) the need for improving the effective daily functioning of the smoke management program through improved information collection and transfer (field mapping system) and the granting of authority to the Department to issue additional burning restrictions by area, time period, and fuel condition when deemed necessary, and 3) the problem of safe burning adjacent to and on the west side of U.S. Interstate 5.

The problem of over-burning, assuming the available evidence is reasonably accurate, could of course have potentially serious implications on compliance with legal state and federally approved maximum acreage limitations, both the annual acreage ceiling (250,000 acres) and the single-day maximum for the south valley (46,934 acres).

In addition, the legislative directive to maximize daily burning within those limitations, combined with the recognized need to continue to minimize smoke intrusions have necessitated more intensive management practices, and generally better communication and performance at each level of organization: management team, permit agent, and grower.

On January 30, 1981, at its regularly scheduled meeting, the Environmental Quality Commission (EQC) approved a request for authorization to conduct a public hearing on the proposed open field burning regulations, with the period for receiving public testimony to extend through to the scheduled public hearing at the March 13, 1981, EQC meeting. Public testimony and comment received as of this writing (February 18, 1981) are reviewed in the Evaluation section of this report.



Contains
Recycled
Materials

A "Statement of Need for Rulemaking" is attached (Attachment 1). The EQC's authority to regulate field burning is established in the following Oregon Revised Statutes (ORS):

- a) ORS 468.130 authorizing the Commission to establish a civil penalty schedule;
- b) ORS 468.450 authorizing the Commission to establish a schedule which identifies the extent and type of burning to be allowed on each "marginal" day; and,
- c) ORS 468.460 authorizing the Commission to promulgate rules controlling Willamette Valley field burning.

In addition, the Department has requested Oregon State University to review and comment upon the proposed rule changes pursuant to ORS 468.460(3).

It should be noted that certain sections of the field burning rules appended to the January 30, 1981 staff report as Attachment III, other than those sections proposed and identified (underscored) for revision, did not incorporate the most recent rule changes approved by the Commission at its regular meeting on April 18, 1980. Those changes have since been incorporated into the rules as presented in Attachment II of this report which now represents the complete and updated version.

2. Alternatives and Evaluation

2.1 Summary of Testimony

Both the City of Eugene and the Oregon Seed Council have been instrumental in assisting in a positive way the rule development process and have submitted written comments on the currently proposed rule revisions which represent a consensus of thought reflective of the year-old signed agreement between the two parties. Both parties have indicated general support for the Department's efforts to increase enforcement activities and implement other improvements of an organizational and operational nature. Both parties have, however, recommended some modifications to the proposed rule revisions related to civil penalties and fluffing requirements. In addition, both parties have recommended a change to an existing rule requiring into-the-wind strip-lighting under certain conditions.

Specifically, the following joint recommendations on the proposed rule revisions were made:

- a) Keep and strengthen the provision for requiring mechanical fluffing treatments such that the Department shall require its use when conditions warranting its use exist. Omit subsequent language stating it to be the Commission's intention to require fluffing on essentially all perennial fields by 1983 (Subsection 26-015(3)(g)(A)).

Both parties argued that, while it is necessary to signal to the grower community that fluffing treatments will eventually be required on a regular basis and that arrangements or capital investments for acquiring such equipment need to be made, adoption and implementation of the fluffing requirement as suggested would adequately accomplish this and allow for more flexibility in discriminating between those specific perennial grass types most suited to the benefits of such treatment.

- b) Omit the existing provision specifying use of into-the-wind strip-lighting techniques on annual grass seed and cereal crop fields when, except under wind directions of 20° to 90°, an estimated mixing height of 3500 feet will not occur (Subsection 26-015(3)(e)(A)).

Both parties agreed that the rule unnecessarily limits the use of preferred perimeter burning techniques and is otherwise of little use since any significant burning under conditions of limited mixing height is usually accomplished on a field-by-field release basis under intense management and scrutiny.

- c) Specify that the proposed civil penalty schedule be applied only in lieu of any \$20 to \$40 per acre assessment and not in addition to it; specify only a specific fine for each of the offenses listed and eliminate the language allowing a penalty assessment range up to \$10,000 for each violation; eliminate the provision for suspending burning privileges for up to 18 months after a repeat violation occurs within a two year period (Subsection 26-025(2)).

Both sides argued that eliminating the penalty range and establishing a single specific fine for each specific offense would better serve the purpose of notifying and clarifying for the grower community the Department's penalty assessment procedure and its intent to act in a straightforward, swift, and predictable manner to various types of violations. It was similarly argued that, in order for the Department to maintain some flexibility in penalty determination, especially for cases in which a per-acre assessment method would more adequately reflect the violation or its consequences, the Department should at its option determine which method of assessment to use (either per-acre or specific fine) but that one not be combined to "piggy-back" upon the other. Furthermore, both parties agreed that the provision for suspending burning privileges should be omitted at this time because of foreseeable difficulties in enforcing such a regulation and as an effort to encourage the industry's sustained spirit of cooperation in supporting more effective rule compliance.

These revisions have been subsequently discussed by staff and the proposed changes are addressed in Section 2.2 of this staff report and in the proposed rules (Attachment II).

Oregon State University (OSU) also submitted testimony in response to the proposed rules which similarly reflects the recommendations of the Oregon Seed Council and the City of Eugene as discussed above. Specifically, the OSU response indicates concern over 1) the application of a fluffing requirement "on essentially all perennial grass seed fields" by 1983, and 2) the wide range of penalties stipulated for specific violations (personal communication).

The proposed field burning rules have been distributed to local, state and federal governmental agencies (including all affected fire districts), as part of a federally mandated coordinated review process. In summary, all responses received to date have been in support of the proposed rules with the exception of those items noted above.

2.2 Proposed Rule Changes in Response to Testimony

2.2.1 Revisions to Subsection 26-015

The proposed rule revision stipulating that by 1983 the Commission require mechanical fluffing treatments on essentially all perennial grass seed fields was originally intended to serve as a message urging growers to make plans for acquiring the necessary equipment. The Department planned then to determine through field studies the specific criteria, conditions, and grass types for which the benefits of fluffing would be maximized. Specific rule provisions would then be developed accordingly.

Staff accepts the reasoning that the proposed rule revision authorizing the Department to require fluffing under certain conditions by itself serves as notice to the grower community that preparations for complying should be made, provided the Department demonstrates during the 1981 summer season that the fluffing rule will, in fact, be implemented liberally whenever conditions would warrant. In addition, permanently adopting the fluffing rule as is now recommended allows the Department considerable flexibility in its application by crop type.

With regard to testimony recommending elimination of a current requirement for use of into-the-wind strip-lighting techniques on annual grass seed and cereal fields under certain limited ventilation conditions, staff substantially concurs with the supporting arguments presented. The current rule unduly restricts more frequent use of perimeter burning which, in the Department's opinion, is the preferred burning technique. As mentioned earlier, any significant amount of burning accomplished under limited ventilation is usually done on a limited or field-by-field release basis in which field condition, burning method, and local meteorology are controlled or carefully selected. Finally, into-the-wind strip-lighting has failed to receive widespread use by growers because of the potential threat to personal safety its use represents.

The Environmental Protection Agency (EPA) is currently reviewing this recommended change and have provided no response as of this writing as to its acceptability. The change could be perceived as representing a relaxation to the current SIP related to continuous emission control. Staff believes that in terms of emission control, however, the effect of the change would be offset by the proposed new rule requiring fluffing of fields when excessive low-level smoke is anticipated.

2.2.2 Revisions to Subsection 26-025

To a great extent, the Department's ability to curb illegal burning activity will depend on the cooperation of growers and permit agents. An effective enforcement program combines a realistic risk of being cited with a penalty assessment procedure that is well defined and not readily mitigable. The former will be addressed at the operational level through personnel additions and greater use of aerial surveillance and photographic coverage. A fine schedule has been proposed to address the latter and to relieve the Department's field investigators from the time-delaying necessity of determining acreage associated with each illegal event.

Staff had originally proposed that such a fine schedule have a wide penalty range associated with it to allow the Department some flexibility in special cases to adjust the penalty above the minimum prescribed, though the Department would intend to as a matter of routine and practice assess that minimum amount for first-time offenders. Testimony suggesting that the wide penalty range defeats the purpose and benefit of a well defined penalty schedule is probably well founded, and that for the same reasoning a per-acre assessment should not be added onto a regular fine. Recognizing that the per-acre method of assessment when used in lieu of the regular fine schedule still allows the Department some flexibility, staff accepts these modifications, but proposes to retain the full penalty range indicated for (2)(e) pertaining to any other violations not specifically identified in the fine schedule. Also, with regard to (2)(b)(B) pertaining to late burning, the proviso "(normal after smoulder excepted)" is omitted to reflect the recently revised language of the rule prohibiting late burning.

Finally, with regard to the provision allowing the Department to suspend a grower's burning privileges after a repeat violation, several problems of enforceability can be anticipated. First, as testimony suggests, it would be relatively easy for a grower to circumvent such a suspension. Secondly, the threat of suspension might cause more growers to challenge or appeal each violation they receive which could contribute significantly to the case workload of enforcement personnel while at the same time greater efforts are made to increase the number of violators cited. The end result of this and its effect on the enforcement process is difficult to predict, but is surely a valid consideration. While staff acknowledges the drawbacks of the proposed provision for suspending burning privileges, the potential value of such a rule as an enforcement deterrent is also apparent. Therefore, the Department proposes to eliminate the suspension provision at this time and adopt a wait-and-see approach toward the effectiveness of the currently proposed rules, leaving open the possibility of implementing a refined suspension rule at a later date.

2.3 Submittal of Proposed Rules for State Implementation Plan Revision

The proposed rules, if adopted, would be submitted along with any necessary

supporting documentation to the EPA. It is the Department's view that the proposed revisions are for the most part more restrictive than current rules contained in the current SIP and should therefore have little difficulty receiving approval.

3. Summation

Revisions to the rules regulating open field burning have been proposed to:

- a) Address problems of illegal over-burning;
- b) Improve smoke management effectiveness through improved information collection and transfer and granting of authority to make additional restrictions on burning by area, time period and fuel condition; and,
- c) Reduce potential public safety hazards associated with burning adjacent to the Interstate 5 freeway.

Written testimony received to date has generally supported the proposed rule revisions with the following exceptions. The Oregon Seed Council and City of Eugene have concurred in recommending that 1) the proposed rule requiring fluffing on essentially all perennial grass seed fields by 1983 be eliminated, 2) an existing rule requiring into-the-wind strip-lighting on annual grass seed and cereal fields under poor ventilation conditions be eliminated, 3) the proposed penalty schedule be modified to eliminate the wide penalty range stipulated for each violation and further specify that the per-acre method of assessment be applied only in lieu of this new penalty schedule, not in addition to it, and 4) the provision allowing the Department to suspend burning privileges of repeat violators be eliminated.

Comments from OSU, for the most part, reflected those recommendations identified above.

Based on the public testimony received to date, additional rule changes are proposed to:

- a) Modify proposed subsection 26-015(3)(g)(A) to eliminate language stating it to be the Commission's intention that fluffing be required on essentially all perennial grass seed fields, and retain the provision specifying that the Department shall require fluffing treatments when conditions warrant;
- b) Modify subsection 26-015(3)(e)(A) to eliminate the existing requirement for into-the-wind strip-lighting on annual grass seed and cereal fields under poor ventilation conditions; and,
- c) Modify proposed subsection 26-025(2) to eliminate the penalty range stipulated for each violation, specify that the proposed

ATTACHMENT 1

Agenda Item , March 13, 1981, EQC Meeting
Public Hearing and Consideration of Adopting Proposed Revised Open
Field Burning Regulations, OAR Chapter 340, Section 26-005 through
26-030.

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to adopt a rule.

(1) Legal Authority

Oregon Revised Statutes 468.020, 468.130, 468.450, and 468.460.

(2) Need for the Rule

Proposed amendment of open field burning regulations, OAR 340, 26-005 through 26-030 is needed to:

1. Incorporate changes enhancing the enforceability of open field burning regulations made necessary by recent evidence of significant levels of illegal burning activity;
2. Make operational rule changes requiring the mapping of all acreage registered for open burning; and,
3. Make operational rule changes granting the Department authority for restricting amounts and timing of burning, and requiring special residue drying treatments when judged by the Department to be necessary.

(3) Principle Documents Relied Upon

1. Staff reports, William H. Young, Director, Department of Environmental Quality presented at the January 30 and March 13, 1981, EQC meetings.
2. Record of the Environmental Quality Commission meetings, January 30 and March 13, 1981.
3. Personal Communication, Timothy J. Sercombe, Johnson, Harrang, Swanson and Long, Eugene City Attorneys, October 22, 1980 and February 12, 1981.
4. Personal Communication with Charles D. Craig, Director of Technical Services, Oregon Seed Council, October 28, November 24, November 26, and December 16, December 23, 1980, and January 6, and February 12, 1981.

5. Personal Communication with Terry Smith, Environmental Analyst City of Eugene, December 11 and December 17, 1980, and January 6, February 12 and February 13, 1981.
6. Personal Communication with David S. Nelson, Executive Secretary Oregon Seed Council, December 24, 1980 and January 6, and February 12, 1981.
7. Personal Communication with Barry Schrupf, Environmental Remote Sensing Applications Laboratory, January 8, 1981.
8. Draft Final Report, Acreage Validation Project, by Barry Schrupf, Oregon State University, Environmental Remote Sensing Applications Laboratory, January 6, 1981.
9. Personal Communication with Harold Youngberg, Extension Agronomist, Oregon State University, February 11, 1981.
10. Letter from Harold Youngberg, Agronomist, OSU, to Sean O'Connell, Department of Environmental Quality, February 12, 1981.
11. Letter from David S. Nelson, Executive Secretary, Oregon Seed Council, to Sean K. O'Connell, Department of Environmental Quality, February 17, 1981.
12. Letter from Terry Smith, Environmental Analyst, City of Eugene, to Sean K. O'Connell, Department of Environmental Quality, February 13, 1981.

ATTACHMENT II

DEPARTMENT OF ENVIRONMENTAL QUALITY
Chapter 340

Agricultural Operations
AGRICULTURAL BURNING

26-005 DEFINITIONS. As used in this general order, regulation and schedule, unless otherwise required by context:

(1) Burning seasons:

(a) "Summer Burning Season" means the four month period from July 1 through October 31.

(b) "Winter Burning Season" means the eight month period from November 1 through June 30.

(2) "Department" means the Department of Environmental Quality.

(3) "Marginal Conditions" means conditions defined in ORS 468.450(1) under which permits for agricultural open burning may be issued in accordance with this regulation and schedule.

(4) "Northerly Winds" means winds coming from directions in the north half of the compass, at the surface and aloft.

(5) "Priority Areas" means the following areas of the Willamette Valley:

(a) Areas in or within 3 miles of the city limits of incorporated cities having populations of 10,000 or greater.

(b) Areas within 1 mile of airports servicing regularly scheduled airline flights.

(c) Areas in Lane County south of the line formed by U. S. Highway 126 and Oregon Highway 126.

(d) Areas in or within 3 miles of the city limits of the City of Lebanon.

(e) Areas on the west side of and within 1/4 mile of these highways: U. S. Interstate 5, 99, 99E, and 99W. Areas on the south side of and within 1/4 mile of U. S. Highway 20 between Albany and Lebanon, Oregon Highway 34 between Lebanon and Corvallis, Oregon Highway 228 from its junction south of Brownsville to its rail crossing at the community of Tulsa.

(6) "Prohibition Conditions" means atmospheric conditions under which all agricultural open burning is prohibited (except where an auxiliary fuel is used such that combustion is nearly complete, or an approved sanitizer is used, or burning is specifically authorized by the Department for experimental purposes pursuant to subsection 26-013(6) of this regulation or for the purpose of confirming forecasted atmospheric dispersion conditions).

(7) "Southerly Winds" means winds coming from directions in the south half of the compass, at the surface and aloft.

(8) "Ventilation Index (VI)" means a calculated value used as a criterion of atmospheric ventilation capabilities. The Ventilation Index as used in these rules is defined by the following identity:

$$VI = \frac{\text{Effective mixing height ((feet))}}{1000} \times (\text{Average wind speed through the effective mixing height (knots)})$$

(9) "Willamette Valley" means the areas of Benton, Clackamas, Lane, Linn, Marion, Multnomah, Polk, Washington and Yamhill Counties lying between the crest of the Coast Range and the crest of the Cascade Mountains, and include the following:

(a) "South Valley," the areas of jurisdiction of all fire permit issuing agents or agencies in the Willamette Valley portion of the Counties of Benton, Lane or Linn.

(b) "North Valley," the areas of jurisdiction of all other fire permit issuing agents or agencies in the Willamette Valley.

(10) "Commission" means the Environmental Quality Commission.

(11) "Local Fire Permit Issuing Agency" means the County Court or Board of County Commissioners or Fire Chief or a Rural Fire Protection District or other person authorized to issue fire permits pursuant to ORS 477.515, 477.530, 476.380, or 478.960.

(12) "Open Field Burning Permit" means a permit issued by the Department pursuant to ORS 468.458.

(13) "Fire Permit" means a permit issued by a local fire permit issuing agency pursuant to ORS 477.515, 477.530, 476.380 or 478.960.

(14) "Validation Number" means a unique three-part number issued by a local fire permit issuing agency which validates a specific open field burning permit for a specific acreage of a specific day. The first part of the validation number shall indicate the number of the month and the day of issuance, the second part the hour of authorized burning based on a 24 hour clock and the third part shall indicate the size of acreage to be burned (e.g., a validation number issued August 26 at 2:30 p.m. for a 70 acre burn would be 0826-1430-070).

(15) "Open Field Burning" means burning of any perennial grass seed field, annual grass seed field or cereal grain field in such manner that combustion air and combustion products are not effectively controlled.

(16) "Backfire Burning" means a method of burning fields in which the flame front does not advance with the existing surface winds. The method requires ignition of the field only on the downwind side.

(17) "Into-the-Wind Strip Burning" means a modification of backfire burning in which additional lines of fire are ignited by advancing directly into the existing surface wind after completing the initial backfires. The technique increases the length of the flame front and therefore reduces the time required to burn a field. As the initial burn nears approximately 85% completion, the remaining acreage may be burned using headfiring techniques in order to maximize plume rise.

(18) "Perimeter Burning" means a method of burning fields in which all sides of the field are ignited as rapidly as practicable in order to maximize plume rise. Little or no preparatory backfire burning shall be done.

(19) "Regular Headfire Burning" means a method of burning fields in which substantial preparatory backfiring is done prior to ignition of the upwind side of the field.

(20) "Approved Alternative Method(s)" means any method approved by the Department to be a satisfactory alternative method to open field burning.

(21) "Approved Interim Alternative Method" means any interim method approved by the Department as an effective method to reduce or otherwise minimize the impact of smoke from open field burning.

(22) "Approved Alternative Facilities" means any land, structure, building, installation, excavation, machinery, equipment or device approved by the Department for use in conjunction with an Approved Alternative Method or an Approved Interim Alternative Method for field sanitation.

(23) "Drying Day" means a 24-hour period during which the relative humidity reached a minimum less than 50% and no rainfall was recorded at the nearest measuring site.

(24) "Basic Quota" means an amount of acreage established for each permit jurisdiction, including fields located in priority areas, in a manner to provide, as reasonably as practicable, an equitable opportunity to burn.

(25) "Priority Area Quota" means an amount of acreage established for each permit jurisdiction, for fields in priority areas, in a manner to provide, as reasonably as practicable, an equitable opportunity to burn.

(26) "Effective Mixing Height" means either the maximum height of actual plume rise as determined by aircraft measurement or the calculated mixing height, whichever is greater.

(27) "Cumulative Hours of Smoke Intrusion in the Eugene-Springfield Area" means the average of the totals of cumulative hours of smoke intrusion recorded for the Eugene site and the Springfield site. Provided the Department determines a smoke intrusion to have been significantly contributed to by field burning, it shall record for each hour of the intrusion which causes the nephelometer hourly reading to exceed background levels (the average of the three hourly readings immediately prior to the intrusion) by:

- (a) 5.0×10^{-4} b-scat units or more, two hours of smoke intrusion;
- (b) 4.0×10^{-4} b-scat units or more, for intrusions after September 15 of each year, two hours of smoke intrusion;
- (c) 1.8×10^{-4} b-scat units or more, but less than the applicable value in (a) or (b), one hour of smoke intrusion.

26-010 GENERAL PROVISIONS. The following provisions apply during both summer and winter burning seasons in the Willamette Valley unless otherwise specifically noted.

(1) Priority for Burning. On any marginal day, priorities for agricultural open burning shall follow those set forth in ORS 468.450 which give perennial grass seed fields used for grass seed production first priority, annual grass seed fields used for grass seed production second priority, grain fields third priority and all other burning fourth priority.

(2) Permits required.

(a) No person shall conduct open field burning within the Willamette Valley without first obtaining a valid open field burning permit from the Department and a fire permit and validation number from the local fire permit issuing agency for any given field for the day that the field is to be burned.

(b) Applications for open field burning permits shall be filed on Registration Application forms provided by the Department[-], and shall include graphic delineation of all acreage so registered upon map materials provided by the Department and on file with the local permit issuing agency.

(c) Open field burning permits issued by the Department are not valid until acreage fees are paid pursuant to ORS 468.480(1)(b) and a validation number is obtained from the appropriate local fire permit issuing agency for each field on the day the field is to be burned. The Department may specify that open field burning permits shall be valid for a designated period of time following the time of issuance and shall expire thereafter if the permitted field burn is not initiated within that designated period.

(d) As provided in ORS 468.465(1), permits for open field burning of cereal grain crops shall be issued only if the person seeking the permits submits to the issuing authority a signed statement under oath or affirmation that the acreage to be burned will be planted to seed crops (other than cereal grains, hairy vetch, or field pea crops) which require flame sanitation for proper cultivation.

(e) Any person granted an open field burning permit under these rules shall maintain a copy of said permit at the burn site or be able to readily demonstrate authority to burn at all times during the burning operation and said permit shall be made available for at least one year after expiration for inspection upon request by appropriate authorities.

authority to burn at all times during the burning operation and said permit shall be made available for at least one year after expiration for inspection upon request by appropriate authorities.

(f) At all times proper and accurate records of permit transactions and copies of all permits shall be maintained by each agency or person involved in the issuance of permits, for inspection by the appropriate authority.

(g) Open field burning permit issuing agencies shall submit to the Department on forms provided, weekly summaries of field burning activities in their permit jurisdiction during the period July 1 to October 15. Weekly summaries shall be mailed and postmarked no later than the first working day of the following week.

(3) Fuel conditions shall be limited as follows:

(a) All debris, cuttings and prunings shall be dry, cleanly stacked and free of dirt and green material prior to being burned, to insure as nearly complete combustion as possible.

(b) No substance or material which normally emits dense smoke or noxious odors may be used for auxiliary fuel in the igniting of debris, cuttings or prunings.

(4) In accordance with ORS 468.450 the Department shall establish a schedule which specifies the extent and type of burning to be allowed each day. During the time of active field burning, the Department shall broadcast this schedule over the Oregon Seed Council radio network operated for this purpose, on an as needed basis, depending on atmospheric and air quality conditions.

(a) Any person open burning or preparing to open burn under these rules shall conduct the burning operation in accordance with the Department's burning schedule.

(b) Any person open burning or preparing to open burn fields under these rules shall monitor the Department's field burning schedule broadcasts and shall conduct the burning operations in accordance with the announced schedule.

(5) Any person open field burning under these rules shall actively extinguish all flames and major smoke sources when prohibition conditions are imposed by the Department.

26-011 CERTIFIED ALTERNATIVE TO OPEN FIELD BURNING.

(1) The Department may certify approved alternative methods of field sanitation and straw utilization and disposal on a permanent or interim basis provided the applicant for such certification:

(a) Provides information adequate to determine compliance with such rules and emissions standards as may be developed pursuant to subsection (2) of this section as well as other State air, water, solid waste, and noise laws and regulations; and

(b) Conducts the approved alternative method and operates any associated equipment subject to subsections (2) and (3) of this section.

(2) Pursuant to ORS 468.472 the Commission shall establish rules and emission standards for alternative methods to open field burning. Such standards shall be set to insure an overall improvement in air quality as a result of the use of the alternative as compared to the open field burning eliminated by such use.

(3) Mobile field sanitizers and other alternative methods of field sanitation specifically approved by the Department, and propane flammers are considered alternatives to open field burning for the purposes of fee refunds pursuant to ORS 468.480 and may be used subject to the following provisions:

(a) Open fires away from the machines shall be actively extinguished.

(b) Adequate water supply shall be available to extinguish open fires resulting from the operation of field sanitizers.

(4) Propane flammers may be used as an approved alternative to open field burning provided that all of the following conditions are met:

- (a) Field sanitizers are not available or otherwise cannot accomplish the burning.
- (b) The field stubble will not sustain an open fire.
- (c) One of the following conditions exist:
 - (A) The field has been previously open burned and appropriate fees paid.
 - (B) The field has been flailchopped, mowed, or otherwise cut close to the ground and loose straw has been removed to reduce the straw fuel load as much as practicable.

26-012 REGISTRATION AND AUTHORIZATION OF ACREAGE TO BE OPEN BURNED.

- (1) On or before April 1 of each year, all acreages to be open burned under this rule shall be registered with the local fire permit issuing agency or its authorized representative on forms provided by the Department. A nonrefundable \$1.00 per acre registration fee shall be paid at the time of registration. At the time of registration, all registered acreage shall be delineated and specifically identified on map materials provided by the Department using a unique four-part reference code defined as follows: registration number-line number-crop type P (perennial), A(annual), C(cereal) - acreage. In addition, the symbol "X" shall be appended to this reference code for fields which, because of their location with respect to particularly sensitive smoke receptors or severe fire hazards, should not be burned under normally preferred windflow patterns.
- (2) Registration of acreage after April 1 of each year shall require:
 - (a) Approval of the Department.
 - (b) An additional late registration fee of \$1.00 per acre if the late registration is determined by the Department to be the fault of the late registrant.
- (3) Copies of all Registration/Application forms and registration map materials shall be forwarded to the Department promptly by the local fire permit issuing agency.
- (4) The local fire permitting agency shall maintain a record of all registered acreage by assigned field number, location, type of crop, number of acres to be burned and status of fee payment for each field[-], and in addition shall maintain a copy of the registration map materials prepared pursuant to subsection (1) above showing each registered field complete with field reference code.
- (5) Burn authorizations shall be issued by the local fire permit issuing agency up to daily quota limitations established by the Department and shall be based on registered fee-paid acres and shall be issued in accordance with the priorities established by subsection 26-010(1) of these rules, except that fourth priority burning shall not be permitted from July 15 to September 15 of any year unless specifically authorized by the Department.
- (6) No local fire permit issuing agency shall authorize open field burning of more acreage than may be sub-allocated annually to the District by the Department pursuant to section 26-013(5) of these rules.

26-013 LIMITATION AND ALLOCATION OF ACREAGE TO BE OPEN BURNED.

- (1) Except for acreage to be burned under 26-013(6) and (7), the maximum acreage to be open burned under these rules shall not exceed 250,000 acres.
- (2) Any revisions to the maximum acreage to be burned, allocation procedures, permit issuing procedures or any other substantive changes to these rules affecting the open field burning program for any year shall be made prior to June 1 of that year. In making these rule changes the Commission shall consult with Oregon State University (OSU) and may consult with other interested agencies.
- (3) Acres burned on any day by approved alternative methods shall not be applied to open field burning acreage allocations or quotas, and such operations may be conducted under either marginal or prohibition conditions.
- (4) In the event that total registration is less than or equal to the acreage allowed to be open burned under section 26-013(1) all registrants shall be allocated 100 percent of their registered acres.

(5) In the event that total registration exceeds the acreage allowed to be open burned under 26-013(1) the Department may issue acreage allocations to growers totaling not more than 110 percent of the acreage allowed under section 26-013(1). The Department shall monitor burning and shall cease to issue burning quotas when the total acreage reported burned equals the maximum acreage allowed under section 26-013(1).

(a) Each year the Department shall sub-allocate 110 percent of the total acreage allocation established by the Commission, as specified in section 26-013(1) to the respective growers on a pro rata basis of the individual acreage registered as of April 1 to the total acreage registered as of April 1.

(b) The Department shall sub-allocate the total acre allocation established by the Commission, as specified in section 26-013(1) to the respective fire permit issuing agencies on a pro rata share basis of the acreage registered within each fire permit issuing agency's jurisdiction as of April 1 to the total acreage registered as of April 1.

(c) In an effort to insure that permits are available in areas of greatest need, to coordinate completion of burning, and to achieve the greatest possible permit utilization, the Department may adjust, in cooperation with the fire districts, allocations of the maximum acreage allowed in section 26-013(1).

(d) Transfer of allocations for farm management purposes may be made within and between fire districts on a one-in/one-out basis under the supervision of the Department. Transfer of allocations between growers are not permitted after the maximum acres specified in section 26-013(1) have been burned within the Valley.

(e) Except for additional acreage allowed to be burned by the Commission as provided for in (6) and (7) of this subsection no fire district shall allow acreage to be burned in excess of their allocations assigned pursuant to (b), (c) and (d) above.

(6) Notwithstanding the acreage limitations under 26-013(1), the Department may allow experimental open burning pursuant to ORS 468.490. Such experimental open burning shall be conducted only as may be specifically authorized by the Department and will be conducted for gathering of scientific data, or training of personnel or demonstrating specific practices. The Department shall maintain a record of each experimental burn and may require a report from any person conducting an experimental burn stating factors such as:

1. Date, time and acreage of burn.
2. Purpose of burn.
3. Results of burn compared to purpose.
4. Measurements used, if any.
5. Future application of results of principles featured.

(a) Experimental open burning, exclusive of that acreage burned by experimental open field sanitizers, shall not exceed 7500 acres annually.

(b) For experimental open burning the Department may assess an acreage fee equal to that charged for open burning of regular acres. Such fees shall be segregated from other funds and dedicated to the support of smoke management research to study variations of smoke impact resulting from differing and various burning practices and methods. The Department may contract with research organizations such as academic institutions to accomplish such smoke management research.

(7) Pursuant to ORS 468.475 the Commission may permit the emergency open burning under the following procedures:

(a) A grower must submit to the Department an application form for emergency field burning requesting emergency burning for one of the following reasons;

(A) Extreme hardship documented by:

An analysis and signed statement from a CPA, public accountant, or other recognized financial expert which establishes that failure to allow emergency open burning as requested will result in extreme financial hardship above and beyond mere loss of revenue that would ordinarily accrue due to inability to open burn the particular acreage for which emergency open burning is requested. The analysis shall include an itemized statement of the applicant's net worth and include a discussion of potential alternatives and probable related consequences of not burning.

(B) Disease outbreak, documented by:

An affidavit or signed statement from the County Agent, State Department of Agriculture or other public agricultural expert authority that, based on his personal investigation, a true emergency exists due to a disease outbreak that can only be dealt with effectively and practicably by open burning.

The statement must also include at least the following:

- i) time field investigation was made,
- ii) location and description of field,
- iii) crop,
- iv) infesting disease,
- v) extent of infestation (compared to normal),
- vi) necessity and urgency to control,
- vii) availability, efficacy and practicability of alternative control procedures,
- viii) probable damages or consequences of non-control.

(C) Insect infestation, documented by:

Affidavit or signed statement from the County Agent, State Department of Agriculture or other public agricultural expert authority that, based on his personal investigation, a true emergency exists due to an insect infestation that can only be dealt with effectively and practicably by open burning. The statement must also include at least the following:

- i) time field investigation was made,
- ii) location and description of field,
- iii) crop,
- iv) infesting insect,
- v) extent of infestation (compared to normal),
- vi) necessity and urgency to control,
- vii) availability, efficacy, and practicability of alternative control procedures,
- viii) probable damages or consequences of non-control.

(D) Irreparable damage to the land documented by:

An affidavit or signed statement from the County Agent, State Department of Agriculture, or other public agricultural expert authority that, based on his personal investigation, a true emergency exists which threatens irreparable damage to the land and which can only be dealt with effectively and practicably by open burning. The statement must also include at least the following:

- i) time of field investigation,
- ii) location and description of field,
- iii) crop,
- iv) type and characteristics of soil,
- v) slope and drainage characteristics of field,

- vi) necessity and urgency to control,
- vii) availability, efficacy and practicability of alternative control procedures,
- viii) probable damages or consequences of non-control.

(b) Upon receipt of a properly completed application form and supporting documentation the Commission shall within 10 days, return to the grower its decision.

(c) An open field burning permit, to be validated subject to daily quota releases and payment of the required fees, shall be issued by the Department for that portion of the requested acreage which the Commission has approved.

(d) Application forms for emergency open field burning provided by the Department must be used and may be obtained from the Department either in person, by letter or by telephone request.

(8) The Department shall act, pursuant to this section, on any application for a permit to open burn under these rules within 60 days of registration and receipt of the fee provided in ORS 468.480.

(9) The Department may [~~on-a-fire-district~~] by fire district or other area basis, issue limitations more restrictive than those contained in these regulations when in their judgment it is necessary to attain and maintain air quality.

26-015 WILLAMETTE VALLEY SUMMER BURNING SEASON REGULATIONS

As part of the smoke management program provided for in ORS 468.470 the Department shall schedule the time, places, and amounts of open field burning according to the following provisions:

(1) As provided for in ORS 468.450 atmospheric conditions will be classified as marginal or prohibition conditions under the following criteria:

(a) Marginal Class N conditions: Forecast northerly winds and a ventilation index greater than 12.5.

(b) Marginal Class S conditions: Forecast southerly winds and a ventilation index greater than 12.5.

(c) Prohibition conditions: A ventilation index of 12.5 or less.

(2) Limitations on Burning Hours.

(a) Burning hours shall be limited to those specifically authorized by the Department each day.

(b) Unless otherwise specifically limited by the Department, burning hours may begin at 9:30 a.m. PDT, under marginal conditions but no open field burning may be started later than one-half hour before sunset or be allowed to continue later than one-half hour after sunset.

(c) The Department may alter burning hours according to atmospheric ventilation conditions when necessary to attain and maintain air quality.

(d) Burning hours may be reduced by the fire chief or his deputy when necessary to protect from danger by fire.

(3) Limitations on Locations and Amounts of Field Burning Emissions.

(a) Use of acreage quotas.

(A) In order to assure a timely and equitable distribution of burning, authorizations of acreages shall be issued in terms of single, multiple, or fractional basic quotas or priority area quotas as listed in Table 1, attached as Exhibit A and incorporated by reference into this regulation and schedule.

(B) Willamette Valley permit agencies or agents not specifically named in Table 1 shall have a basic quota and priority area quota of 50 acres only if they have registered acreage to be burned within their jurisdiction.

(C) The Department may designate additional areas as Priority Areas and may adjust the basic acreage quotas or priority area quotas of any permit jurisdiction where conditions in its judgment warrant such action.

(b) Distribution and limitation of burning under various classifications of atmospheric conditions.

(A) Prohibition. Under prohibition conditions, no fire permits or validation numbers for agricultural open burning shall be issued and no burning shall be conducted, except where an auxiliary liquid or gaseous fuel is used such that combustion is essentially completed, an approved field sanitizer is used, or where burning is specifically authorized by the Department for determining atmospheric dispersion conditions or for experimental burning pursuant to section 26-013(6) of this regulation.

(B) Marginal Class N Conditions. Unless specifically authorized by the Department, on days classified as Marginal Class N burning shall be limited to the following:

(i) North Valley: one basic quota may be issued in accordance with Table 1 except that no acreage located within the permit jurisdictions of Aumsville, Drakes Crossing, Marion County District 1, Silverton, Stayton, Sublimity, and the Marion County portions of the Clackamas-Marion Forest Protection District shall be burned upwind of the Eugene-Springfield non-attainment area.

(ii) South Valley: one priority area quota for priority area burning may be issued in accordance with Table 1.

(C) Marginal Class S Conditions. Unless specifically authorized by the Department on days classified as Marginal Class S conditions, burning shall be limited to the following:

(i) North Valley: one basic quota may be issued in accordance with Table 1 in the following permit jurisdictions: Aumsville, Drakes Crossing, Marion County District 1, Silverton, Stayton, Sublimity, and the Marion County portion of the Clackamas-Marion Forest Protection District. One priority area quota may be issued in accordance with Table 1 for priority area burning in all other North Valley jurisdictions.

(ii) South Valley: one basic quota may be issued in accordance with Table 1.

(D) In no instance shall the total acreage of permits issued by any permit issuing agency or agent exceed that allowed by the Department for the marginal day except as provided for jurisdictions with 50 acres quotas or less as follows: when the Department has authorized one quota or less, a permit may be issued to include all the acreage in one field providing that field does not exceed 100 acres and provided further that no other permit is issued for that day. Permits shall not be so issued on two consecutive days.

(c) Restrictions on burning based upon air quality.

(A) The Department shall establish the minimum allowable effective mixing height required for burning based upon cumulative hours of smoke intrusions in the Eugene-Springfield area as follows:

(i) Except as provided in (ii) of this subsection, burning shall not be permitted on a marginal day whenever the effective mixing height is less than the minimum allowable height specified in Table 2, attached as Exhibit B and incorporated by reference into this regulation.

(ii) Notwithstanding the effective mixing height restrictions of (i) above, the Department may authorize up to 1000 acres total for the Willamette Valley, each marginal day on a field-by-field or area-by-area basis.

(B) The total acreage burned in the south Valley under southerly winds shall not exceed, on a single day, 46,934 acres.

(C) The Department shall prohibit burning if, based upon real-time monitoring, a violation of federal or state air quality standards is projected to occur.

(D) The Department may on a field-by-field or area-by-area basis prohibit the burning of fields which result in excessive low-level smoke.

(d) Special restrictions on priority area burning.

(A) No priority acreage may be burned on the upwind side of any city, airport, or highway within the same priority area.

(B) No south priority acreage shall be burned upwind of the Eugene-Springfield non-attainment area.

(C) All priority acreage to be burned on the west side of and abutting U.S. Interstate 5 shall maintain a plowed margin at least 8 feet in width between said acreage and the Interstate right-of-way to serve as a non-combustible fireguard for safety purposes.

(e) Restrictions on burning techniques.

(A) The Department shall require the use of into-the-wind strip-lighting on annual grass seed and cereal crop fields when fuel conditions or atmospheric conditions are such that use of into-the-wind strip-lighting as determined by observation of test fires or prior general burning would reduce ground level smoke concentrations. ~~[and specifically, except under conditions when wind directions are between 20 degrees and 90 degrees, the Department shall require such use when it is estimated that an effective mixing height over 3500 feet will not occur.]~~

(B) The Department shall require the use of perimeter burning on all fields where no severe fire hazard conditions exist and where strip-lighting is not required. "Severe fire hazards" for purposes of this subsection means where adjacent and vulnerable timber, brush, or buildings exist next to the field to be burned.

(C) The Department shall require regular headfire burning on all fields where a severe fire hazard exists.

(f) Restrictions on burning due to rainfall and relative humidity.

(A) Burning shall not be permitted in an area for one drying day for each 0.10 inch of rainfall received at the nearest measuring station up to a maximum of four consecutive drying days.

(B) The Department may on a field-by-field or area-by-area basis waive the restrictions of (A) above when dry fields are available through special preparation or unusual rainfall patterns and wind direction and dispersion conditions are appropriate for burning with minimum smoke impact.

(C) Burning shall not be permitted in an area when relative humidity at the nearest measuring station exceeds 50 percent under forecast northerly winds or 65 percent under forecast southerly winds.

(g) Restrictions on burning due to field condition.

(A) The Department shall on an area-selective, crop-selective, or Valley-wide basis require mechanical fluffing of straw residue on fields which in the judgment of the Department, contain a fuel load which is of such condition that open burning without such treatment would result in an unacceptably slow burn rate or in excessive low-level smoke.

26-020 WINTER BURNING SEASON REGULATIONS.

(1) Classification of atmospheric conditions:

(a) Atmospheric conditions resulting in computed air pollution index values in the high range, values of 90 or greater, shall constitute prohibition conditions.

(b) Atmospheric conditions resulting in computed air pollution index values in the low and moderate ranges, values less than 90, shall constitute marginal conditions.

(2) Extent and Type of Burning.

(a) Burning Hours. Burning hours for all types of burning shall be from 9:00 a.m. until 4:00 p.m., but may be reduced when deemed necessary by the fire chief or his deputy. Burning hours for stumps may be increased if found necessary to do so by the permit issuing agency. All materials for burning shall be prepared and the operation conducted, subject to local fire protection regulation to insure that it will be completed during the allotted time.

(b) Certain Burning Allowed Under Prohibition Conditions. Under prohibition conditions no permits for agricultural open burning may be issued and no burning may be conducted, except where an auxiliary liquid or gaseous fuel is used such that combustion is essentially complete, or an approved field sanitizer is used.

(c) Priority for Burning on Marginal Days. Permits for agricultural open burning may be issued on each marginal day in each permit jurisdiction in the Willamette Valley, following the priorities set forth in ORS 468.450 which gives perennial grass seed fields used for grass seed production first priority, annual grass seed fields used for grass seed production second priority, grain fields third priority and all other burning fourth priority.

26-025 CIVIL PENALTIES. In addition to any other penalty provided by law:

(1) Any person who intentionally or negligently causes or permits open field burning contrary to the provisions of ORS 468.450, 468.455, 468.480, 476.380 and 478.960 shall be assessed by the Department a civil penalty of at least \$20, but not more than \$40 for each acre so burned.

(2) In lieu of any per-acre civil penalty assessed pursuant to Subsection (1) of this section, the Director may assess a specific civil penalty for any violation pertaining to agricultural burning operations by service of a written notice of assessment of civil penalty upon the respondent. The amount of such civil penalty shall be determined consistent with the following schedule:

(a) \$1500 upon any person who:

(A) Conducts open field burning on any acreage which has not been registered with the Department for such purposes.

(B) Conducts open field burning on any acreage without first obtaining and readily demonstrating a valid open field burning permit for all acreage so burned.

(b) \$1000 upon any person who:

(A) Fails to report with reasonable accuracy all acreage burned in association with or as a direct result of a permitted open field burning operation.

(B) Fails to actively extinguish all flames and major smoke sources when prohibition conditions are imposed by the Department.

(C) Conducts burning using an approved alternative burning method contrary to any specific conditions or provisions governing such operation.

(c) \$500 upon any person who:

(A) Initiates an open field burn after expiration of the designated permit period.

(B) Conducts an agricultural open burning operation which does not comply with any specific restrictions established by the Department related to required burning techniques, field and fuel conditions, or field and fuel treatments.

(d) \$300 upon any person who:

(A) Fails to readily demonstrate at the site of the burn operation the capability to monitor the Department's field burning schedule broadcasts.

(e) Not less than \$50 nor more than \$10,000 upon any person who commits any other violation pertaining to agricultural burning operations or the rules of this Division.

(f) The civil penalty for each repeat offense which occurs within five years of a previous violation shall be at a minimum, double the amount previously assessed but not more than \$10,000.

(3) [~~2~~] Any person planting contrary to the restrictions of subsection (1) of ORS 468.465 shall be assessed by the Department a civil penalty of \$25 for each acre planted contrary to the restrictions.

[~~3~~]-Any person who violates any requirements of these rules shall be assessed a civil penalty pursuant to OAR Chapter 340, Division 1, Subdivision 2, G+V+L PENALTIES.]

26-030 TAX CREDITS FOR APPROVED ALTERNATIVE METHODS, APPROVED INTERIM ALTERNATIVE METHODS OR APPROVED ALTERNATIVE FACILITIES.

(1) As provided in ORS 468.150, approved alternative methods or approved alternative facilities are eligible for tax credit as pollution control facilities as described in ORS 468.155 through 468.190.

(2) Approved alternative facilities eligible for pollution control facilities tax credit shall include:

(a) Mobile equipment including but not limited to:

- (A) Straw gathering, densifying and handling equipment.
- (B) Tractors and other sources of motive power.
- (C) Trucks, trailers, and other transportation equipment.
- (D) Mobile field sanitizers and associated fire control equipment.
- (E) Equipment for handling all forms of processed straw.
- (F) Special straw incorporation equipment.

(b) Stationary equipment and structures including but not limited to:

- (A) Straw loading and unloading facilities.
- (B) Straw storage structures.
- (C) Straw processing and in plant transport equipment.
- (D) Land associated with stationary straw processing facilities.
- (E) Drainage tile installations which will result in a reduction of acreage

burned.

(3) Equipment and facilities included in an application for certification for tax credit under this rule will be considered at their current depreciated value and in proportion to their actual use to reduce open field burning as compared to their total farm or other use.

(4) Procedures for application and certification of approved alternative facilities for pollution control facility tax credit.

(a) A written application for preliminary certification shall be made to the Department prior to installation or use of approved alternative facilities in the first harvest season for which an application for tax credit certification is to be made. Such application shall be made on a form provided by the Department and shall include but not be limited to:

(i) Name, address and nature of business of the applicant.

(ii) Name of person authorized to receive Department requests for additional information.

(iii) Description of alternative method to be used.

(iv) A complete listing of mobile equipment and stationery facilities to be used in carrying out the alternative methods and for each item listed include:

(a) Date or estimated future date of purchase.

(b) Percentage of use allocated to approved alternative methods and approved interim alternative methods as compared to their total farm or other use.

(v) Such other information as the Department may require to determine compliance with state air, water, solid waste, and noise laws and regulations and to determine eligibility for tax credit.

(B) If, upon receipt of a properly completed application for preliminary certification for tax credit for approved alternative facilities the Department finds the proposed use of the approved alternative facilities are in accordance with the provisions of ORS 468.175, it shall, within 60 days, issue a preliminary certification of approval. If the proposed use of the approved alternative facilities are not in accordance with provisions of ORS 468.175, the Commission shall, within 60 days, issue an order denying certification.

(b) Certification for pollution control facility tax credit.

(A) A written application for certification shall be made to the Department on a form provided by the Department and shall include but not be limited to the following:

(i) Name, address and nature of business of the applicant.

(ii) Name of person authorized to receive Department requests for additional information.

(iii) Description of the alternative method to be used.

(iv) For each piece of mobile equipment and/or for each stationary facility, a complete description including the following information as applicable:

(a) Type and general description of each piece of mobile equipment.

(b) Complete description and copy of proposed plans or drawings of stationary facilities including buildings and contents used for straw storage, handling or processing of straw and straw products or used for storage of mobile field sanitizers and legal description of real property involved.

(c) Date of purchase or initial operation.

(d) Cost when purchased or constructed and current value.

(e) General use as applied to approved alternative methods and approved interim alternative methods.

(f) Percentage of use allocated to approved alternative methods and approved interim alternative methods as compared to their farm or other use.

(B) Upon receipt of a properly completed application for certification for tax credit for approved alternative facilities or any subsequently requested additions to the application, the Department shall return within 120 days the decision of the Commission and certification as necessary indicating the portion of the cost of each facility allocable to pollution control.

(5) Certification for tax credits of equipment or facilities not covered in OAR Chapter 340, Section 26-030(1) through 26-030(4) shall be processed pursuant to the provisions of ORS 468.165 through 468.185.

(6) Election of type of tax credit pursuant to ORS 468.170(5).

(a) As provided in ORS 468.170(5), a person receiving the certification provided for in OAR Chapter 340, Section 26-030(4)(b) shall make an irrevocable election to take the tax credit relief under ORS 316.097, 317.072, or the ad volorem tax relief under ORS 307.405 and shall inform the Department of his election within 60 days of receipt of certification documents on the form supplied by the Department with the certification documents.

(b) As provided in ORS 468.170(5) failure to notify the Department of the election of the type of tax credit relief within 60 days shall render the certification ineffective for any tax relief under ORS 307.405, 316.097 and 317.072.

TABLE I
FIELD BURNING ACREAGE QUOTAS
NORTH VALLEY AREAS

<u>County/Fire District</u>	<u>Quota</u>	
	<u>Basic</u>	<u>Priority</u>
<u>North Valley Counties</u>		
<u>Clackamas County</u>		
Canby RFPD	50	0
Clackamas County #54	50	0
Clackamas-Marion FPA	100	0
Estacada RFPD	75	0
Molalla RFPD	50	0
Monitor RFPD	50	0
Scotts Mills RFPD	50	0
	<hr/>	<hr/>
Total	425	0
<u>Marion County</u>		
Aumsville RFPD	100	0
Aurora-Donald RFPD	50	50
Drakes Crossing RFPD	100	0
Hubbard RFPD	50	0
Jefferson RFPD	225	50
Marion County #1	200	50
Marion County Unprotected	50	50
Mt. Angel RFPD	50	0

TABLE I
(continued)

<u>County/Fire District</u>	<u>Quota</u>	
	<u>Basic</u>	<u>Priority</u>
<u>North Valley Counties</u>		
<u>Marion County (continued)</u>		
St. Paul RFPD	125	0
Salem City	50	50
Silverton RFPD	600	0
Stayton RFPD	300	0
Sublimity RFPD	500	0
Turner RFPD	50	50
Woodburn RFPD	125	50
	<hr/>	<hr/>
Total	2575	350
 <u>Polk County</u>		
Spring Valley RFPD	50	0
Southeast Rural Polk	400	50
Southwest Rural Polk	125	50
	<hr/>	<hr/>
Total	575	100
 <u>Washington County</u>		
Cornelius RFPD	50	0
Forest Grove RFPD	50	0
Forest Grove, State Forestry	50	0

TABLE I
(continued)

<u>County/Fire District</u>	<u>Quota</u>	
	<u>Basic</u>	<u>Priority</u>
<u>North Valley Counties</u>		
<u>Washington County (continued)</u>		
Hillsboro	50	50
Washington County RFPD #1	50	50
Washington County	50	50
	—	—
Total	300	150
<u>Yamhill County</u>		
Amity #1 RFPD	125	50
Carlton RFPD	50	0
Dayton RFPD	50	50
Dundee RFPD	50	0
McMinnville RFPD	150	75
Newberg RFPD	50	50
Sheridan RFPD	75	50
Yamhill RFPD	50	50
	—	—
Total	600	325
<u>North Valley Total</u>	4475	925

TABLE I
(continued)
SOUTH VALLEY AREAS

<u>County/Fire District</u>	<u>Quota</u>	
	<u>Basic</u>	<u>Priority</u>
<u>South Valley Counties</u>		
<u>Benton County</u>		
County Non-District & Adair	350	175
Corvallis RFPD	175	125
Monroe RFPD	325	50
Philomath RFPD	125	100
Western Oregon FPD	100	50
	—	—
Total	1075	500
<u>Lane County</u>		
Coburg RFPD	175	50
Creswell RFPD	75	100
Eugene RFPD (Zumwalt RFPD)	50	50
Junction City RFPD	325	50
Lane County Non-District	100	50
Lane County RFPD #1	350	150
Santa Clara RFPD	50	50
Thurston-Waltermville	50	50
West Lane FPD	50	0
	—	—
Total	1225	550

TABLE I
(continued)

<u>County/Fire District</u>	<u>Quota</u>	
	<u>Basic</u>	<u>Priority</u>
<u>South Valley Counties</u>		
<u>Linn County</u>		
Albany RFPD (inc. N. Albany, Palestine, Co. Unprotected Areas)	625	125
Brownsville RFPD	750	100
Halsey-Shedd RFPD	2050	200
Harrisburg RFPD	1350	50
Lebanon RFPD	325	325
Lyons RFPD	50	0
Scio RFPD	175	50
Tangent RFPD	925	325
Total	6250	1225
<u>South Valley Total</u>	8550	2275

TABLE 2

MINIMUM ALLOWABLE EFFECTIVE MIXING HEIGHT
REQUIRED FOR BURNING BASED UPON THE CUMULATIVE HOURS
OF SMOKE INTRUSION IN THE EUGENE-SPRINGFIELD AREA

Cumulative Hours of Smoke Intrusion
in the Eugene-Springfield Area

Minimum Allowable Effective
Mixing Height (feet)

0 - 14	no minimum height
15 - 19	4,000
20 - 24	4,500
25 and greater	5,500

EXTENSION SERVICE
101 Farm Crops



Corvallis, Oregon 97331
754-2771

RECEIVED
FEB 17 1981
DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
FIELD BURNING OFFICE

February 12, 1981

Department of Environmental Quality
1244 Walnut Street
Eugene, OR 97403

Attn: Sean K. O'Connell

Subject: Proposed Amendments to Open Field Burning Regulations

I strongly question the factual basis for the statement of intention under the proposed changes in Open Field Burning Regulations under (g) B on P.10, "It is the intention of the Commission that by January 1, 1983, mechanical fluffing treatments for the purpose of improving residue burn characteristics be required on essentially all perennial grass seed fields to be open burned". There are many situations under which fluffing will improve the burn characteristics and enhance smoke dispersal. These situations have been numerous during the past 2 or 3 seasons. The rules should allow for the use of fluffing when conditions require.

On the other hand, there have been many seasons, particularly during the early 1970's when soil moisture and lack of summer rainfall made fluffing unnecessary and perhaps in some cases detrimental to the crop (by causing excessively high soil temperature). Therefore, it is not appropriate to propose a universal fluffing rule without more data to justify the additional cost and fuel consumption involved.

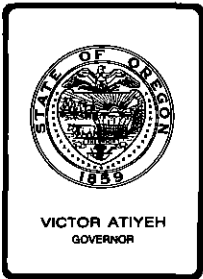
Sincerely,

Harold W. Youngberg
Harold W. Youngberg
Extension Agronomist

HWY/sl



Agriculture, Home Economics, 4-H Youth, Forestry, Community Development, and Marine Advisory Programs
Oregon State University, United States Department of Agriculture, and Oregon Counties cooperating



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 No. N, March 13, 1981, EQC Meeting

Status Report on Proposed Approval of the Portland
"Parking and Traffic Circulation Plan"

Background

In August, 1979, work began on a study to update the City of Portland's Downtown Parking and Circulation Policy adopted by the Portland City Council in 1975. A major goal of the study was to develop an air quality plan which would bring the downtown into compliance with the state and federal standards for carbon monoxide by no later than 1987. Also, the study was designed to meet the Department's requirements for Parking and Traffic Circulation Plans under the Indirect Source Rules.

A consultant team under the direction of City staff produced a draft report in September, 1980, and on October 30, 1980, the Portland City Council adopted the Downtown Parking and Circulation Study. The Study contains an updated parking policy and an air quality plan, thus, fulfilling the initially set goals.

The air quality plan has been submitted by the City for approval as a Parking and Traffic Circulation Plan (P&TCP) under the Indirect Source (I/S) Rules. A notice concerning proposed approval of the P&TCP and intent to hold a hearing on March 5, 1981 was published in the Secretary of State's Bulletin on February 1, 1981.

The Department is bringing this item before the Commission because the air quality plan is intended to form the primary basis for the METRO region's carbon monoxide (CO) State Implementation Plan (SIP). Formal submittal of the CO SIP is expected by July 1, 1981. Although under the I/S Rules the Department can act directly on approval of the P&TCP without EQC involvement, the EQC will have to act formally on the SIP. Therefore, it has been considered appropriate that if the EQC has any particular problems with the P&TCP, now would be the time to consider them.

The Department will hold a public hearing on the proposed approval of the downtown Parking and Traffic Circulation Plan on March 5, 1981. Results of the hearing will be presented as an amendment to this report.

DISCUSSION

The air quality plan adopted by the Portland City Council contains the following key features:

1. A fixed supply of 40,055 parking spaces which includes an exclusive 1,185 space allocation for the South Waterfront area.
2. A special 800 parking space reserve account.
3. Maximum parking ratios reflecting improved access to transit.
4. A Parking Management Program with a full time parking manager to implement the updated parking policy and to carry out the elements of the air quality plan.

The air quality plan also contains commitments by the City to develop new programs and strengthen existing programs designed to encourage the use of flex-time, ride sharing, and bicycles. The new plan is ultimately intended to replace the old Transportation Control Strategy written into the existing State Implementation Plan.

Based upon the plan projections, the downtown area should meet carbon monoxide standards by 1985. An annual inspection/ maintenance program might only speed up attainment to 1984 since biennial effectiveness approaches annual effectiveness when biennial programs have been in existence for several years. Some delay in attainment would result if controls on parking were removed. Such an avoidable delay could be grounds for EPA disapproval of the SIP and imposition of severe mandatory sanctions.

In developing the updated parking policy, the consultant team studied four policy options ranging from keeping the 1975 ceiling on parking to removing all restrictions on the supply of spaces. Growth assumptions associated with the plan and brief descriptions of the four policy options considered are presented in Attachment 1.

The Department testified in favor of the updated parking policy and the associated air quality plan at the Portland City Council meeting on October 30, 1980. However, the following two concerns were raised: 1) increases to 800 space reserve account would be difficult to approve without some other strategies to reduce carbon monoxide levels; 2) the Department will review those large developments that concentrate large numbers of parking spaces into small areas to assure they would not cause local violations of standards.

Agenda Item No. N
February 17, 1981
Page 3

DIRECTOR'S RECOMMENDATION

No action is necessary on this item unless the EQC has problems with the plan as it might ultimately fit into the CO SIP. In that case, the EQC should note the problem to the Department and suggest corrective action. If no problems are identified, the Department will approve the P&TCP under the I/S Rules and continue to assist Metro and the City in developing the CO SIP with the P&TCP as the major element.

Michael Downs
for
William H. Young

Attachment: Growth Assumptions and Policy Options
Howard Harris:r
229-6086
February 17, 1981
AR844 (1)

ATTACHMENT 1

Downtown Parking and Circulation Study

Growth Assumptions and Policy Options

As the Study progressed, the consultant team concluded that the amount of future development would be relatively unaffected by the type of parking policy. The same rate of growth in development that has taken place since 1974 is expected to continue at least through 1987. Separate growth rates were estimated for office and retail development as follows: a) an average of 375,000 square feet of office space would be added each year; b) and between 50,000 and 100,000 square feet of additional retail space should be available each year.

Although development growth rates would be little affected by the type of parking policy, the consultant team concluded that the policy would have great impact on the amount of traffic entering and leaving the downtown. To determine those impacts as well as the associated air quality impacts, four policy options were developed and tested. A brief

description of each of the four parking and circulation policy options follows.

Option 1 - Maintain and Manage the Existing Parking Supply

The existing parking lid would be maintained at 38,870 spaces plus an exclusive 1,185 space allocation for the South Waterfront area and a special reserve account of 800 parking spaces. A full time parking manager would monitor conditions affecting parking and seek to maximize the efficiency of the fixed supply of spaces. Under this option by 1987 an additional 17,000 daily vehicle trips would go to and from the downtown.

Option 2 - Adjust the Parking Lid to Accomodate New Development

The parking lid would be increased to meet an expansion of demand for spaces. Option 2 would need approximately 4,500 more parking spaces than Option 1. This number of spaces would be the equivalent of more than five East Morrison Garage facilities. By 1987 Option 2 would cause an additional 38,5000 daily vehicle trips to travel to and from the downtown.

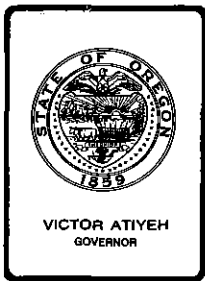
Option 3 - Maintain the Status Quo

The existing parking lid and parking ratios would be maintained without an active parking management program. Parking spaces would be allocated to new development up to the limit of the lid. Without a parking

management program the projected amount of new development could not be fully accommodated. The amount of traffic added by this option would be the same as under Option 1.

Option 4 - Remove all Restrictions on the Parking Supply

All restrictions on the parking supply would be removed and spaces would be allocated in accordance with the existing space/land use ratios. The parking demand of this option versus that of Option 1 would be increased by approximately 9,000 spaces. This number spaces is equivalent to approximately eleven parking facilities the size of the City's East Morrison Garage. By 1987 Option 4 would cause an additional 60,000 daily vehicle trips to travel to and from the downtown.



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: Amendment No. 1, Agenda Item No. N,
March 13, 1981, EQC Meeting

Status Report on Proposed Approval of the Portland "Parking and Traffic Circulation Plan"

Purpose of Amendment

Since preparation of the original staff report, a public hearing has been held on the Parking and Traffic Circulation Plan (P&TCP) for downtown Portland. One of the key features of the proposed P&TCP is a parking lid (inventory) of 40,055 spaces, supplemented by an 800 space special reserve account. Some of the testimony at the hearing raised questions as to the appropriateness of the reserve account. The amended report contains the Hearing Report and the Department's response to the major issues raised.

Evaluation and Alternatives

Two key issues have been raised by the testimony at the hearing:

1. The increase of the old parking lid from 38,870 spaces to 40,055 spaces.
2. The allowance of a special reserve account of 800 parking spaces.

On the first issue, 1,185 parking spaces have been allocated exclusively to the South Waterfront area which was not provided spaces under the old parking policy. Also, another area on the northern edge of the downtown was not provided spaces under the old parking policy. This area is now incorporated under the new parking policy, but no separate allocation of spaces has been provided for it. Thus, the new parking inventory covers a greater area than existed under the old parking policy and the new inventory is precisely composed of the 1,185 spaces for the added South Waterfront area plus the old lid of 38,870 spaces, which yields the new total of 40,055 spaces.

The air quality analysis indicated that the separate allocation of 1,185 spaces for the South Waterfront area would not cause or contribute to carbon monoxide standards violations in 1982 or future years.

On the second issue of the 800 space reserve account, the Department has expressed some concern about it. However, we are persuaded that it gives the new Parking Management Program, which is a key element of the new parking policy, flexibility. The 800 spaces were needed to deal with imminent new development proposals, and they are intended to be replenished by the Parking Management Program to stay within the inventory of 40,055 spaces. The new parking policy may not have been passed by the City Council without it. The Department has helped to secure federal funding for one-half of the startup costs of the Parking Management Program.

From an air quality standpoint, 800 spaces even in one location would not likely contribute significantly to carbon monoxide concentrations. However, increases much beyond that figure could start to be significant.

EPA made technical comments on the plan to the air quality lead agency, METRO. A copy of those comments was appended to Jeanne Roy's testimony. The Department believes that EPA's concerns can be mostly addressed by providing additional explanatory material and documentation.

Based upon the submitted P&TCP and the hearing results, staff intends to make a recommendation to the Director to approve the P&TCP under the Indirect Source Rules.

Director's Recommendation

The Director recommends that the subject staff report be amended by adding the foregoing Evaluation and Alternatives section and attaching the Hearing Report and the Department's response to major issues raised. The staff intends to submit a detailed recommendation to the Director requesting approval of the submitted Parking and Traffic Circulation Plan.



William H. Young

- Attachments: 2. Downtown Portland Parking and Traffic
Circulation Plan Hearing Report
3. Major Issues and Response

Howard W. Harris:w
229-6086
March 12, 1981

AW92 (1)

STATE OF OREGONDEPARTMENT OF ENVIRONMENTAL QUALITYINTEROFFICE MEMO

To: Director

Date: March 11, 1981

From: Hearing Officer

Subject: Hearing Report on March 5, 1981, hearing.
"Proposed Portland Downtown Parking and Traffic
Circulation Plan."

Summary of Procedure

Pursuant to public notice, a public hearing was convened at the Yeon Building Room 1400, located at 522 SW Fifth Avenue in Portland, at 2:07 p.m. on March 5, 1981. The purpose was to receive testimony regarding a proposed Parking and Traffic Circulation Plan for downtown Portland, submitted for approval by the City of Portland.

Summary of Testimony

Bill Cook, Oregon Environmental Council (OEC) presented a prepared paper focusing on the downtown Portland parking lid. OEC stated that the Downtown Parking and Circulation Plan is generally a step in the right direction. However, citing the past effectiveness of the old lid, OEC maintains that the increase from 38,870 spaces to 40,055 spaces is significant and appears to contradict the findings of the study. OEC stated that raising the lid is inconsistent with the mandate of the Clean Air Act which demands attainment of CO standards "as expeditiously as practicable." Raising of the lid means that the City of Portland and the Department of Environmental Quality must find another way to reduce CO. OEC recommended maintenance of the existing parking "lid."

Ray J. Polani, Citizens for Better Transit (CBT) stated that his organization participated on the Citizens Advisory Committee which came to a consensus on a revised policy. CBT was primarily concerned that removal of the parking lid would take away the constraint which has forced better transit service in the downtown. However, CBT believed that new development, as well as the time required to make the Parking Management Program effective, justified an increase in the lid. Mr. Polani hopes that the lid, if approved, will be fairly permanent.

Mr. Polani also stated that other pollutants more insidious than carbon monoxide, such as nitrogen oxides, sulfur oxides, and particulates, were not addressed by the plan. He concluded by stressing the need to monitor air pollution carefully and keep it under control.

Michael Fisher, Portland Bureau of Planning and Parking and Circulation Study Manager presented a prepared paper summarizing the elements of the Air Quality Plan proposed for adoption by DEQ. The plan has two major components: 1) the updated policy first adopted by the City Council in 1975; 2) the Parking Management Program, which is a new element. Key features of the updated policy include: 1) reduced maximum parking ratios to as low as 0.7 space per 1,000 square feet, the equivalent of one space per seven employees; 2) a maximum inventory of 40,855 parking spaces, approximately 2,000 spaces greater than the 1975 figure, with 1,200 of the increased spaces reserved exclusively for the South Downtown Waterfront Project and the remaining 800 spaces used as a special reserve account; 3) long-term and short-term parking goals for each parking sector, with reductions in long-term parking as transit service and ridership increase; 4) speculative parking facilities would be denied; 5) a functional street classification system. Elements of the Parking Management Program include: 1) conduct field surveys to locate parking facilities which could be more efficiently used; 2) make recommendations to the City Council for more efficient use of the City garage and curb spaces; 3) make recommendations on curb parking rates to discourage excessive traffic circulation; 4) make recommendations to other governmental bodies with downtown parking facilities to encourage carpooling and more short-term public parking; 5) develop guidelines for carpool parking in new developments; 6) develop a carpool parking plan. Mr. Fisher urged the Department to maintain the support for the plan expressed at the public hearings conducted by the Planning Commission and City Council.

Jessica Richman, Downtown Community Association (DCA) stated that the DCA probably works most closely with the parking policy because they are the ones who battle with developers over the amount of parking that goes into a new development. She sees the policy and plan as meeting the Land Conservation and Development Commission goals to the end that the downtown be kept as a vital place and that developments located in the downtown promote good utilization of transit service, thereby making best use of available land.

The new policy overcomes some of the problems with the old policy. The new policy gives some specific standards for stepping down the parking ratio from the old ratio of one space per 1,000 square feet. The new policy provides a Parking Management Program which can help turn long-term spaces into short-term spaces. She stated that the old lid had outlived its usefulness because new developments were being proposed which would have simply violated the lid. Thus, there was a need for a new policy with flexibility. The DCA supports the new policy with its additional reserve for the South Waterfront area. Although the 800 space reserve account is somewhat of a gamble, the DCA believes that the Parking Management Program should be able to work to put back spaces in the reserve account, if they are drawn down by development. The DCA would like to maintain downtown air quality while continuing with downtown development.

Jan Sokol stated that the original policy fixed a lid of approximately 39,000 spaces primarily because the downtown was in violation of the carbon monoxide standard. He criticized the allowance of an 800 space reserve account with no provision for offsets or mitigating measures. Mr. Sokol also claimed that without such measures the proposed Air Quality Plan will not comply with the Clean Air Act Amendments which require attainment of air standards as expeditiously as practicable. He requested that EPA comments on the draft plan be included in the record and that the Department respond to those comments in its presentation to the Environmental Quality Commission.

J. Don Chapman, Association for Portland Progress stated that a long period of deliberations led to the plan being submitted to DEQ. The parking inventory was set at 40,855 and did not go from 45,000 to 55,000. He believes the assertion that an additional 800 spaces would constitute a disaster needs to be bolstered by some statistics explaining why as an added factor it would be such a problem. He recalled that previous testimony indicated that the 800 spaces would not be a problem.

Mr. Chapman explained that a Downtown Portland Committee has recently formed which is looking to solve circulation problems that he believes substantially contribute to carbon monoxide pollution in the downtown. He also stressed the importance of the three year review of the management program which will be evaluated on the basis of what the manager found he could and could not do. Mr. Chapman urged adoption of the Plan.

Stan Goodell, Chairman of the Citizens Advisory Committee stated that people of good faith, but divergent views, put together a consensus document. He took exception to some of the previous testimony which indicated that the plan is inconsistent with the Clean Air Act. He pointed out the uncertainties inherent in estimating air quality and the fact that the analysis interpreted a plus or minus ten percent as a minus. He also maintained that a plan which allows for growth of the downtown is the right thing for the City, clean air, and the region. If the downtown shrinks and development goes to the suburbs, then that would create an environmental problem, because the suburbs are not regulated to the degree that the downtown is. Mr. Goodell stressed the importance of the trade-offs which consisted of a slightly increased lid in return for a Parking Management Program and reduced parking space per square foot ratios. He concluded that those trade-offs were eminently proper and were consistent with the clean air plan and that the plan was a step forward in the right direction with which not only the City of Portland, but the State of Oregon, and the federal government can and should live.

Other Testimony, Received by Letter

Ms. Eve Heidtmann stated that she is opposed to changing the lid on parking spaces since the City still violates the carbon monoxide standard.

Ms. Jeanne Roy, Citizens Advisory Committee stated that in order to achieve attainment of the carbon monoxide standard as expeditiously as practicable, the DEQ must not approve the Parking and Circulation Plan unless it includes: 1) a parking lid maintained at 40,055 parking spaces, or provision of offsets for any increases; 2) the parking management program and reduced maximum parking ratios; 3) and other reasonable available control measures such as a subsidized transit fare program for City employes, a shop and ride program, a policy encouraging City employes to find alternatives to the auto in the conduct of business, and specific commitments on incentives for carpooling and vanpooling. Ms. Roy attached a copy of technical comments on the study from EPA Region X.

EPA pointed out the following areas of concern that needed to be addressed prior to submittal as a 1982 State Implementation Plan.

The assessment of the carbon monoxide problem may be faulty because: 1) Mobile 1 was used instead of Mobile 2; 2) VMT growth rates were not documented; 3) the cold/hot start inputs may need to be revised; 4) the air quality model (APRAC 2) was not validated; 5) the methodology used to account for background concentrations may need to be refined. The baseline emission levels (1982, 1987) should be itemized as well as the individual effects of growth, federal tail pipe program, and the parking policy. The alternatives analysis needs to have included the air quality details as well as the transportation, energy, and social impacts. Costs should be developed for each element of the carbon monoxide attainment strategy.

Mr. Dean P. Gisvold, Citizens Advisory Committee stated that he generally supports the revisions to the Downtown Parking and Traffic Circulation Plan, but believes that the 800 space reserve account is not needed. The parking inventory should be fixed at 40,055 spaces and the parking management program should be given a chance to work before allowing increased parking spaces.

Oral and Written Testimony was offered by:

Bill Cook, Oregon Environmental Council
Michael Fisher, Portland Bureau of Planning

Oral Testimony was given by:

Ray J. Polani, Citizens for Better Transit
Jessica Richman, Downtown Community Association
Jan Sokol
J. Don Chapman, Association for Portland Progress
Stan Goodell, Chairman Citizens Advisory Committee

Portland Downtown Parking

March 11, 1981

Page 5

Testimony received in written form only:

Eve Heidtmann

Jeanne Roy, Air Quality Advisory Committee and
Citizens Advisory Committee

Dean P. Gisvold, Citizens Advisory Committee

Recommendations

The hearing officer makes no recommendations.

Respectfully submitted,

Howard W. Harris

Howard W. Harris
Hearing Officer

HWH:w

AW912 (1)

- Attachments
1. Notice of Public Hearing
 2. Testimony of the Oregon Environmental Council
 3. Testimony of the Portland Bureau of Planning
 4. Testimony of Eve Heidtmann
 5. Testimony of Jeanne Roy
 6. Testimony of Dean P. Gisvold



Department of Environmental Quality

522 SOUTHWEST 5TH AVE. PORTLAND, OREGON

MAILING ADDRESS: P.O. BOX 1760, PORTLAND, OREGON 97207

NOTICE OF PUBLIC HEARING

A CHANCE TO BE HEARD ABOUT:

Portland Downtown Parking and Traffic Circulation Plan

The Department is proposing to approve a Parking and Traffic Circulation Plan for downtown Portland. The Plan demonstrates how carbon monoxide air standards will be met by 1985 while allowing projected development to take place within specific ratios of parking/floor area and a total fixed supply of parking in the downtown area. Upon Plan approval, projects requiring indirect source construction permits would be processed in a simplified manner. The Plan would be subject to annual review. A hearing on this matter will be held in Portland on March 5, 1981.

WHAT IS THE DEQ PROPOSING:

Interested parties should request a copy of the Downtown Parking and Circulation Study, October, 1980. Some highlights are:

- ** A fixed supply of 40,055 parking spaces would be supplemented by an 800 space reserve account.
- ** Maximum parking ratios have been reduced to reflect improved access to transit.
- ** A Parking Management Program with a full time parking manager would be started to implement the parking policy and elements of the Plan.
- ** The City will encourage use of flex-time, ride sharing, and bicycles.
- ** The Department will automatically issue proposed indirect source construction permits for parking projects (150 or more spaces) conforming to the Plan. A 20-day public comment period will follow each issuance of a proposed permit.

WHO IS AFFECTED BY THIS INFORMATION:

Downtown businesses and property owners, persons who live in the downtown, and persons who travel to the downtown area.

HOW TO PROVIDE YOUR INFORMATION:

Written comments should be sent to the Department of Environmental Quality, Air Quality Division, Box 1760, Portland, Oregon 97207, and should be received by March 5, 1981.

Oral and written comments may be offered at the following public hearing:

<u>City</u>	<u>Time</u>	<u>Date</u>	<u>Location</u>
Portland	2:00 p.m.	March 5	Yeon Building 522 SW Fifth Avenue Room 1400 Portland, Oregon

WHERE TO OBTAIN ADDITIONAL INFORMATION:

Copies of the Downtown Parking and Circulation Study

Mr. Howard Harris
DEQ Air Quality Division
Box 1760
Portland, Oregon 97207

LEGAL REFERENCES FOR THIS PROPOSAL:

This proposal conforms to OAR 340-20-120.
It is proposed under authority of ORS 468.020 and 468.320.

LAND USE PLANNING CONSISTENCY:

The Department has concluded that the proposals do affect land use.

With regard to Goal 6 (air, water and land resources quality) the rules are designed to enhance and preserve air quality in the affected area and are considered consistent with the goal.

Goal 11 (public facilities and services) is deemed unaffected by the proposals.

Public comment on any land use issue involved is welcome and may be submitted in the same fashions as are indicated for testimony in this NOTICE OF PUBLIC HEARING.

It is requested that local, state, and federal agencies review the proposed action and comment on possible conflicts with their programs affecting land use and with Statewide Planning Goals within their expertise and jurisdiction.

The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any apparent conflict brought to our attention by local, state or federal authorities.

FURTHER PROCEEDINGS:

After the public hearing the Department will submit an informational report to the Environmental Quality Commission at its March 13, 1981 meeting which will include the Department's proposed action on the Plan. The Department may approve the Plan as proposed, or recommend changes to the Plan for consideration by the City of Portland.

HH:g
AG773 (1)



OREGON ENVIRONMENTAL COUNCIL

2637 S.W. WATER AVENUE, PORTLAND, OREGON 97201 / PHONE: 503/222-1963

TESTIMONY ON THE PORTLAND

DOWNTOWN PARKING AND CIRCULATION PLAN---MARCH 25, 1981

My name is Bill Cook, and I represent the Oregon Environmental Council, a coalition of 2,800 individuals and 70 organizations.

Downtown Portland violates primary ambient air standards for carbon monoxide (CO). Generally, the Downtown Parking and Circulation Plan is a step in the right direction toward attainment of the standard. The encouragement of flex-time, ridesharing and bicycle use is an effective and necessary action, for example.

However, our main concern is with the "lid" on available parking spaces downtown. The Portland Parking and Circulation Study noted that, despite a rise in the number of workers downtown and auto trips into the core area, parking supply has remained stable. Thus, the study says, the "lid" need not be adjusted to accommodate future employment growth. (page I-6).

The study also says "The parking lid, which was established in the original policy, has proven to be an effective tool towards the management of public transit, the stabilization of traffic volumes, and the improvement of air quality in downtown. The lid has helped restrain excessive new parking construction." (page III-1).

Despite this appraisal of the lid's effectiveness, the policy increases the lid from 38,870 spaces to 40,055 spaces---a significant increase.

This appears to contradict the findings of the study. If the lid was such "an effective tool", why should it be lifted? Apparently, the reason for raising the

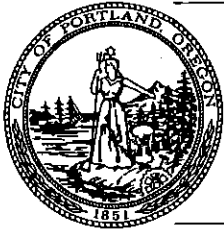
ALTERNATIVE FUTURES, Tigard
AMERICAN INSTITUTE OF ARCHITECTS
Portland Chapter
AMERICAN SOCIETY OF LANDSCAPE
ARCHITECTS
Oregon Chapter
ASSOCIATION OF NORTHWEST STEELHEADERS
ASSOCIATION OF OREGON RECYCLERS
AUDUBON SOCIETY
Central Oregon, Corvallis, Portland, Salem
BAY AREA ENVIRONMENTAL COUNCIL
Coos Bay
B. R. I. N. G.
CENTRAL CASCADES CONSERVATION COUNCIL
CHEMEKETANS, Salem
CITIZENS FOR A BETTER GOVERNMENT
CITIZENS FOR A CLEAN ENVIRONMENT
CLATSOP ENVIRONMENTAL COUNCIL
CONCERNED CITIZENS FOR AIR PURITY
Eugene
DEFENDERS OF WILDLIFE
ECO-ALLIANCE, Corvallis
ENVIRONMENTAL ACTION CLUB
Parkrose High School
EUGENE FUTURE POWER COMMITTEE
EUGENE NATURAL HISTORY SOCIETY
GARDEN CLUBS of Cedar Mill, Corvallis,
McMinnville, Nehalem Bay, Scappoose
GRANT COUNTY CONSERVATIONISTS
H.E.A.L., Azalea
LAND, AIR, WATER, Eugene
LEAGUE OF WOMEN VOTERS
Central Lane, Coos County
McKENZIE GUARDIANS, Blue River
NORTHWEST ENVIRONMENTAL DEFENSE
CENTER
OBSIDIANS, Eugene
1,000 FRIENDS OF OREGON
OREGON ASSOCIATION OF RAILWAY
PASSENGERS
OREGON BASS AND PANFISH CLUB
OREGONIANS COOPERATING TO PROTECT
WHALES
OREGON FEDERATION OF GARDEN CLUBS
OREGON GUIDES AND PACKERS
OREGON HIGH DESERT STUDY GROUP
OREGON LUNG ASSOCIATION
Portland, Salem
OREGON NORDIC CLUB
OREGON NURSES ASSOCIATION
OREGON PARK & RECREATION SOCIETY
Eugene
OREGON ROADSIDE COUNCIL
OREGON SHORES CONSERVATION COALITION
O.S.P.I.R.G.
PLANNED PARENTHOOD ASSOCIATION INC
Portland
PORTLAND ADVOCATES OF WILDERNESS
PORTLAND RECYCLING TEAM, INC.
RECREATIONAL EQUIPMENT, INC.
SANTIAM ALPINE CLUB
Salem
SIERRA CLUB
Oregon Chapter
Columbia Group, Portland
Klamath Group, Klamath Falls
Mary Rivers Group, Eugene
Mary's Peak Group, Corvallis
Mt. Jefferson Group, Salem
Rogue Valley Group, Ashland
SOLV
SPENCER BUTTE IMPROVEMENT ASSOCIATION
STEAMBOATERS
SURVIVAL CENTER
University of Oregon
THE TOWN FORUM, INC.
Collage Grove
TRAILS CLUB OF OREGON
UMPUQA WILDERNESS DEFENDERS
WESTERN RIVER GUIDES ASSOCIATION, INC.
WILLAMETTE RIVER GREENWAY ASSOCIATION

lid is to avoid any chilling effect on downtown economic development. But, there is little hard evidence in the study itself that the present lid actually harms downtown business.

Our major concern is that raising the lid is inconsistent with the mandate of the Clean Air Act. The Act demands that communities move "as expeditiously as practicable" to meet primary CO standards. If the lid has been effective in improving air quality, raising it would seem to be a setback, and a contradiction of the Act. The law requires attainment of the standard, and if the lid is raised, the City of Portland and the Dept. of Environmental Quality must find another way to reduce CO.

The Oregon Environmental Council urges maintenance of the existing parking "lid" as a proven and necessary air quality tool.

Thank you.



CITY OF
PORTLAND, OREGON
BUREAU OF PLANNING

Mildred A. Schwab, Commissioner
Terry D. Sandblast, Acting Director
621 S.W. Alder
Portland, Oregon 97205
(503) 248-4253

Department of Environmental Quality
522 SW Fifth Avenue
Portland, OR 97204

Good afternoon. My name is Michael Fisher and I am a transportation planner for the Portland Bureau of Planning. I was the project manager for the study which developed the Updated Downtown Parking and Circulation Policy and Air Quality Plan.

The Air Quality Plan for downtown has two components: The Downtown Parking and Circulation Policy, and the Downtown Parking Management Program. The first element was first adopted by the City Council in 1975. This study updated this policy. The Parking Management Program is a new element, and is designed to encourage more efficient use of our existing parking supply, to thus reduce the need for new parking. I would like to briefly describe the elements of both the policy and management program, and to explain why the overall program is considered to be a strong commitment toward meeting our air quality goals in downtown.

A. Parking and Circulation Policy.

1. For each new development in downtown, parking maximums have been established. For example, in the 1975 policy, the maximum parking spaces for new office developments was set at one space per 1,000 sq. ft. The

CODE
ADMINISTRATION
248-4250

LONG RANGE
PLANNING
248-4260

SPECIAL
PROJECTS
248-4509

TRANSPORTATION
PLANNING
248-4254

HOUSING AND
POPULATION
248-5525

updated policy has tightened this ratio to 0.7 spaces per 1,000 sq. ft. in downtown areas where transit service is good. This means that new offices will be allowed only one parking space for every seven employees. Consequently, our policy encourages, and in fact, strongly depends, on increased use of transit, carpooling, cycling, walking, and more efficient use of our parking supply.

2. A maximum inventory of parking exists. The 1975 inventory was established at 38,860. The new inventory is 40,855. This increase of about 2,000 spaces is allocated as follows:

- 1,200 spaces are reserved exclusively for the South Downtown Waterfront Project. This is a new area of downtown not covered in the 1975 policy.
- 800 spaces are held in a special reserve account. This was established because the current reserve account is nearly zero, and a number of major large scale projects are being proposed. To accommodate these developments, even with the very restrictive maximum ratio, we determined that the reserve account must be increased or development would be stopped in downtown. To encourage these developments to migrate to the suburbs, where six times the parking would be built, would be unacceptable. Our air quality consultant advised us that the 800 space increase would have an insignificant impact on air quality.

3. We have established long-term and short-term parking goals for each sector in downtown. Overall, our goal is to decrease long-term parking as transit service and ridership is increased to downtown.

4. The new policy establishes that new parking would be allowed only for new developments. Speculative parking facilities would be denied. The policy also establishes that parking approved for new developments must be under construction in two years. This would discourage developers from hoarding the limited reserve that we have.
5. The policy has a functional street classification system. Each street in downtown is classified for a special use, i.e. traffic, transit, pedestrian, bicycle, or local service. This allows us over time to reduce conflicts between the various transportation systems.

B. Parking Management Program. The basic purpose of this program is to encourage more efficient use of our parking supply to thus reduce the need for excessive parking. The elements of the program include:

1. To conduct field surveys to locate parking facilities which could be more efficiently used.
2. To develop recommendations for adoption by the City Council for more efficient use of City garage and curb spaces.
3. To develop recommendations regarding rates on curb parking to discourage excessive traffic circulation which would improve air quality.
4. To make recommendations to other governmental bodies with parking facilities in downtown to encourage carpooling and more short-term public parking.

5. To develop guidelines for carpool parking for application to new developments.
6. To develop a carpool parking plan, including the feasibility of a public off-street parking facility.

The downtown air quality plan was developed with the cooperation and input from a citizen group representing downtown business interests, transit advocates, downtown neighborhood groups, and environmental concerns. A technical committee representing the DEQ, Tri-Met, Metro, Traffic Engineering and the Portland Development Commission also participated. The plan, therefore, reflects a number of competing interests, and therefore, is both progressive, but practical.

We urge the Department of Environmental Quality to maintain their support of the plan, which they expressed at the public hearings conducted by the Planning Commission and City Council.

I thank you for an opportunity to share these comments at this hearing.

MF:db

A handwritten signature in black ink, appearing to read "M. Fisher", with a long horizontal stroke extending to the right.

AWH

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED
MAR 3 1981

18052 S.W. Sandra Lane
Aloha, Or. 97006
Feb. 28, 1981

AIR QUALITY CONTROL

DEQ Air Quality Division
Box 1760
Portland, Or. 97207

Dear Sir,

I am writing in regard to the Downtown Parking and Circulation Study, as I will not be able to attend the public hearing on March 5.

I am opposed to any change in the lid on the number of parking spaces in Portland. With the city still in violation of the carbon monoxide standard, it makes no sense to increase the number of parking spaces.

Sincerely,
Eve Heidtmann

Testimony on Portland Downtown Parking and Circulation Plan
by

Jeanne Roy, Air Quality Advisory Committee and Citizens
Advisory Committee to Downtown Parking and Circulation Study

RECEIVED
MAR 4 1981

AIR QUALITY CONTROL

The primary CO standard, set to protect public health, is being violated in Portland. The Clean Air Act requires that the standard be achieved as expeditiously as practicable.

To assure that Portland is moving toward attainment in an expeditious manner, the DEQ must not approve the Parking and Circulation Plan unless it includes the following:

1. Maintain the Parking lid at 40,055. The air quality study done by Seton, Johnson, and Odell showed that the parking lid was the most effective means of controlling CO. In June 1980 the City staff said Portland could handle parking demand without any increase in the lid. In August, under political pressure, the staff suggested adding a 400 reserve account. In October the number was increased to 800. Downtown business interests have pressed for further increases in the number. The precedent of "adjusting" the lid is dangerous; a line must be drawn in order to improve CO levels.

As a member of the Advisory Committee to the Downtown Parking and Circulation Study, I was not convinced of a need to increase parking spaces. There has been a dramatic increase in downtown employment, office space, and retail activity in the last six years. Yet the number of auto trips has been kept constant. The Seton study estimates that in the next seven years the number of work trips by transit will increase more than in the last eight years. Consultants Lord and Associates predicted that Tri-Met could absorb future increases in Downtown trips by increasing its daily passenger count three percent annually; Tri-Met says it has the capability of accomodating a four percent passenger count. Businesses, being aware of future energy shortages, want to locate in the central business district where transit is most efficient. They will not be hurt by restrained parking.

2. If you determine that an increase in the lid is justified, require an offset. Industrial sources are required to obtain offsets. If the City feels the necessity to encourage indirect sources, it should have to show an offset for them.

3. Approve the parking management program and reduced maximum parking ratios. Everyone on the Advisory Committee supported the parking management plan. The transportation consultant said that by such management, parking pressures could be relieved. Parking spaces not now utilized could be shifted to those sections of the downtown where more parking is needed.

4. Direct the City to adopt all other reasonable available control measures. The control measures in the City's plan--encouraging flex time, ride sharing, and bicycles--are too limited. I suggest that you ask the City to include the following measures:

- a. A subsidized transit fare program. To my knowledge Multnomah County and the Port of Portland are the only public agencies with such programs. Portland State had a program, but it is no longer funded. If the City established a program, the City could encourage other public agencies in Portland to do likewise.

- b. A commitment to work with businesses and Tri-Met to establish a Shop and Ride program. Many businesses downtown validate parking tickets for customers. If bus tickets were given to shoppers, the 15% nonwork transit trips would be increased.
- c. A policy encouraging alternatives to the auto in the conduct of business. City officials and employees should be encouraged to telephone, walk, use the bus or use taxis if necessary. Other public agencies and private organizations should be urged by the City to follow this example.
- d. More specific commitments on incentives for carpooling and vanpooling.

The Clean Air Act requires Portland to demonstrate it has employed all reasonably available control measures and is moving toward attainment as expeditiously as practicable. The parking lid must not be modified until it can be clearly shown that the Parking and Circulation Plan will move Downtown Portland expeditiously toward attainment. The proposed plan would establish a dangerous precedent and would be a backward step for air quality in Portland.

The EPA has sent technical comments on the Study. These are attached so that they may be incorporated into the record.

COMMENTS ON PORTLAND DOWNTOWN PARKING AND CIRCULATION STUDY
(Sections I, II, III, IV, VII)

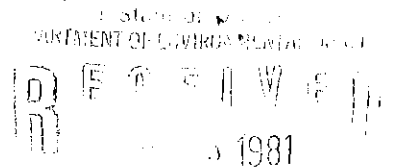
While these documents are valuable for planning and represent a considerable effort, there are some items that need to be addressed prior to submitting this information as the 1982 SIP. The major areas of concern are:

1. The assessment of the carbon monoxide problem may be in error because:
 - A. The emission factors used in the air quality model were derived by the MOBILE 1 computer program. MOBILE 1 has been updated by MOBILE 2 and the emission factors used for the 1982 SIP must reflect MOBILE 2 output.
 - B. Growth effects may have been neglected. The traffic growth rates were not included in these reports so evaluation of growth effects is impossible. However, statements such as, ". . . 1982 link volumes remained equal to base year 1979 volumes . . ." (p. 30, Section VII) suggest that growth has very little effect. The actual population and VMT growth rates used need to be presented and discussed along with assurances that these rates are consistent with those used in water quality planning.
 - C. The operation mode inputs may need to be revised. It is not clear from Table 3 (p. 14, Section VII) and the accompanying discussion why the Hot and Cold Start values change with respect to time. The emission factor computer program normally accounts for fleet soak (dwell) time changes internally. Also, the operating modes should be broken down according to technology type (i.e. catalyst and pre-catalyst) because of differences in soak (dwell) time (i.e., one hour and four hours).
 - D. The air quality modeling should be revised. The model (APRAC 2) was calibrated before any validation was attempted. The reasons the model failed should be examined and incorporated into the model rather than merely adjusting the output. Calibration of short-term models is questionable and not recommended. Furthermore, the calibration performed accounts for only 56% of the variation in measured values. (Refer to "Guidance on Air Quality Models" [EPA-450/2-78-027] for further discussion of validation and calibration.)
 - E. The methodology used to account for background concentrations may need to be refined. Some tangible justification for the selected background of 5.0 mg/m³ needs to be presented. In addition, the background adjustment equation (p. 30, Section VII) appears to be in error.

2. A clear statement of the problem would be useful in evaluating control measures. The baseline emission levels (design year 1982, 1987) should be itemized as well as the individual effects of growth, FMVECP, the selected parking policy and other control measures.
3. Air Quality details of the control measure analyses need to be included in the alternatives analysis. Transportation, energy and social impacts need to be included as well. The air quality impacts should specifically focus on carbon monoxide.
4. There are many options and projected goals listed throughout the document, with no accompanying costs. If the intent is to include some or all of this study as part of the overall package for the Transportation Control Plan, then costs should be developed for each element of the package. These should include the major capital, as well as annual operation and maintenance costs. This is very important to decision makers for comparative purposes in assessing the cost effectiveness of each package.

DEAN P. GISVOLD

2815 N.E. 17th Avenue
PORTLAND, OREGON 97212



AIR QUALITY CONTROL

March 5, 1981

HAND DELIVERED

Department of Environmental Quality
Air Quality Division
P.O. Box 1760
Portland, Oregon 97207

Re: Portland Downtown Parking and
Traffic Circulation Plan

Dear Air Quality Division:

As a member of the Advisory Committee, I generally supported, and still support, the revisions to the Portland Downtown Parking and Traffic Circulation Plan (Plan). However, I am concerned about the proposed increase of 800 parking spaces to the parking lid. Initially, the City planning staff said an increase in the lid was not necessary. I think that is still the case. The lid has helped to clean our air, and supported greater usage of mass transit. I believe the supply of parking spaces should be maintained at 40,055 spaces as set forth in your Notice of Public Hearing.

The important part of the Plan is the parking management section. I am convinced that if proper management takes place, the increase in parking spaces will not be needed. Certainly, parking management should be given a chance before the easier route of merely increasing parking spaces is used.

Thank you for the opportunity to comment on the Plan and your approval of it.

Very truly yours,

Dean P. Gisvold

DPG:trn

Department Responses to Major Issues Raised in Hearing Report on
"Proposed Portland Downtown Parking and Traffic Circulation Plan"

A. Responses to Testimony of the Oregon Environmental Council (OEC)

1. Issue: ". . . the study says, the 'lid' need not be adjusted to accommodate future employment growth. (page I-6)." "If the lid was such 'an effective tool', why should it be lifted?"

Response: In citing page I-6 of the study document, OEC omitted a key word. The actual sentence reads, "Based upon this data, the parking lid established in 1973 need not be substantially adjusted in order to accommodate future employment growth." Under the new parking policy adopted by the Portland City Council on October 30, 1980, two separate areas on the edges of the downtown, one on the north and the other designated the South Waterfront area, have been added to the boundary to which the old lid of 38,870 spaces applied. For the newly incorporated South Waterfront area an exclusive allocation of 1,185 parking spaces has been provided by the new parking policy. Thus, total parking under the new parking policy is 40,055 spaces, which is precisely the old lid figure of 38,870 spaces plus the South Waterfront area allocation of 1,185 spaces. The new inventory of 40,055 spaces is also supplemented by a special reserve account of 800 parking spaces. The special area to the north has not been given a separate allocation of spaces, even though the old parking policy anticipated such a future exclusive allocation. Most importantly with respect to the South Waterfront area, the air quality analysis shows immediately surrounding areas to be in compliance with carbon monoxide standards by 1982.

B. Responses to Testimony of Ms. Jeanne Roy

1. Issue: "In August, under political pressure, the staff suggested adding a 400 reserve account. In October the number was increased to 800. Downtown business interests have pressed for further increases in the number. The precedent of "adjusting" the lid is dangerous; a line must be drawn in order to improve CO levels."

Response: In August, 1980, the City staff produced a memorandum covering a typical two-year scenario of downtown development. Parking demand and supply numbers were projected. Average demand was projected to be 880 spaces over a two-year period. Approximately one-half of those spaces would have to be produced as a direct result of the Parking Management Program. In order to give the Management Program time to start providing the minimum amount of needed spaces, the City staff initially concluded that a two-year period, or 400 spaces was an appropriate amount for a reserve account. As of August 1, 1980, the City was committed to 1,259 parking spaces for new

developments. By October two major new development proposals appeared (Pacwest and U.S. Bank), both requiring substantial parking commitments within a relatively short period of time. The two projects combined would seek an additional commitment of approximately 1,310 parking spaces. The City staff concluded that the 400 space reserve account would not be sufficient to accommodate both developments and therefore proposed that the account be increased to 800 spaces.

As of February 18, 1981, the total parking space commitments to new projects has increased to 1,665, which includes the Pacwest project at 410 spaces, but does not include the U.S. Bank proposal. The surplus has now dwindled to 77 spaces. Based on this consideration alone, the 800 space reserve account appears to be needed.

From the standpoint of impact on ambient air concentrations of carbon monoxide, the 800 spaces, even if put in one development, would likely produce a concentration in 1982 that could be barely detected by the best monitoring equipment. However, increases much beyond the 800 spaces, especially in one location, might begin to produce a significant incremental impact of carbon monoxide on the ambient air.

In recognition of these facts, the Department testified at the October 30, 1981, City Council hearing, stating that increases to the reserve account beyond the 800 spaces could not be very easily approved without some other strategy or mitigating measures to reduce carbon monoxide levels.

2. Issue: "If you determine that an increase in the lid is justified, require an offset."

Response: See the Department's comments under B.1.

3. Issue: "Direct the City to adopt all other reasonable available control measures."

The City has made a commitment to expand its flex-time program. The provision of a transit fare subsidy could be included in that program. On an overall basis, the Department expects the Parking Management Program to be the mechanism through which specific alternative mode programs are developed.

C. Responses to EPA comments submitted by Ms. Jeanne Roy as an attachment to her testimony

1. Issue: "Mobile 1 has been updated by Mobile 2 and the emission factors used for the 1982 SIP must reflect Mobile 2 output."

Response: Mobile 2 was not available when the air quality analysis was performed. There is no money budgeted to perform such a revision. For calendar year 1987 we understand that there is little difference between Mobile 1 and Mobile 2. Also, the final guideline document for the 1982 ozone SIP submittals encourages the use of Mobile 2, but does not require its use. Finally, the Department has learned from METRO's running of the program that Mobile 2 appears to generate faulty emission factors. We understand that EPA is investigating this problem.

2. Issue: "Growth effects may have been neglected."

Response: The documentation will be provided.

3. Issue: "The operation mode inputs may need to be revised."

Response: Documentation for these inputs was not provided. Additional material documenting how the operating modes were determined will be provided.

4. Issue: "The air quality modeling should be revised. The model (APRAC 2) was calibrated before any validation was attempted."

Response: The APRAC model is documented in the EPA's OAQPS Guideline Series, Guideline on Air Quality Models. EPA indicates that the authors of the model documented one validation study. A worthwhile validation study, locally applied, was well beyond the scope of the contracted work. The calibration equation was reviewed by the Technical Advisory Committee for the study and there was agreement that its use would produce conservative results. Furthermore, concentration predictions at the downtown DEQ monitoring stations were adjusted and put on a statistical third highest level in three years basis. Even if the resources were available to perform a validation, we are very skeptical that modeling results would be markedly improved.

5. Issue: "The methodology used to account for background concentration may need to be refined."

Response: The 5.0 mg/m^3 concentration level actually is the intercept value of regression equation. Natural background is almost impossible to determine for areas where traffic densities are great because of the difficulty in finding monitoring locations that are not too far away from a high impact site, but are at the same time not inordinately influenced by a nearby roadway. Based upon the Department's experience with monitored levels of carbon monoxide around the Portland Metropolitan area, we believe that 5.0 mg/m^3 is not an unreasonable level to assume as background.

During the monitoring period of the study, a site in northwest downtown Portland recorded 8-hour carbon monoxide concentrations ranging from 25% to approximately 40% of the levels measured at the DEQ's Burnside Central Air Monitoring Station (CAMS). The site in the northwest downtown, although not too far away from CAMS, was also under the influence of nearby roadways, so it was not a perfect indicator of background concentrations. However, the fact that the concentration levels measured there were 25% to 40% of the CAMS levels gives some additional support for treating 5.0 mg/m³ as a background concentration.

6. Issue: "A clear statement of the problem would be useful in evaluating control measures. The baseline emission levels (design year 1982, 1987) should be itemized as well as the individual effects of growth, FMVECP, the selected parking policy and other control measures."

Response: The individual effects of the various control measures were presented, but were generally found to be fairly small. The parking policy with its several subelements of control measures is designed to hold the parking supply relatively constant. This will limit growth in vehicle miles of travel (VMT) and thereby allow the downtown to take great advantage of the cleaner cars expected over the next several years. Documentation of baseline emission levels will be provided in the SIP submittal.

7. Issue: "Air Quality details of the control measure analysis need to be included in the alternatives analysis. Transportation, energy and social impacts need to be included as well."

Response: Further documentation is needed in this area and will be provided in the SIP submittal.

8. Issue: "There are many options and projected goals listed throughout the document, with no accompanying costs."

Response: To the extent possible the costs of the strategy elements will be identified in the SIP submittal.

D. Response to testimony of Mr. Jan Sokol

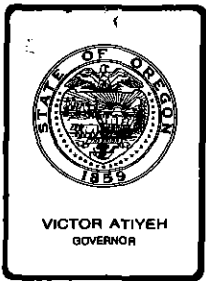
1. Issue: The allowance of an 800 space reserve account without provision for offsets will not comply with the Clean Air Act Amendments which require attainment of air standards as expeditiously as practicable.

Response: See the Department's comments under B.1. The reserve account appears to be a practical response to the recent rapid pace of downtown development proposals. The Parking Management Program will require some time before it can produce the needed parking spaces which will help to keep the supply of parking relatively constant. If the supply of parking can be held near the 40,055 space level, then attainment of carbon monoxide standards should occur in an expeditious and practicable manner.

E. Responses to testimony of Mr. Dean P. Gisvold

1. Issue: ". . . I am concerned about the proposed increase of 800 parking spaces to the parking lid. . . . I believe the supply of parking spaces should be maintained at 40,055 spaces as set forth in your Notice of Public Hearing."

Response: See the Department's comments under B.1 and D.1.



Item 0

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: Information Report on Status of the Portland Metropolitan Motor Vehicle Inspection Program

The Motor Vehicle Emission Inspection Program began mandatory operation July, 1975. Since that time the Department has provided periodic updates on the inspection program operation. The first update was at the January 14, 1977, Commission meeting. That report was submitted by the Commission to the Legislature. On February 23, 1979, a report updating the inspection program activities was submitted to the Commission.

Attached is a new report, prepared by the Department for your consideration. The purpose of the report is to update the Commission on the activities of the Motor Vehicle Inspection Program during 1979 and 1980. Please let me know if you would like to discuss this report sometime during the meeting or lunch on March 13, 1981.

Bill

William H. Young

Attachments: Report on Motor Vehicle
Emission Inspection Program, 1979-1980.

William P. Jasper: dg
Phone 229-5081
February 23, 1981



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STATE of OREGON
ENVIRONMENTAL QUALITY COMMISSION

REPORT on MOTOR VEHICLE
EMISSION INSPECTION PROGRAM
1979-1980

February 1980

Prepared by
Department of Environmental Quality
Vehicle Inspection Program

TABLE of CONTENTS

<u>Summary Report</u>	<u>Page</u>
Background	1
Program Operations	2
Emission Reductions From Motor Vehicles	3
Air Quality Trends	4
Population and Traffic Trends	5
Status of Other Inspection/Maintenance Programs	5
Summary	5

Appendices

- A. Summary of Legislative and Administrative Policy
- B. Program Operations
- C. Motor Vehicle Emissions
- D. Heavy Duty Truck Testing
- E. Cost of Repair
- F. Air Quality Trends
- G. Engineering Activities
- H. Population and Traffic Trends
- I. Status of Other Inspection Programs

REPORT ON MOTOR VEHICLE INSPECTION PROGRAM
1979 - 1980

Background and Legislative History

Motor vehicles are a source of air pollution in the United States, as well as in many other industrialized countries of the world. Consequently at least 27 countries have vehicle emission control regulations and about 90% of all passenger cars manufactured in the world are designed to meet an emission control standard. The major air pollutants produced by motor vehicles are carbon monoxide, hydrocarbon gases, and oxides of nitrogen. Particulate matter, including lead compounds, and sulfur oxides are also produced. In many urban areas the buildups in the concentrations and the reactions in the atmosphere of these motor vehicle produced air pollutants have given rise to public health concerns.

As a result of the recognition of a national motor vehicle pollution problem, Congress enacted the 1965 Clean Air Act Amendments. This action initiated a federal motor vehicle pollution control program which applied the 1966 California auto emission standards nationally in 1968. This 1965 Act did not produce the results Congress intended. Subsequently, the Clean Air Act Amendments of 1970 was enacted.

The Clean Air Act Amendments of 1970 established a national air quality control program with specified goals, objectives, and time schedules. New motor vehicle emission standards were promulgated. The states were required to submit implementation plans that outlined how these national goals and objectives were to be met within the state and within the specified time schedule.

Oregon's Implementation Plan was originally submitted by the Governor in 1972. This was followed in 1973 by the Transportation Control Strategy which specified in greater detail the methodology chosen by the State to control automotive caused air pollutants. The State's plan relied upon a combination of control measures at various governmental levels to obtain compliance with the national standards. These control measures included traffic flow improvements in the city, a parking/traffic circulation plan, significant mass transit improvements, an annual motor vehicle emission control inspection program, and the federal new vehicle emission control program. The State's plan has not yet met its objective. This is primarily due to delays in the federal new vehicle program and enactment by the state legislature of a biennial inspection program rather than the projected annual program.

The Clean Air Act Amendments of 1977 extend the time schedule for compliance with national ambient air standards to 1982. If a state implements all reasonable control measures--including a schedule for a motor vehicle inspection/maintenance program--and is still unable to

project compliance with the national standards, then an extension of the time schedule until as late as 1987 is possible. A summary of federal and state motor vehicle emission control legislative and administrative action is contained in Appendix A.

Since July 1, 1975, the Department of Environmental Quality has operated a motor vehicle emission inspection program within the boundaries of the Metropolitan Service District which includes the City of Portland. The program boundaries are legislatively set. By State law, vehicles registered within these boundaries must comply with the emission control standards and obtain a certificate of compliance prior to motor vehicle registration renewal.

The certificates are available only from the Department-operated inspection centers. A five dollar (\$5) fee, which totally supports the program, is charged for the issuance of a certificate. To conduct the vehicle emission inspection and maintenance program, seven test centers operate in the Portland metropolitan area. During this last year over 600,000 emission tests were conducted. Table 1 summarizes the testing activity during 1979 and 1980 and Figure 1 shows testing volumes on a monthly basis for 1979 and 1980.

The Department's inspection program is part of Oregon's Clean Air Act State Implementation Plan. The inspection program's purpose is to reduce the amount of carbon monoxide and hydrocarbon gases of the area's motor vehicles by promoting proper maintenance. The emission reductions attained help meet ambient air standards.

Program Operations

The general discussion of the State's inspection/maintenance program is contained in Appendix B. Approximately 840,000 inspections were conducted at the seven inspection centers during 1979 and 1980. In this period over 500,000 certificates of compliance were issued. Inspector staff size during this past year peaked at 56 employees compared with 68 inspectors in 1978. During 1979 inspector staff size dropped to 30. As a complement to the State's inspection program, private motor vehicle fleets of 100 or more vehicles and publicly owned fleets of 50 or more vehicles can qualify for self inspection status. The 46 licensed fleets issued almost 6,400 certificates during 1980, 2% of the total. A discussion of the fleet inspection program is also contained in contained in Appendix B.

Among the highlights of the past two years has been the change in the Metropolitan Service District boundaries. The inspection program boundary changes resulted in removing portions of Multnomah and Washington Counties and the addition of portions of Clackamas County. As this affected the program operation the Department established temporary inspection sites in the Damascus/Boring area and in the Wanker's Corner area south of Lake Oswego. Unfortunately, test volumes at both facilities necessitated the withdrawal and the closing of these operations. The Department initiated a study and proposal to construct an inspection facility in Beaverton.

This facility, if approved, would greatly improve the service to the Department's eastern Washington County customers.

Training for both employees and for the private fleet inspectors has been maintained during these past two years. Additionally the Department participated in an EPA pilot study for mechanic training. The results of this pilot study aided in the development of a mechanic training course. With the aid of federal funds, training is being conducted in the Medford-Jackson County area. By early 1981 over 140 mechanics will have received training in emission related automotive repairs.

Emission Reductions From Motor Vehicles

The purpose of conducting an inspection/maintenance program is to improve ambient air quality by achieving reduced emissions from motor vehicles. The inspection/maintenance program operating in Portland is projected to just be sufficient to achieve the EPA's minimum requirement of a 25% reduction in both HC and CO by December 31, 1987. This is due to the biennial nature of the program. If the program was on an annual basis, emission reductions would be greater.

Emission reductions, such as that described above, are calculated by computer modeling techniques and projected over many years of program operation. This modeling technique is continuously being upgraded to reflect more accurately, real world situations. As part of this type of study, the EPA has been conducting an inspection/maintenance evaluation in the Portland area. As means of an update on that program, the findings from the EPA study indicate that the program achieved mass emission reductions of 34% carbon monoxide and 24% hydrocarbons for 1975-1977 model year cars over a year's period. This comparison was between cars operating in Portland and those operating in Eugene. Discussions of some of the EPA activities in Portland are included in both Appendices C and G.

Tailpipe emission measurements, obtained at the inspection stations, are the day-to-day tool used to measure compliance with the inspection program standards. The reduction in these emissions is another indicator of program effectiveness. A short test, like the test used in the inspection program, is an effective method of identifying high emitting vehicles. When a vehicle is first manufactured, it generally complies with the new vehicle emission standards. As the vehicle ages, emissions increase. This deterioration in emission control is due to many factors. Parts in the vehicle wear and lose their effectiveness and require replacement. Some repairs are made that do not adequately address the required maintenance. An inspection test readily identifies vehicles needing correction or additional maintenance, so that the vehicle operates consistent with the manufacturer's design criteria. When a vehicle is brought into total conformity with the vehicle manufacturer's design criteria, overall emissions are reduced, and the vehicle is then operating as originally intended. In past reports, the Department has presented emission distributions which show the effects of deterioration and the effects of proper maintenance. Emission distribution bar charts shown in Figures 2 and 3 indicate that increased emissions generally result with increased

vehicle age. The charts indicate that, while the majority of vehicles comply with the emission criteria, the number of cars exceeding the criteria in a given category grows each year and that the amount of pollutants they emit also increases. Repair of these high emitting vehicles dramatically reduces their emissions. The average mass emission reduction for repaired vehicles was 47% for carbon monoxide and 42% for hydrocarbons, as measured in the EPA Portland study. Idle emission reductions after repair for the vehicles which failed the DEQ test were over 90% for carbon monoxide and 80% for hydrocarbons. A more detailed discussion on emission characteristics and reductions is contained in Appendix C.

The reported costs for emission-related repair has generally been low, averaging \$17. Less than 4% of the vehicles which failed reported repairs in excess of \$100. A special study by the Department indicated that some repair facilities (approximately 20% in this study) may not be performing complete repairs, but instead just simple fixes to pass the DEQ test. The Department is attempting to reduce this type of activity by assisting in and coordinating training programs to help mechanics properly diagnose and repair vehicle emission control systems.

With the newer motor vehicles, advances in air pollution control technology are being implemented. These newer vehicles, which use closed loop sensors and computer technology are now on the market. It is too early to tell how well these vehicles will maintain their emission system performance. We are establishing baseline information on these vehicles so that changes can be determined.

Heavy duty gasoline powered trucks are included in the inspection program. A discussion on the heavy truck program is included in Appendix D. Emission reductions for these trucks were sizable, up to a 25% idle carbon monoxide emission reduction and a 16% idle hydrocarbon emission reduction compared to a period two years ago. Many of these vehicles operate in congested urban and shopping areas where the emission reductions have maximum benefit.

Air Quality Trends

The motor vehicle inspection program is an important element in the Portland area's overall transportation control strategy. The transportation control strategy strives to reduce carbon monoxide and ozone (oxidants) to comply with ambient air standards. Carbon monoxide concentrations measured at the area's monitoring stations have been reduced. Carbon monoxide violation days have also been decreased from 88 days in 1970 to 20 days in 1980. Compliance with the carbon monoxide ambient standard is projected to be achieved during 1985 with the inspection maintenance program.

A special statistical study of the effects of the inspection program is scheduled to be completed this April. The statistical study, being conducted by the University of Wisconsin, is analyzing Oregon ambient carbon monoxide data for Eugene and Portland. Preliminary conclusions

state that the federal new car program and the inspection maintenance program are directly responsible for the carbon monoxide decreases. The final report will attempt to quantify the relationship between the two programs.

Decreases in ambient ozone concentrations due to emission reductions have been achieved. The inspection maintenance program has been estimated to provide an approximate 12,000 kg/day hydrocarbon emission reduction by 1987. Ozone violations have dropped during the last two years in the Portland metropolitan area. The three probable causes for the decline in these ozone emissions are: the meteorology during the past two years has not been as conducive to ozone formation as it had been in previous years; there have been monitor methodology changes; and there have been emission reductions from various control strategies. It is estimated that all existing control strategies, including the inspection maintenance program will be necessary to meet the federal requirements for reductions in ambient air concentrations of ozone as outlined in the Clean Air Act.

Population and Traffic Trends

In previous reports population and traffic discussions were made. Traffic trend analysis has been reviewed and updated, and is presented in more detail in Appendix H. Traffic volumes have increased continuously over the past few years peaking in 1979. A slight traffic reduction was observed in 1980. Changes in traffic patterns with increased bus ridership and growing population in the suburbs have been noted. Increasing fuel and vehicle operating costs may be part of the causes of changing traffic patterns. Studies made during this past year indicate that there has been no great change in out-of-area vehicles consistently operating in the metro area.

Status of Other Inspection/Maintenance Programs

Appendix I lists the status of the ongoing and proposed inspection/maintenance programs in the United States. Currently there are 22 mandatory inspection programs now planned for implementation in the next two years. The State of Washington is initiating an inspection program. The Washington program is proposed to start January 2, 1982. Vancouver has been included in the Washington program because of Vancouver's contribution to the metropolitan Portland area's photochemical oxidant problem. All states, requiring inspection programs for ambient standard compliance, except California and Kentucky, have approved programs in some stage of implementation. Economic sanctions, as required by the Clean Air Act, have been proposed for California and Kentucky.

Summary

The Clean Air Act and its amendments established a national air quality control program with specific goals and objectives and time schedules. Oregon's Clean Air Act Implementation Plan includes a transportation control strategy geared to achieving these goals for the Portland

Metropolitan area. The inspection/maintenance program is an important element of that plan. The EPA has required that inspection/maintenance programs contribute a 25% reduction in both hydrocarbons and carbon monoxide emissions from motor vehicles by 1987. These reduction requirements are forecast to be met with Oregon's current program. Average idle emission reductions for individual cars of over 90% carbon monoxide and 80% hydrocarbons after repair have been observed. Mass emission differences for 1975 and newer vehicles operating in Portland compared to Eugene were 34% for carbon monoxide and 24% for hydrocarbons. These inspection/maintenance emission reductions will be retained for up to a year after vehicle repairs are completed as demonstrated by both the long-term federal studies and the data from the Oregon inspection program. Heavy duty gasoline powered trucks are showing good emission performance. Emission reduction benefits for heavy duty trucks of up to 25% idle carbon monoxide and 16% idle hydrocarbons have been observed.

With the biennial inspection program operating and with the other ongoing control measures, compliance with ambient air carbon monoxide standards is projected to be achieved by 1985. Compliance with the federal ozone standard is projected to be achieved by 1987 with all existing and currently planned control measures.

Oregon's inspection and maintenance program has been demonstrated to be effective in reducing emissions from motor vehicles, in maintaining those emissions reductions, and in contributing to the overall effort of meeting the clean air goals.

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Table 1

DEPARTMENT OF ENVIRONMENTAL QUALITY
 VEHICLE INSPECTION PROGRAM
 522 Southwest Fifth Avenue
 Portland, Oregon

Activity Report for January, 1979 through December, 1980

EMISSION LIGHT DUTY INSPECTION TESTS 841,703

CERTIFICATES OF COMPLIANCE ISSUED* 509,628

Emission Inspection Tests

Pass Emission Test	501,597 = 60%
Tests Failed for Carbon Monoxide (CO)	128,496 = 15%
Tests Failed for Hydrocarbons (HC)	70,406 = 8%
Tests Failed for Both HC & CO	52,765 = 6%
Tests Failed for Emission Equipment Disconnects	40,514 = 5%
Tests Failed for Other Causes (i.e., smoke, dilution, idle RPM)	47,930 = 6%

Pre-Catalyst Vehicle Tests (June, 1979 - December, 1980)

Number of Tests	450,329 = 65% of all Tests
Percentage Pass	56%

1975 and Newer Vehicle Tests (June 1979 - December, 1980)

Number of Tests	238,649 = 35% of all Tests
Percentage Pass	66%

Total Light and Heavy Duty Emission Inspection Test by Location

Powell	-	169,827
Tigard	-	144,746
Milwaukie	-	121,684
Northeast	-	120,117
Rockwood	-	111,473
Hillsboro	-	88,631
Northwest	-	84,358
Mobile No. 6	-	12,769
Mobile No. 5	-	12,527

* includes heavy duty trucks

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 VDD14.B

Figure 1

MONTHLY TEST VOLUME AT DEQ INSPECTION STATIONS

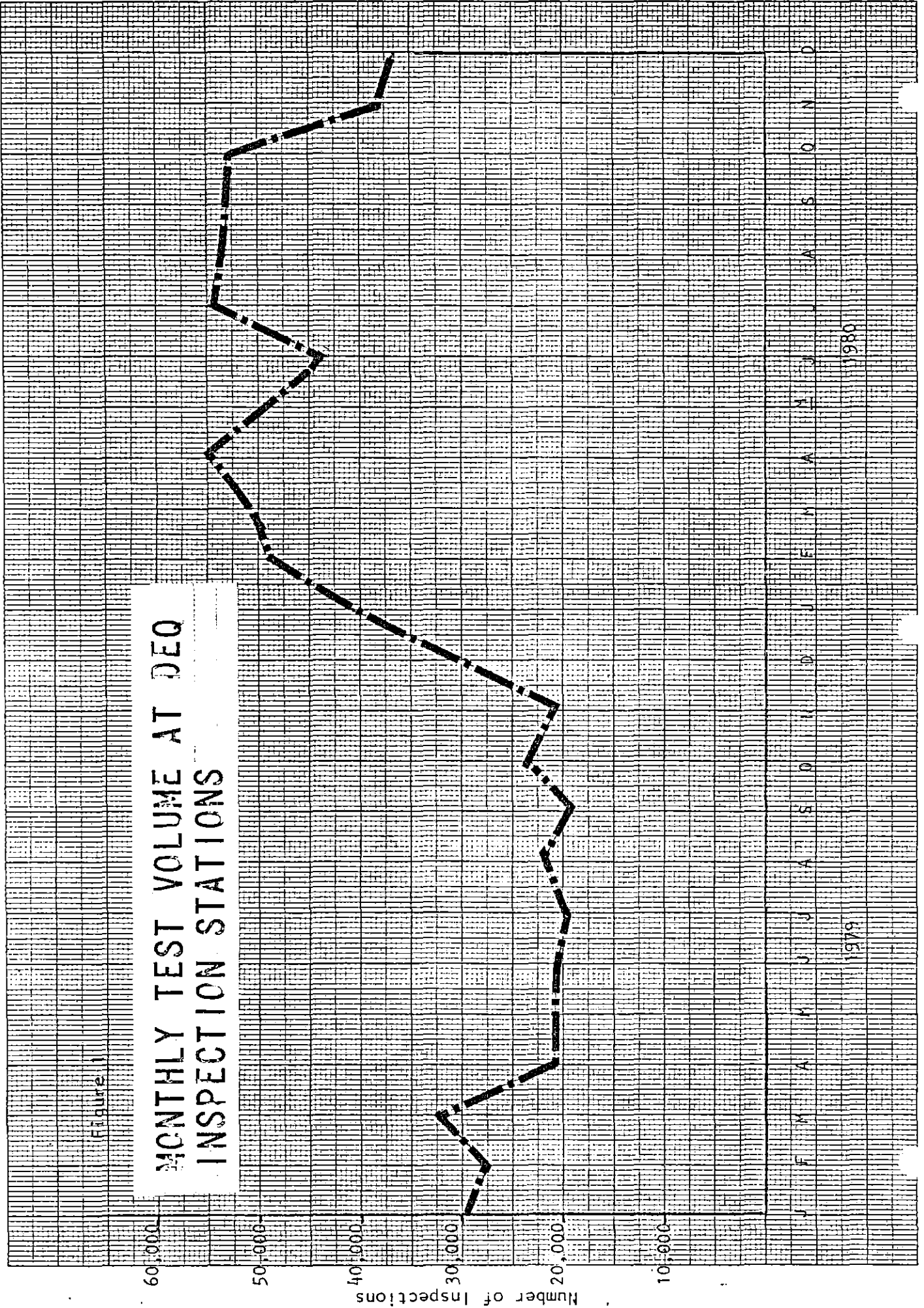
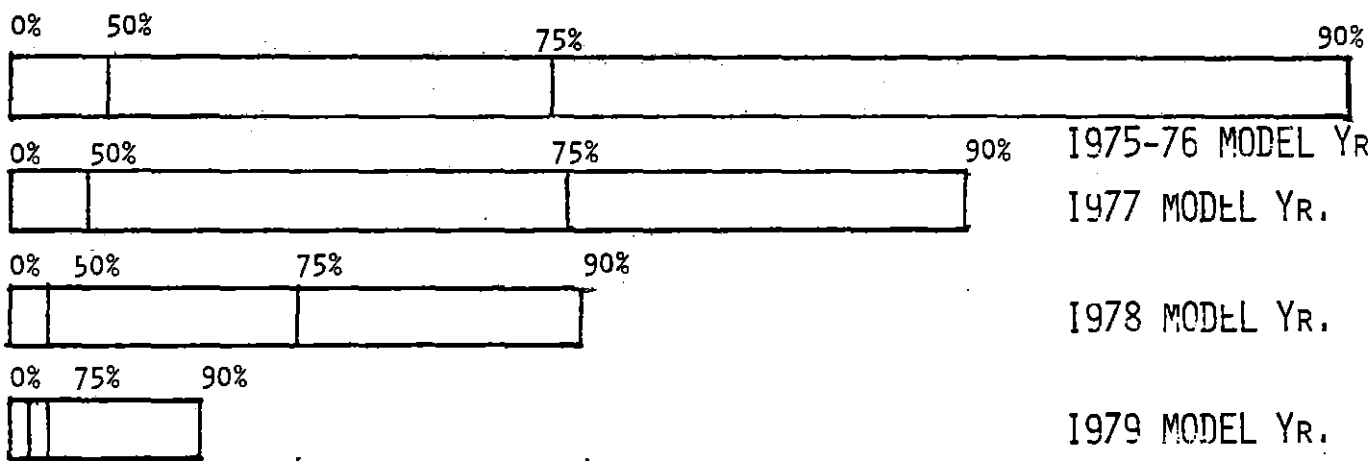


Figure 2
DEPARTMENT OF ENVIRONMENTAL QUALITY

Vehicle Inspection Program

Carbon Monoxide Idle Emission Distribution for a Popular Vehicle Make

BARS SHOW PERCENT OF POPULATION BELOW CONCENTRATION
TESTED IN 1979



TESTED IN 1980

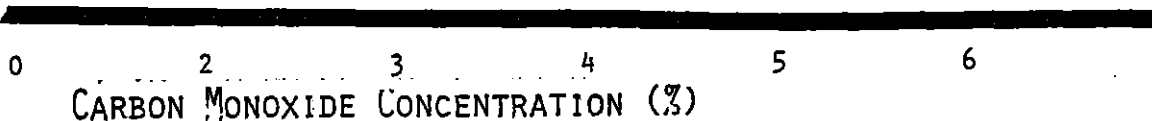
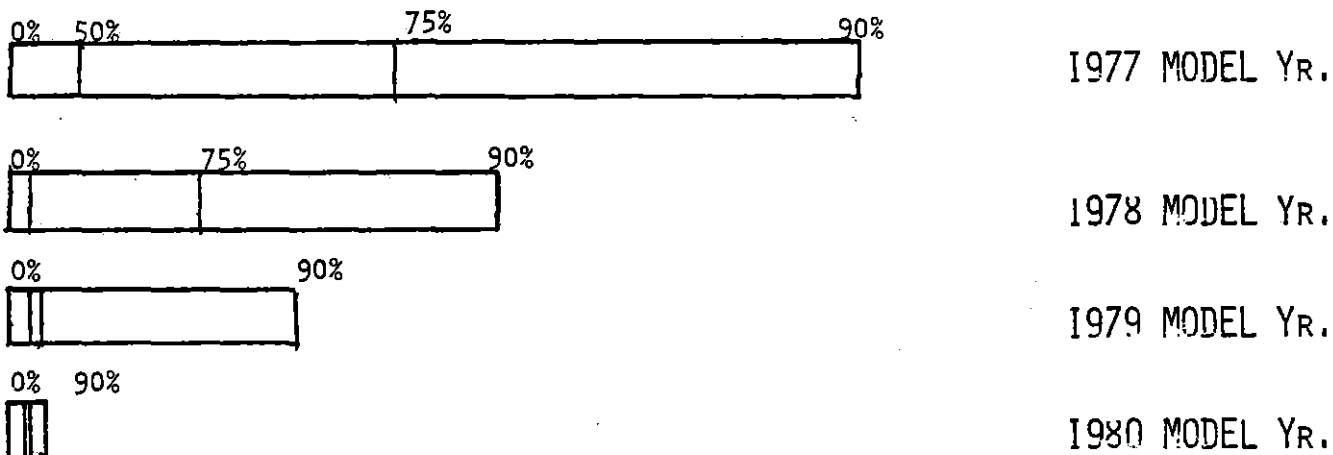


Figure 3

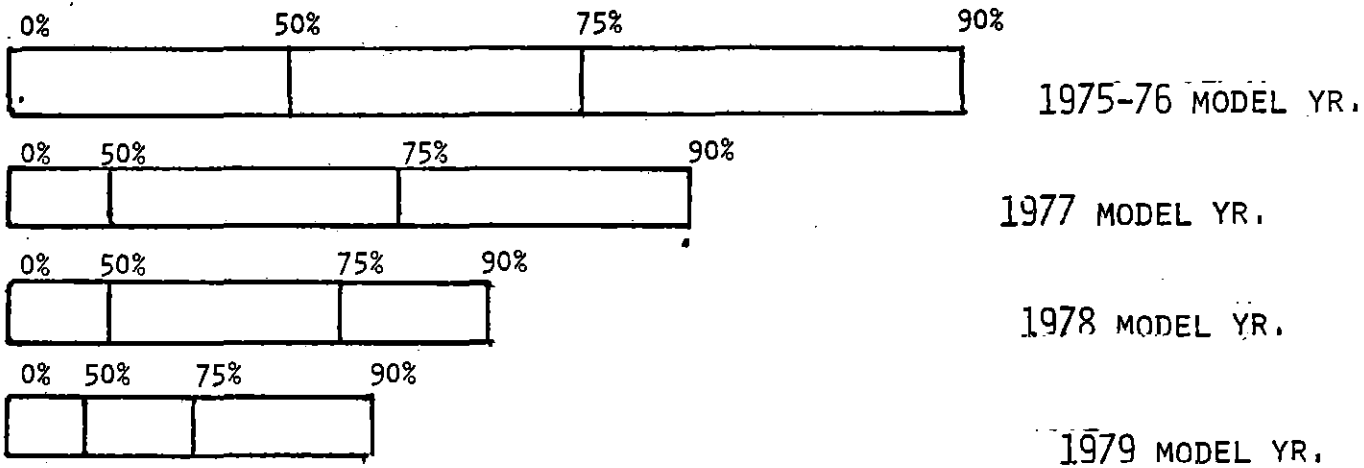
DEPARTMENT OF ENVIRONMENTAL QUALITY

Vehicle Inspection Program

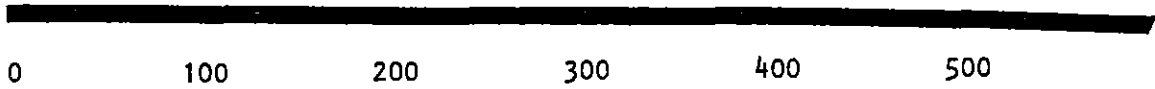
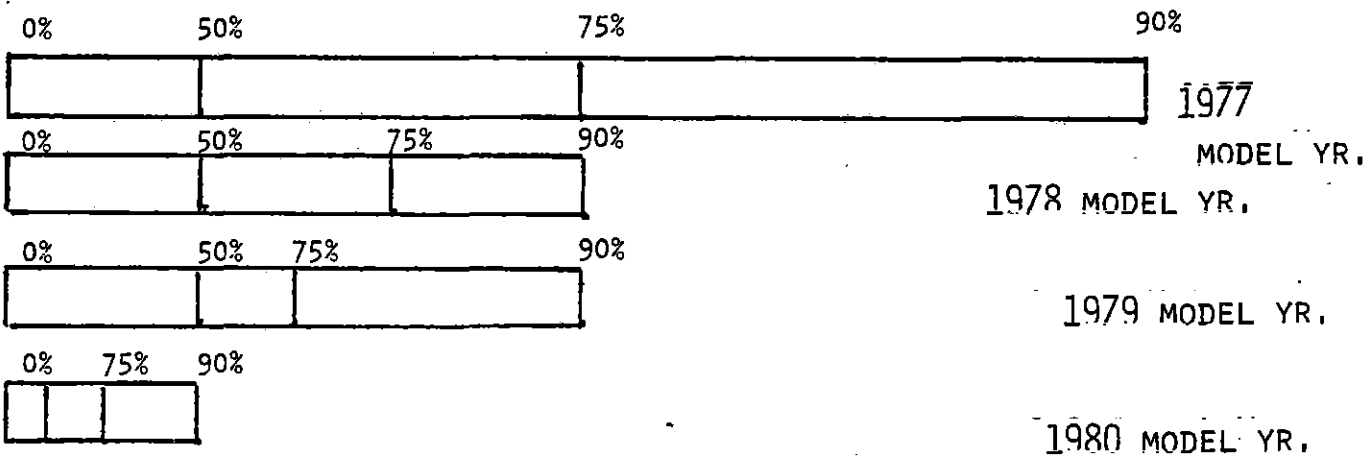
Exhaust Hydrocarbons Idle Emission Distributions for a Popular Vehicle Make

BARS SHOW PERCENT OF POPULATION BELOW CONCENTRATION

TESTED IN 1979



TESTED IN 1980



0 100 200 300 400 500

HYDROCARBON CONCENTRATION (PPM)

APPENDIX A

A SUMMARY OF LEGISLATIVE AND ADMINISTRATIVE ACTIONS

FEDERAL LEGISLATION

CLEAN AIR ACT OF 1965

Title II ("Motor Vehicle Air Pollution Control Act") empowers HEW to establish emission standards for sale in California beginning with model year 1966.

CLEAN AIR ACT OF 1967

Establish emission standards for pollutants from new motor vehicles manufactured for sales in remaining 49 states beginning with model year 1968. Emissions regulated by HEW were crankcase emissions (HC), fuel evaporative emission (HC), and exhaust emissions (CO and HC).

CLEAN AIR ACT OF 1970

Directs EPA to manage the national control of air pollution by developing Interstate Air Quality Agencies or Commissions, Air Quality Control Regions, establishing national primary and secondary air quality standards and requiring each state to submit implementation plans. Specifies 90% reduction in exhaust emissions of CO and HC from allowable 1970 levels by the 1975 model year and 90% reduction in NO_x emissions from average measured 1971 levels by the 1976 model year. Required manufacturers to warrant emission control equipment for 5 years or 50,000 miles; subjects certain persons to a civil penalty of not more than \$10,000 for tampering.

CLEAN AIR ACT OF 1970,
AS AMENDED, JUNE 1974

Requires EPA to comply with provisions of Energy Supply and Environmental Coordination Act of 1974.

CLEAN AIR ACT
AS AMENDED, AUG. 1977

Requires States to rewrite State Implementation Plans. Ties compliance with National Clean Air Goals to federal monies. Modifies compliance schedule for automobile exhaust emissions. Modifies mandated manufacturers emission performance warranty to 2 years, 24,000 miles. Requires States to implement all practicable control strategies. Allows States, under certain circumstances, to adopt California's emission standards for new cars.

SUMMARY
FEDERAL GOVERNMENT AGENCIES' ACTIVITIES

March 30, 1966

The initial Federal motor vehicle emission standards became applicable with the 1968 models. The standards and procedures were similar to those which had been employed by California and required specified control of exhaust hydrocarbons and carbon monoxide from light-duty vehicles and one hundred percent control of crankcase emissions from gasoline-fueled cars, buses, and trucks. The term light-duty vehicle refers to self-propelled vehicles designed for street or highway use, which weigh less than 6,000 pounds and carry no more than twelve passengers.

June 4, 1968

Revised Federal standards were published which require more stringent control of hydrocarbons and carbon monoxide from light-duty vehicles, of evaporative emissions from fuel tanks and carburetors of light-duty vehicles, of exhaust hydrocarbons, and carbon monoxide emissions from gasoline-fueled engines for heavy-duty vehicles, and of smoke emissions from diesel engines for heavy-duty vehicles. The fuel evaporative emission standards became fully effective with model year 1971. The other standards applied to 1970 model year vehicles and engines.

July, 1970

The Federal Government adopted a Constant Volume Sample or CVS procedure, during which the vehicle is run through a test cycle designed to simulate urban driving. The characteristics of the standard test drive were based on an elaborate study of Los Angeles traffic patterns in 1965. All emissions from ignition key-on after a 12-hour storage period to the end of the test cycle are collected and analyzed. EPA further refined the test procedure by later including both a cold start (after a 12-hour storage) and a hot start (after a 10-minute wait) and the computation of a weight average as a basis for 1975 and 1976 numerical standards. These changes, as well as certain minor modifications in analytical techniques, were intended to make test results more representative of emissions from in-use vehicles.

November 10, 1970

Standards were published applicable to 1972 model light and heavy-duty vehicles and heavy-duty engines.

April 30, 1971

National primary and secondary ambient air quality standards were published in final rulemaking, including standards for hydrocarbons, carbon monoxide and oxides of nitrogen. Also, the State of California was granted the first of several waivers of Federal preemption for motor vehicle emission standards more stringent than those currently in effect by Federal regulations.

May, 1971

Three contracts were awarded to provide prototype cars for government testing and evaluation under the Federal Clean Car Incentive Program.

June 18, 1971

The Low-Emission Vehicle Certification Board held its initial meeting and approved procedural regulations concerning preferential purchasing of low-emission vehicles for use in government fleets.

June 29, 1971

The first Federal standards were issued requiring control of oxides of nitrogen emissions and prescribing measurement techniques for this pollutant applicable to 1973 model light-duty motor vehicles. Also, standards were promulgated to prescribe the 1975 exhaust hydrocarbon and carbon monoxide emission requirements and 1976 oxides of nitrogen emission requirement applicable to light-duty vehicles. In addition, modifications in test and analytical procedures were included.

December 15, 1972

EPA ordered six motor vehicle manufacturers to eliminate certain emission control system disabling devices from their 1973 automobiles produced after specified dates.

January 10, 1973

Fuel regulations were promulgated to insure that lead-free gasoline would be available by July 1, 1974 to owners of automobiles equipped with catalytic converters. Also, regulations were promulgated requiring the amount of lead in gasoline to be reduced to an average of 1.25 grams per gallon by January 1, 1978.

April 11, 1973

EPA suspended for 1 year the statutory 1975 model year light-duty vehicle emission standards for hydrocarbons (HC) and carbon monoxide (CO) and established interim standards.

July 20, 1973

EPA suspended for 1 year the statutory 1976 model year emission standards for nitrogen oxides (NO_x) and established interim standards. The 1976 standards are applicable to light-duty vehicles and engines manufactured during or after model year 1976.

August 7, 1973

Regulations for the control of exhaust pollutants from diesel-powered light-duty passenger vehicles to be effective with the 1975 model year were promulgated. These vehicles were now required to meet the same emission standards that were applicable to gasoline-fueled light-duty vehicles. Also, regulations for the control of emissions from light-duty gasoline-fueled trucks, effective with the 1975 model year were promulgated. (A light-duty truck is defined as any motor vehicle weighing 6,000 pounds or less, which is designed primarily for transporting property, or is a derivative of such a vehicle, or has special features enabling off-street operation). This action was in response to the U.S. Court of Appeals' decision regarding emission standards for 1975 model year light-duty vehicles (International Harvester Company vs. Ruckelshaus, D.C. Cir. No. 72-1517, February 10, 1973) in which the court ordered EPA to remove light-duty trucks from the light-duty vehicle category. The new emission standards for light-duty trucks were significantly more stringent than the 1974 standards, but were slightly less stringent than the interim 1975 standards for light-duty vehicles.

January, 1974

EPA published the first of yearly fuel consumption results in a booklet for consumer use.

January 27, 1974

EPA promulgated regulations designed to accomplish three main purposes: (1) to clarify certain requirements pertaining to vehicle emissions certification, and provide that certification may be denied (or revoked) on account of a failure to comply with such requirements; (2) to clarify

that the Administrator would not certify any vehicle employing Auxiliary Emission Control Devices which have been determined by the Administrator to be "defeat devices;" and (3) to provide that once the regulations are in effect, production vehicles which do not conform in all material respects to the same design specifications that applied to a certification vehicle would not be covered by the Certificate of Conformity.

June 25, 1974

Under the Recall Program, EPA tested in-use vehicles and announced that four manufacturers of certain 1972 model year vehicles appeared to be in violation of Federal air pollution emission standards.

September 4, 1974

Regulations were promulgated which provided for the exclusion and exemption from emission standards for certain motor vehicles and motor vehicle engines.

October 15, 1974

EPA and the Federal Energy Administration (FEA) published a notice of Voluntary Fuel Economy Labeling for 1975 model year vehicles.

October 22, 1974

EPA published the final rulemaking concerning the control of emissions from light-duty powered trucks.

November 18, 1974

EPA promulgated regulations which required manufacturers to certify new motor vehicles designed for initial sale at high altitude to comply with emission standards at those altitudes. These amendments are applicable to light-duty gasoline-fueled vehicles, light duty diesel vehicles, and light-duty trucks beginning with the 1977 model year.

November 21, 1974

EPA promulgated regulations for the emissions control of 1976 and later model year light-duty diesel powered trucks.

December 23, 1974

EPA promulgated regulations governing the recall of motor vehicles and motor vehicle engines which failed to conform to emission standards for their useful life.

May 30, 1975

EPA promulgated regulations to establish the certification procedures for 1977 model year light-duty diesel powered trucks offered for sale in high altitude regions.

- June 5, 1975 EPA established standards for 1976 model year light-duty vehicles and light-duty trucks and emission standards for 1977 and later model year light-duty vehicles, light-duty trucks and diesel-powered light-duty trucks.
- June 23, 1975 EPA promulgated regulations to deny importation, except as a bonded entry, to all vehicles certified with a catalyst which were driven outside the United States, Canada, and Mexico unless the vehicles were included in an internal control program.
- February 6, 1976 EPA announced it was considering amendments to increase in the upper weight limit for 1978 and later model year light-duty trucks from 6,000 to 8,500 pounds gross vehicle weight (GVWR). Also proposed was a reduction of the current light-duty truck emission standards which would represent more than a 10% reduction from the present limits for current light-duty trucks, and more than a 67% reduction for vehicles to be added to the class.
- May 11, 1976 EPA published proposed revised regulations for 1979 and later model year heavy-duty gasoline-fueled and diesel engines.
- July 20, 1976 EPA promulgated regulations establishing a testing program for new automobiles coming off the assembly line in order to insure that these vehicles conform to the pollution control requirements of the Clean Air Act.
- November 3, 1976 EPA published an advance notice that it was considering the development and promulgation of regulations to provide general clarification concerning the coverage of Section 207(a) of the Clean Air Act (the emission control production warranty) for light-duty vehicles and light-duty trucks. In EPA's view, this was necessary because the Section 207(a) warranty has not developed into an effective remedy for the consumer, despite its presence since the 1972 model year.
- November 10, 1976 EPA promulgated regulations which require manufacturers of 1977 and later model year automobiles and light-duty trucks to label each vehicle with fuel economy information.

November 16, 1976 EPA issues advanced notice of rulemaking regarding the Emission Control warranties for light duty cars and trucks.

December 28, 1976 EPA issues the revised light duty truck regulation for 1979 and later model year vehicles. The revisions increase the weight on light duty trucks from 6,000 lbs to 8,500 lbs gross.

January 5, 1977 EPA issues regulation for the emission certification and test procedures for new motorcycles.

April 20, 1977 EPA issues final rule on the sale on the high altitude vehicles.

May 2, 1977 Proposed EPA estimates of emission reduction achievable through inspection and maintenance of light duty vehicle, motorcycles, and light duty trucks are made. (Appendix N)

May 19, 1977 EPA issues final rule on regulation of fuels and fuel additives. The rule clarifies EPA's regulation for phased reduction of lead additives in motor gasoline and does not preempt state or local governments from controlling other aspects of fuel and additives used in motor gasolines.

May 25, 1977 EPA issues emission control system performance regulations and proposed rule for the short test cycle establishment. Issues the procedures and tests that will invoke section 207B of CAA.

June 6, 1977 EPA issues fuel economy and emission testing procedures for 1978 and later model vehicles. The EPA proposes several changes to its fuel economy labeling regulations.

June 8, 1977 EPA issues certification test results for 1977 model year.

June 28, 1977 Republication of the 1977, 1978, and 1979 model year vehicle certification regulations. One aspect of this publication was the inclusion of the motorcycle test procedure.

August 10, 1977 EPA issues notice of interim final rulemaking on regulations which established evaluation criteria and test procedures for evaluating fuel economy improvement claims for retrofit devices.

August 11, 1977 EPA issues final light duty vehicle exhaust emission standards for 1978 model year.

August 25, 1977 EPA issues notice of availability that procedures for measuring exhaust sulphuric acid content are available.

August 29, 1977 EPA issues notice to the public that emission control system performance warranty regulation public workshops are available and sets dates. One of the meetings held September 30th, was in Portland.

October 21, 1977 EPA issues notice of proposed rulemaking changes to the emission test procedures. Such revisions to the testing procedures would allow for certification testing within any range of engine adjustment available.

January 6, 1978 EPA issues a notice of intent to propose regulation to include new motorcycles and in the selective enforcement auditing procedures.

February 2, 1978 EPA issued rulemaking for the selective enforcement auditing procedures.

June 7, 1978 EPA issues notice of hearing for the MMT waiver request. The outcome of this hearing was that MMT the fuel additive methylcyclopentadienyl manganesetricarbonyl was banned.

June 22, 1978 EPA issues correction notice on a final rulemaking early in the year requiring fuel economy labeling procedures for 1979 and later model year vehicles.

July 20, 1978 EPA issues some miscellaneous amendments and corrections regarding the fuel economy regulations.

August 24, 1978 EPA issues a final rule for the evaporated emission regulation for light duty vehicles and trucks, applicable with the 1981 model year.

August 29, 1978 EPA issues notice of proposed rulemaking which announces a set of regulations for testing fuels and fuel additives.

September 5, 1978	EPA issues the final rule on the fuel economy calculation and test procedures for 1979 and later model light trucks.
January 29, 1979	EPA issues a change in the ambient oxidant health standard from 0.08 ppm to 0.12 ppm.
January 21, 1980	EPA issues final rule increasing the stringency of hydrocarbon and carbon monoxide emissions limits and revising the certification test procedures for heavy-duty gasoline-fueled and diesel engines.
March 3, 1980	EPA issues final rule extending the privilege of making engine modifications for research purposes to individuals other than vehicle manufacturers.
March 5, 1980	EPA issues final rule establishing a standard for emission of particulate matter from diesel-fueled light-duty vehicles.
April 17, 1980	EPA issues notice of decision denying fuel additive waiver request by Beker Industries, Inc. for use of 0-15 percent methanol in unleaded gasoline.
June 22, 1980	EPA issues final rule establishing emissions "short tests" which will be used to enforce the pollution control equipment warranty for 1981 and newer vehicles. On a two speed idle test, if emissions exceeded 1 percent CO or 200 ppm HC, a vehicle owner will be entitled to pollution control equipment repairs at the manufacturer's expense during the effective time of the warranty.
August 13, 1980	EPA issues decision to deny a fuel additive waiver request by Conservation Consultants of New England Inc. for use of specific methanol/ethanol mixtures at 10 percent in unleaded gasoline.
August 27, 1980	EPA issues results of certification tests for 1980 new motor vehicles.
September 25, 1980	EPA issues the final gaseous emissions regulations for 1984 and later model year light-duty trucks.
October 8, 1980	EPA issues the final high altitude emissions standards for 1982 and 1983 model year light-duty motor vehicles.

November 25, 1980

EPA issues the final regulations governing aftermarket parts certification. Under these regulations aftermarket manufacturers may serve notice that their part is equivalent to the original equipment part with respect to its impact on emissions.

SUMMARY
OREGON LEGISLATIVE ACTION

- 1969 Adopted legislation which prohibited the removal or rendering inoperative of factory-installed pollution control equipment.
- 1971 Legislation was adopted which directed the Department of Environmental Quality to develop a periodic Motor Vehicle Emission Inspection Program.
- 1973 Assembly reviewed Motor Vehicle Emission Control Inspection proposals, but adjourned without providing budget for a mandatory program.
- Emergency Board authorized the Department to implement a voluntary pilot program using \$1,000,000 in funds appropriated during the regular session.
- 1974 During the Special Session, action was taken to provide for an increase of inspection fees to \$5.00; restricted the program to within the Metropolitan Service District; required annual emission control inspection; and set the start-up date as July 1, 1975.
- 1975 Legislative Assembly again reviewed the implementation of the program and at the end of the session changed the laws so that an inspection would be required only every other year with vehicle license renewal as of July 1, 1975.
- Emergency Board approved a revised budget reflecting the reduced fee income resulting from bi-annual inspection of vehicles.
- 1976 Speaker of House of Representatives assigned a five member Task Force on Auto Emission Control to review the program and forward recommendations.
- 1977 Legislation was adopted requiring publicly owned vehicles to comply with emission inspection regulations; exempted "fix load" vehicles and vehicles operating in interstate commerce from inspection requirements; direc-

ted EQC to determine most cost effective method of conducting inspection; and enacted legislation prohibiting visible emissions from motor vehicles operating on the public roads, setting limitations and establishing penalty.

1979

Legislation was adopted that amended ORS 481-190 updating the DEQ vehicle inspection boundaries to be identical with the current boundaries of the Metropolitan Service District.

Legislation was adopted that amended ORS 483-825 to include the use of turbochargers on motor vehicles provided their installation did not significantly affect the control of air pollution.

SUMMARY
ENVIRONMENTAL QUALITY COMMISSION ACTION

March 30, 1970	Adopted motor vehicle visible emission regulation.
October 25, 1972	Approved the projected inspection/maintenance program after reviewing a comprehensive staff report.
March 2, 1973	Held public hearings to designate those Oregon counties in which the vehicle inspection program would be instituted.
March 21, 1973	Designated Clackamas, Columbia, Multnomah and Washington counties and set an effective starting date for the program of January 1, 1974.
May 29, 1973	Adopted the Portland Transportation Control Strategy as an Amendment to Oregon's Implementation Plan (Clean Air Act).
November 26, 1973	Commission authorized the deletion of Columbia County from the inspection program requirements and to extend the effective date of the program to May 31, 1974.
January 25, 1974	Adopted criteria for Certification of Motor Vehicle Control Systems which precluded the use of retrofit devices.
December 20, 1974	Gave authorization for Public Hearings to adopt Motor Vehicle Inspection Program Criteria.
March 28, 1975	Adopted proposed Motor Vehicle Emission Control Inspection Test Criteria, Methods and Standards.
June 25, 1976	Adopted Emergency Rules Extending Enforcement Tolerance for the Motor Vehicle Inspection Program through June 30, 1977.
August 27, 1976	Repealed the Emergency Rules adopted June 25, 1976 and adopted Revisions to OAR Chapter 340, Sections 24-320 through 24-330 pertaining to Motor Vehicle Inspection Standards.

January 14, 1977	Transmitted report to legislature on Motor Vehicle Emission Inspection Program.
February 25, 1977	Authorization for Public Hearing for proposed heavy-duty truck inspection criteria.
April 1, 1977	Authorization for Public Hearing for proposed revisions to light-duty inspection criteria.
May 27, 1977	Adopted inspection criteria for heavy-duty trucks.
June 24, 1977	Adopted inspection criteria revisions for light-duty vehicles.
November 18, 1977	Authorized Public Hearing for testing procedures for publicly owned vehicles.
February 24, 1978	Adopted procedures for testing publicly owned vehicles.
April 28, 1978	Authorized Public Hearing for revisions to inspection criteria.
June 30, 1978	Adopted revisions to motor vehicle inspection criteria.
September 22, 1978	Conducted Public Hearing and adopted minor revision to inspection criteria.
September 22, 1978	Received status report on contractor vs. state operation of inspection program and issued finding.
February 23, 1979	Accepted "Report on Motor Vehicle Emission Inspection 1977-1978".
April 27, 1979	Gave authorization for public hearing to update vehicle emission standards for 1979 model year vehicles and others.
June 29, 1979	Adopted updates to vehicle emissions standards for 1979 model year vehicles and others, also adopted certain clarifications in the tampering portion of the inspection.
November 16, 1979	Gave authorization for public hearing to make housekeeping regulation changes and regulations to clarify the allowable engine changes.

January 18, 1980

Adopted housekeeping regulations and regulations to clarify allowable engine changes.

April 18, 1980

Gave authorization for public hearing to update vehicle emission standards for 1980 model year vehicles and others.

June 20, 1980

Adopted update to vehicle emission standards for 1980 model year vehicles and others.

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Appendix B

PROGRAM OPERATIONS

ORS 481.190 provides that all motor vehicles, with certain exceptions, registered within the boundaries of the Metropolitan Service District, which includes the City of Portland, comply with the emission criteria established by the Environmental Quality Commission in order to register or reregister a motor vehicle. The passenger car registrations, which constitute the bulk of the inspection workload, are on a biennial registration renewal system and are tested every two years. Heavy duty and government owned vehicles are tested on an annual basis.

The primary goal of the inspection program is to reduce air pollution from the area's motor vehicles by promoting proper maintenance. Providing a good level of service for the public at the inspection facilities is also one of the program goals. Service levels are maintained by providing sufficient and convenient inspection facilities; by maintaining reduced customer waiting times; by maintaining a trained and helpful staff; and by maintaining the test equipment in good operation.

The Department of Environmental Quality operates seven motor vehicle emission inspection centers with two lanes each and a mobile unit to service the Portland metropolitan area. The general locations of these stations are in Southeast Portland, Northeast Portland, Northwest Portland, Milwaukie, Gresham, Tigard, and Hillsboro. The Department augments its inspection program operations with a fleet inspection program, which allows for licensed fleets to self-inspect their own vehicles.

With the biennial cycle, the motor vehicle passenger car registrations and the emission inspections are not spread evenly throughout the two years. They remain concentrated more in the even years, 1980, than in the odd years, 1979. Figure 1 is the plot of monthly testing activities during 1979 and 1980.

During the first six months of 1979 testing volume remained at about the anticipated reduced level at our stations. These stations were able to operate at reduced staff level. In July 1979 testing volume began to increase as expected. Vacant inspector positions were filled. Testing hours for the stations were expanded to 8 a.m. to 6 p.m., Tuesday through Saturday, and mobile units were placed in the Damascus and Wanker's Corners area.

During the past two years approximately 840,000 light duty vehicle inspections were conducted at the Department's facilities. In this period, over 500,000 Certificates of Compliance were issued. The activity summary is shown in Table I. At the beginning of November, 1980, testing operations were reduced at two of our stations because of expected decline in registration activities.

To increase testing availability to the public, the planning for an inspection station in Beaverton has been started. Initial architectural plans have been drawn. The proposal was submitted to the December, 1980 Emergency Board. The Emergency Board recommended that the plans be deferred pending review during the 1981 Legislative Session. If a Beaverton inspection center is completed, plans call for the closing of current mobile operation inside a drive-in theatre in Tigard. The overall impact of this action should provide increased service level for the eastern Washington County area residents.

Customers waiting times at the inspection station has been closely monitored. During the past two years overall waiting times at the Powell Street facility have dropped and Tigard has replaced Powell as the station with the longest waiting times. Peak waiting times occur at the end of the month. Waiting times at Tigard during these periods often exceed 1 hour. At non-peak periods, customers are served in a quick and timely manner. Typical waiting times are shown in Table 2.

Training of inspection program personnel has continued and provides the necessary background to insure proper inspection skills. New inspection program personnel receive 40 hours of class room training followed by a month of on-the-job training. Training is also provided for the licensed fleet inspectors. Licensed fleet inspectors are employes of private fleets that are licensed for self inspection. The fleet inspection program is discussed below. The fleet training program provides for 24 hours of classroom instruction. Following the classroom instruction, all attendees must pass a written test. During 1980, twenty fleet inspectors were trained.

The Department staff has participated in programs aimed at increasing mechanic training. In early 1980, a pilot study on mechanic training was done in Portland. The results of that study led to a 30 hour training course which has been conducted in the Medford-Jackson County area. By early 1981, approximately 140 mechanics will have completed this training course.

There are currently 45 licensed inspection fleets. These fleets operate as an adjunct to the regular inspection operation. To qualify as a fleet, a company or governmental agency must have a fleet of 100 vehicles (50 for governmental agencies) and have approved exhaust gas analysis equipment. Its employes must complete a Department operated training session. During 1980 the inspection fleets issued 6390 certificates of compliance. This represents about 2% of the total certificates of compliance issued. A Summary of Fleet Activity is listed in Table 3.

Maintenance activities and calibration checks of the programs equipment have been maintained. Variations in emission measurements at the stations have remained generally within the design limits of the equipment. Maintenance has been designed to keep the equipment operating in an efficient and cost effective manner.

Summary

During the past two years, over 840,000 inspections were conducted. This activity has been augmented by the fleet inspection program. Continued efforts in training have been effective for our inspection program personnel. A special training program is underway in the Medford-Jackson County. The maintenance operations are conducted in an efficient manner.

VDD14 (1)
Revised 2-17-81:r

Figure 1

MONTHLY TEST VOLUME AT DEQ INSPECTION STATIONS

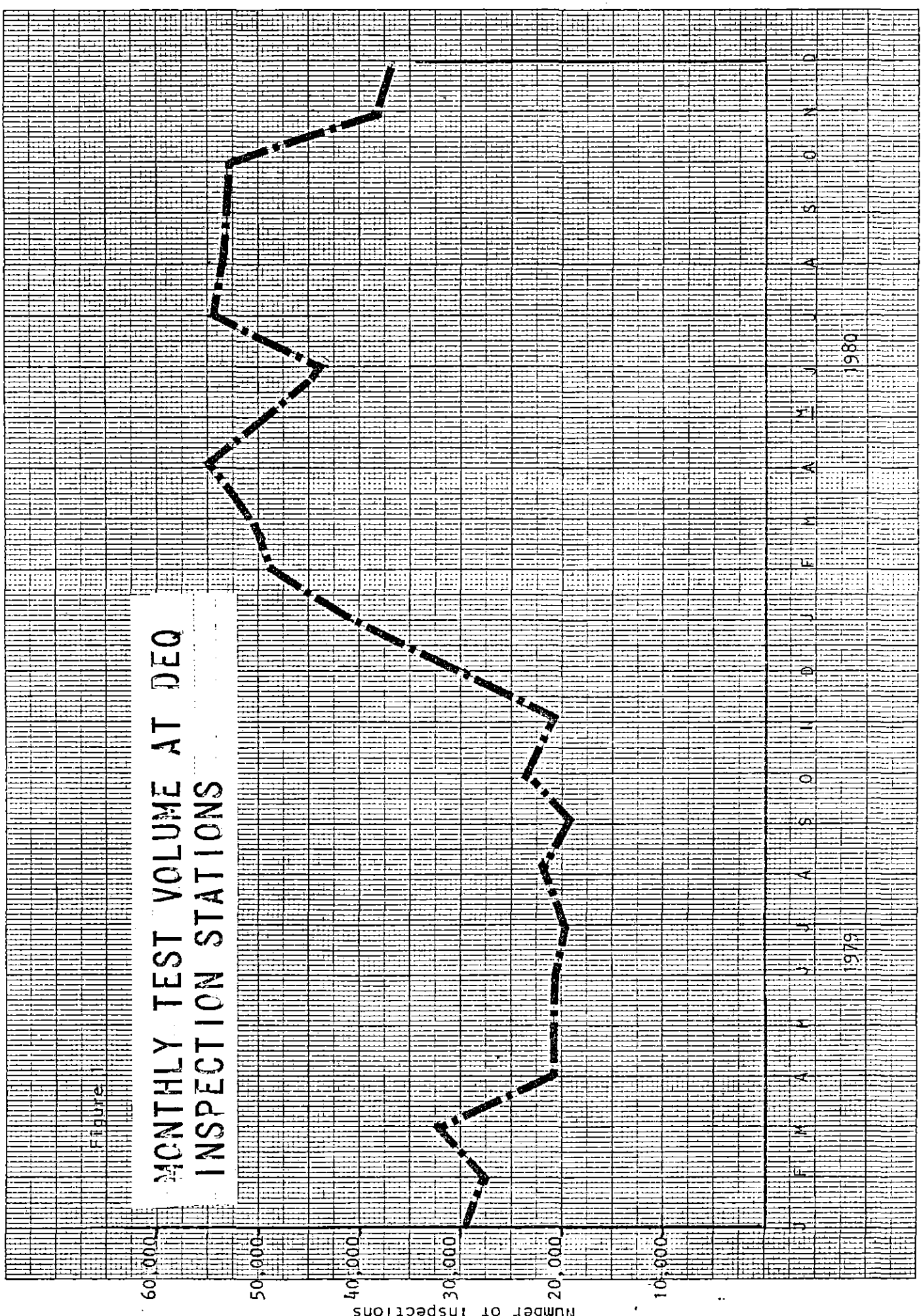


Table 1

DEPARTMENT OF ENVIRONMENTAL QUALITY
 VEHICLE INSPECTION PROGRAM
 522 Southwest Fifth Avenue
 Portland, Oregon

Activity Report for January, 1979 through December, 1980

LIGHT DUTY INSPECTION TESTS 841,708

CERTIFICATES OF COMPLIANCE ISSUED* 509,628

Emission Inspection Tests

Pass Emission Test	501,597 = 60%
Tests Failed for Carbon Monoxide (CO)	128,496 = 15%
Tests Failed for Hydrocarbons (HC)	70,406 = 8%
Tests Failed for Both HC & CO	52,765 = 6%
Tests Failed for Emission Equipment Disconnects	40,514 = 5%
Tests Failed for Other Causes (i.e., smoke, dilution, idle RPM)	47,930 = 6%

Pre-Catalyst Vehicle Tests (June, 1979 - December, 1980)

Number of Tests	450,329 = 65% of all Tests
Percentage Pass	56%

1975 and Newer Vehicle Tests (June 1979 - December, 1980)

Number of Tests	238,649 = 35% of all Tests
Percentage Pass	66%

Total Light and Heavy Duty Emission Inspection Test by Location

Powell	-	169,827
Tigard	-	144,746
Milwaukie	-	121,684
Northeast	-	120,117
Rockwood	-	111,473
Hillsboro	-	88,631
Northwest	-	84,358
Mobile No. 6	-	12,769
Mobile No. 5	-	12,527

* includes heavy duty trucks

WPJ:g
 VDD14.B

Table 2

Department of Environmental Quality
 Vehicle Inspection Program
 Waiting Time Survey
 Minutes Average Waiting Time

<u>Date</u>	June 1980							
	<u>Powell</u>	<u>Northwest</u>	<u>Northeast</u>	<u>Tigard</u>	<u>Milwaukie</u>	<u>Rockwood</u>	<u>Hillsboro</u>	<u>Mobile 6</u>
June 3	15.6	4.1	10.7	21.1	4.5	7.6	1.2	0.0
June 5	4.8	2.8	3.9	4.9	---	2.5	0.6	0.2
June 10	11.6	6.0	9.6	26.0	4.7	4.4	2.4	0.0
June 14	1.2	0.0	1.1	---	0.1	1.0	0.0	0.0
June 19	2.9	1.5	4.5	3.7	---	1.1	0.1	0.0
June 27	5.8	3.6	5.9	8.6	---	2.9	2.2	0.5
June 28	5.2	1.9	3.7	17.1	2.4	---	5.9	0.9
Average	6.7	2.8	5.6	13.6	2.9	3.2	1.8	0.2
	November 1980							
November 1	7.0	0.7	4.4	10.0	2.0	1.7	0.7	
November 6	4.5	4.2	6.3	10.1	2.2	4.2	2.7	
November 8	---	---	5.2	4.1	4.7	3.5	6.7	
November 20	15.5	8.2	3.7	5.2	---	2.7	2.2	
November 28	18.2	24.2	19.1	25.8	---	7.9	19.4	
November 29	6.1	2.7	6.4	3.2	5.2	4.0	6.4	
Average	10.3	8.1	7.5	9.7	3.5	4.0	6.3	

VDD14.A (1)

VWTS (7/80)

Table 3
FLEET SUMMARY
1-1-80 to 12-31-80

Fleet No.	Fleet	Inspectors	Vehicles	Cert. Purchased
001	General Service- St. of Ore.	4	740	500
002	Canteen Mobile Chef Inc.	1	115	100
003	City of Portland	7	1150	600
004	U. S. Postal Service	2	900	200
005	Dept. of Trans.-St. of Ore.	2	185	---
006	Washington County	2	250	250
007	General Telephone Co.	3	400	200
008	G.S.A., U. S. Government	3	400	200
009	N.W. Natural Gas Co.	4	255	300
010	Portland General Electric Co.	11	400	500
011	Pacific N.W. Bell Telephone Co.	12	850	400
012	Clackamas County	6	300	200
013	Multnomah County	4	600	400
014	United Parcel Service	2	165	200
015	Port of Portland	6	300	200
016	Portland Public Schools	3	225	200
017	Pacific Power & Light Co.	2	150	---
018	Beaverton School Dist. #48	2	200	150
020	Carnation Company	1	108	---
021	Columbia Bus Co.	1	255	300
022	City of West Linn	2	50	---
024	Tri-Met Transportation	1	60	50
026	City of Lake Oswego	2	80	100
027	North Clackamas School Dist. #12	2	160	100
028	Washington Co. Fire Dist. #1	3	73	50
029	Lake Oswego School Dist. #7	1	51	80
030	Consolidated Freightways	2	96	50
031	City of Oregon City	2	70	100
032	Oregon City School Dist. #62	1	60	100
033	City of Milwaukie	1	50	50
034	Portland Bottling Co.	2	105	80
035	Unified Sewerage Agency	3	80	50
036	Parkrose School District	1	55	50
037	Tektronix, Inc.	2	200	100
038	David Douglas School District	1	91	100
039	City of Forest Grove	1	60	50
040	Oregon Army National Guard	1	400	200
041	Reynolds School District	2	70	50
042	City of Beaverton	2	69	30
043	Hillsboro Union High School	1	62	150
044	Oregon Air National Guard	4	175	50
045	American Rent-a-Car	1	185	50
046	City of Hillsboro	1	70	50
	TOTALS	118	10,720	6,390

Appendix C

EMISSIONS FROM MOTOR VEHICLES

Currently about 90 percent of all passenger cars manufactured throughout the world are designed to meet the emission control standards. Over twenty-seven countries have enacted legislation restricting emission levels from automobiles. Automobiles, motorcycles, and light and heavy duty trucks manufactured for sale in the United States must be certified as meeting the national emission standards.

The United States federal emission standards for new automobiles, motorcycles, and light-duty trucks requires that vehicles be tested under specific modes of operation. The test procedure is designed to represent an urban driving pattern, including cycles under both cold and hot operations. In addition to this driving cycle, which required about 22 minutes to complete, the certification of vehicles undergo a 50,000 mile durability test. The purpose of the durability test is to ensure that the emission levels remain within the standards as the vehicle ages. The federal emission standards specify the maximum weight (mass) of pollutant allowed to be emitted during the testing procedure regardless of vehicle size, or design characteristics. Consequently, the methods to meet the emissions standards used by the manufacturers vary considerably. The manufacturer uses production prototype vehicles for this certification so that certification can be complete at the time of new model introduction.

When actual production vehicles are new, they meet or exceed compliance with pollution standards. As the vehicle accumulates miles there is a gradual emission deterioration which is easily offset with proper maintenance. However, when there is a system malfunction which is not observed or corrected during the normal maintenance cycle, the rate of deterioration on emissions may increase. As the vehicle accumulates miles through the owner use, this deterioration and regular wear begins to take its toll, and emission levels tend to rise. If wear and component failures occur, routine periodic maintenance may not be sufficient to offset the increasing emissions, declining fuel, and declining performance.

Within the Portland metropolitan area, motor vehicles produce about 95% of the CO and 61% of the HC pollutants in the airshed. A reduction in vehicle emissions is necessary to meet clean air standards. Although new, better controlled vehicles, and transportation strategies are instrumental in reducing automobile emissions, the vehicle inspection program is a required complement to these approaches. The Department has seen that new vehicles are generally low emitters. However, after a year or so, emissions can increase substantially. The purpose of the I/M program is to limit the vehicle emissions system deterioration by promoting improved maintenance.

The actual calculation of overall emissions reductions in CO and HC that is due to inspection maintenance (I/M) in the Portland area is quite complex. It involves knowing the vehicle year mixture, initial I/M improvements, the deterioration rates of different vehicles, and a variety of other factors which are input into a computer model. EPA has run this model to determine the benefits of the Portland I/M program. In a letter to the Department dated February 5, 1980, EPA reported the results from the model. They calculated a reduction in both HC and CO emissions, due solely to the Oregon inspection program, of 25%.

The DEQ idle test has been shown by EPA in their Portland study to be an effective means of identifying highly polluting vehicles. Of primary concern now, and especially for the future, are the emissions from the catalyst technology cars. These cars make up almost half of the vehicles currently operating in the Portland area. This proportion is expected to continue to grow. The average emissions of a 1975-77 catalyst-equipped vehicle which fails the DEQ test is:

CO 41 grams/mile HC 2.8 grams/mile

On the other hand the average emissions of a passing vehicle is:

CO 13 grams/mile HC 1.2 grams/mile

Once the DEQ emission test has recognized a highly polluting vehicle, maintenance is performed. The after maintenance emissions of the vehicles which originally failed is reduced to:

CO 22 grams/mile HC 1.6 grams/mile

This is a reduction in actual driving emissions of a failed vehicle of 47% in CO and 42% for HC.

The DEQ's exhaust gas analysis equipment is used to measure emissions while the vehicle is idling. Examples of idle emission of catalyst technology cars are given in Figures 1-6. The graphs contrast vehicles which failed the DEQ test with those which passed. Table 1 summarizes the 50 percentile values of the graphs. HC reductions at 50 percentile range between 80-83 percent, while CO reductions were 92-96 percent. These are major reductions in idle emissions of the dirty cars which are induced by I/M.

The California vehicle inspection program has recently reported idle emissions results from their inspection program. Idle emission reduction results are summarized in Table 2. Note in Table 2 that the improvement in idle emissions due to I/M in California is somewhat larger for 1975-80 models (catalyst equipped) than for the older cars. This reveals the increased effectiveness that I/M has as the catalyst equipped cars become a larger percentage of the vehicle population. The latest major improvement in emissions control systems is that of the three-way catalyst

with a computer controlled fuel feed system. The three-way catalyst was initially field tested on some California cars in 1977. It is now a common control system in most 1981 model year vehicles nationwide. The idle emission I/M benefits for this control technique is shown in Table 2 to be even greater than for 1975-80 vehicles. The trend for the future displayed in Table 2 seems to be one of increased importance of the I/M program as an auto emission reduction mechanism.

The deterioration of idle emissions control systems for vehicles in the Portland area can be seen in Figures 7 through 14. Bar charts representing these graphs are shown in Figures 15 and 16. The figures show the idle emissions distributions for light-duty vehicles 1977-80 when the vehicles were new and for subsequent years as the vehicles aged. Almost all of these vehicles use catalyst technology emission systems. Increases in HC and CO idle emissions with time is seen with each model year for which this comparison was available. Note an aberration in this deterioration data for 1977 model year CO emissions. Here vehicles tested in 1980 were cleaner than those tested in 1979. Since the curves are quite close together, a statistically small data sample may have resulted in this inconsistency. The CO emissions for the 1977 and 1978 models showed a marked increase after one year and then stayed relatively steady. The HC readings did not have such a pronounced first year increase, but showed continual deterioration with the years. An increase in HC and CO emissions also occurred in 1979 model year vehicles. It is too early at this time to evaluate the deterioration of the very clean new 1980 vehicles.

Table 3 gives the 50 and 90 percentile new car CO and HC idle readings for several model years. The data in this table are emissions concentrations which were exceeded by 50% and 10% of the vehicles tested. In general the idle pollutant emissions of new cars has been less in the later model years. Major improvements in idle emissions at 90 percentile has occurred in the last two years. It is possible that these improvements result from the new limited-adjustment carburetors. These emissions reductions may have also stemmed from control equipment improvement brought about by the tightening of the federal emissions standards in 1980.

In summary, a large share of the CO and HC pollutants in the Portland airshed results from automobile emissions. These vehicle related pollutant emissions are being reduced by the addition of better emission control equipment and by the use of transportation control strategies. I/M is a complement to these programs. The DEQ I/M program is estimated to reduce overall automobile emissions of HC and CO by 25%.

The Department's vehicle inspection test has been shown to be an effective tool in identifying highly polluting vehicles. After repairs are done on these polluting vehicles a reduction in overall emissions of 47% for CO and 42% for HC has occurred. The Department's test results show an idle emissions reduction due to I/M of 80-83% for HC and 92-96% for CO.

The idle emissions reductions due to I/M have been seen to be greater for the new catalyst technology cars and especially for the 3-way catalyst cars. This indicates increased effectiveness of I/M in the future as catalyst technology cars become a larger share of the vehicle population.

Deterioration in idle emission with vehicle age has been shown for all model years of vehicles for which data were available through 1979. I/M is an effective element to limit this deterioration.

JC:wng
VWD86 (1)

Table 1

Idle Emissions of Some Oregon Vehicles
50 Percentile Values

<u>Class of Vehicle</u>	<u>Vehicle Which Failed the DEQ Test</u>		<u>Vehicles Which Passed the DEQ Test</u>		<u>Percent Difference</u>	
	<u>CO (%)</u>	<u>HC (ppm)</u>	<u>CO (%)</u>	<u>HC (ppm)</u>	<u>CO</u>	<u>HC</u>
1975	1.6	220	0.1	45	93%	80%
1977	2.7	300	0.1	40	96%	87%
1979	1.2	300	0.1	50	92%	83%

AI866

Table 2

Average Idle Emissions
State of California
Vehicle Inspection Program

<u>Class of Vehicles</u>	<u>Vehicles Which Failed the Emissions Test</u>		<u>After Maintenance Retest</u>		<u>Percent Difference</u>	
	<u>CO (%)</u>	<u>HC (ppm)</u>	<u>CO (%)</u>	<u>HC (ppm)</u>	<u>CO</u>	<u>HC</u>
Pre 68	6.0	850	3.9	471	35%	44%
1968-70	4.7	542	3.2	334	32%	38%
1971-74	4.9	472	2.7	268	44%	43%
1975-80	3.2	254	1.3	135	59%	47%
1977-80 (3-way Cat)	2.6	160	0.9	52	65%	67%

AI866

Table 3
90 Percentile New Car
Idle Emission Readings

<u>Year</u>	50 Percentile		90 Percentile	
	<u>CO</u>	<u>HC</u>	<u>CO</u>	<u>HC</u>
1976	0.2	100	3.1	350
1977	0.2	70	2.7	290
1978	0.2	50	1.3	325
1979	0.1	50	1.0	175
1980	0.1	20	0.1	80

AI866

Figure 1

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Carbon Monoxide Emissions

1975 Popular Vehicle Make

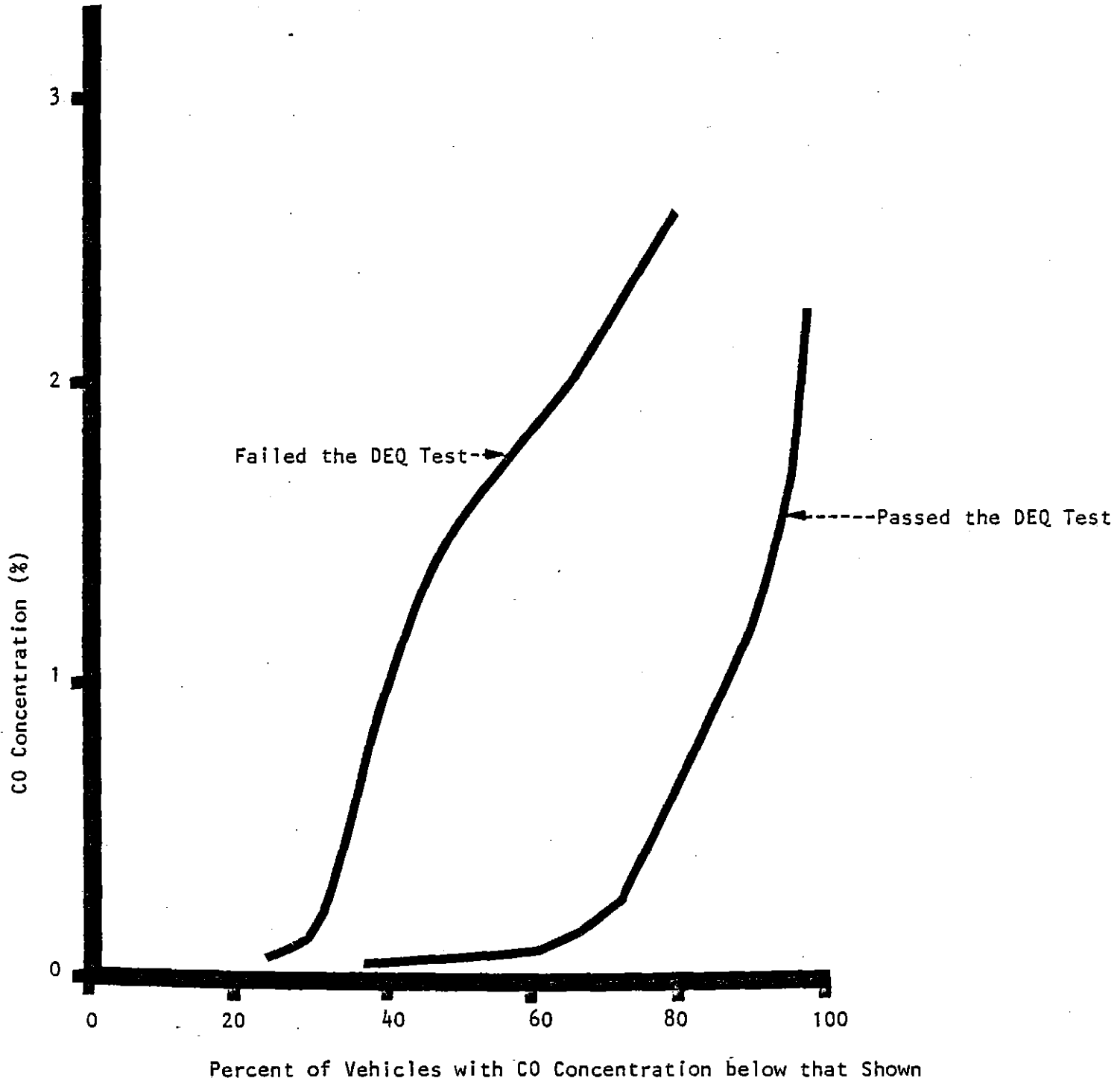


Figure 2

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Hydrocarbon Emissions

1975 Popular Vehicle Make

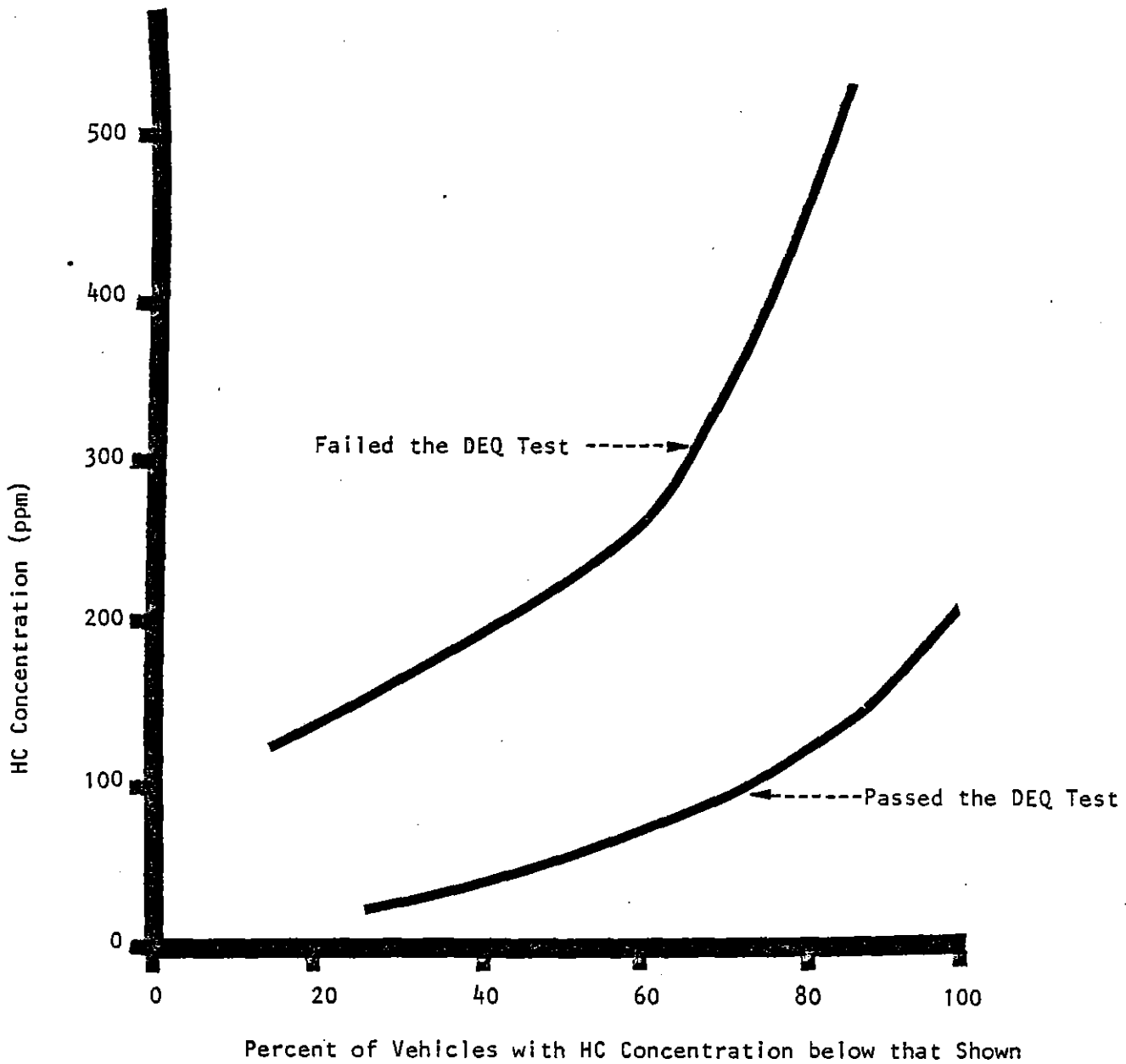


Figure 3

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Carbon Monoxide Emissions

1977 Popular Vehicle Make

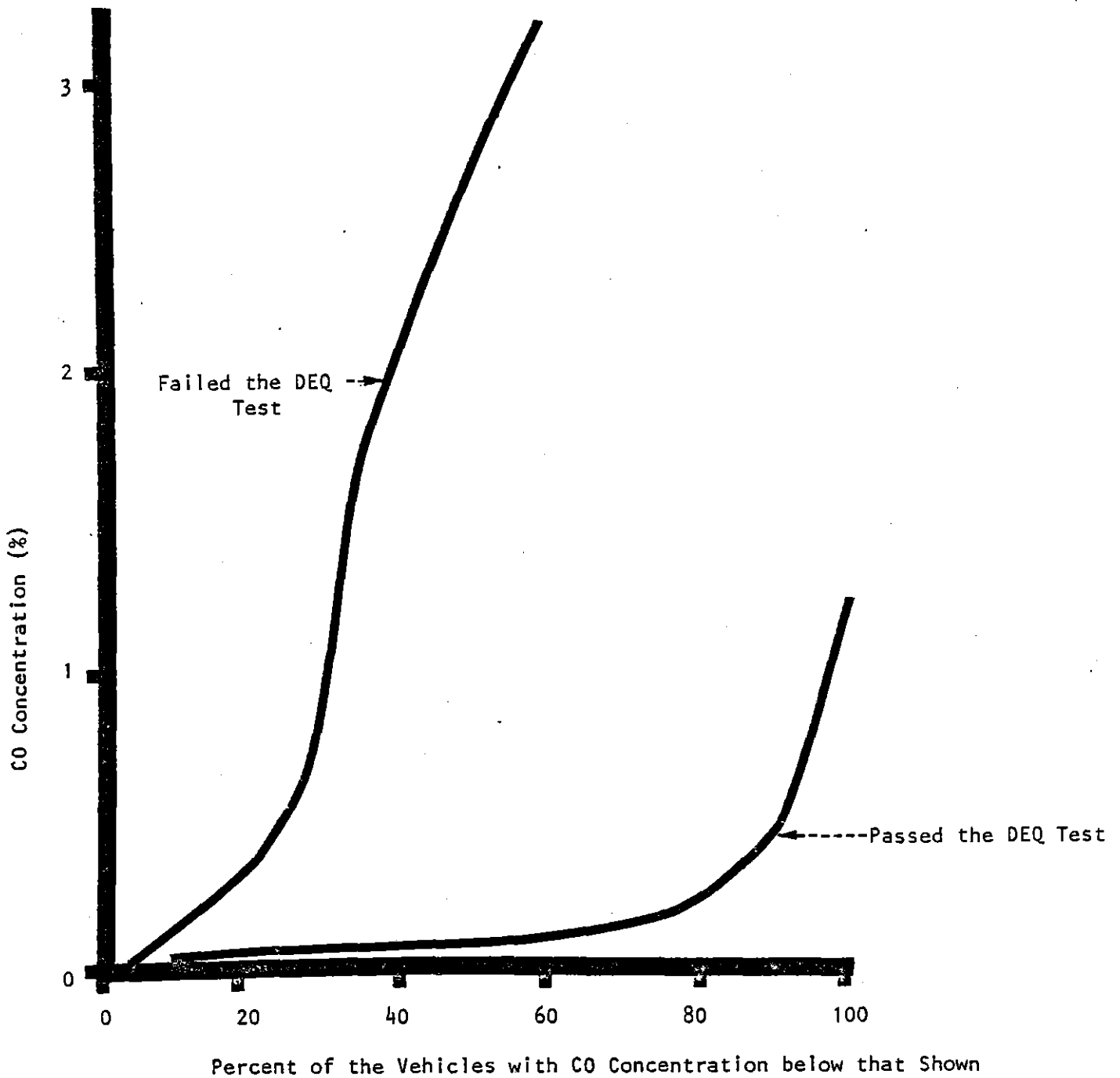


Figure 4

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Hydrocarbon Emissions

1977 Popular Vehicle Make

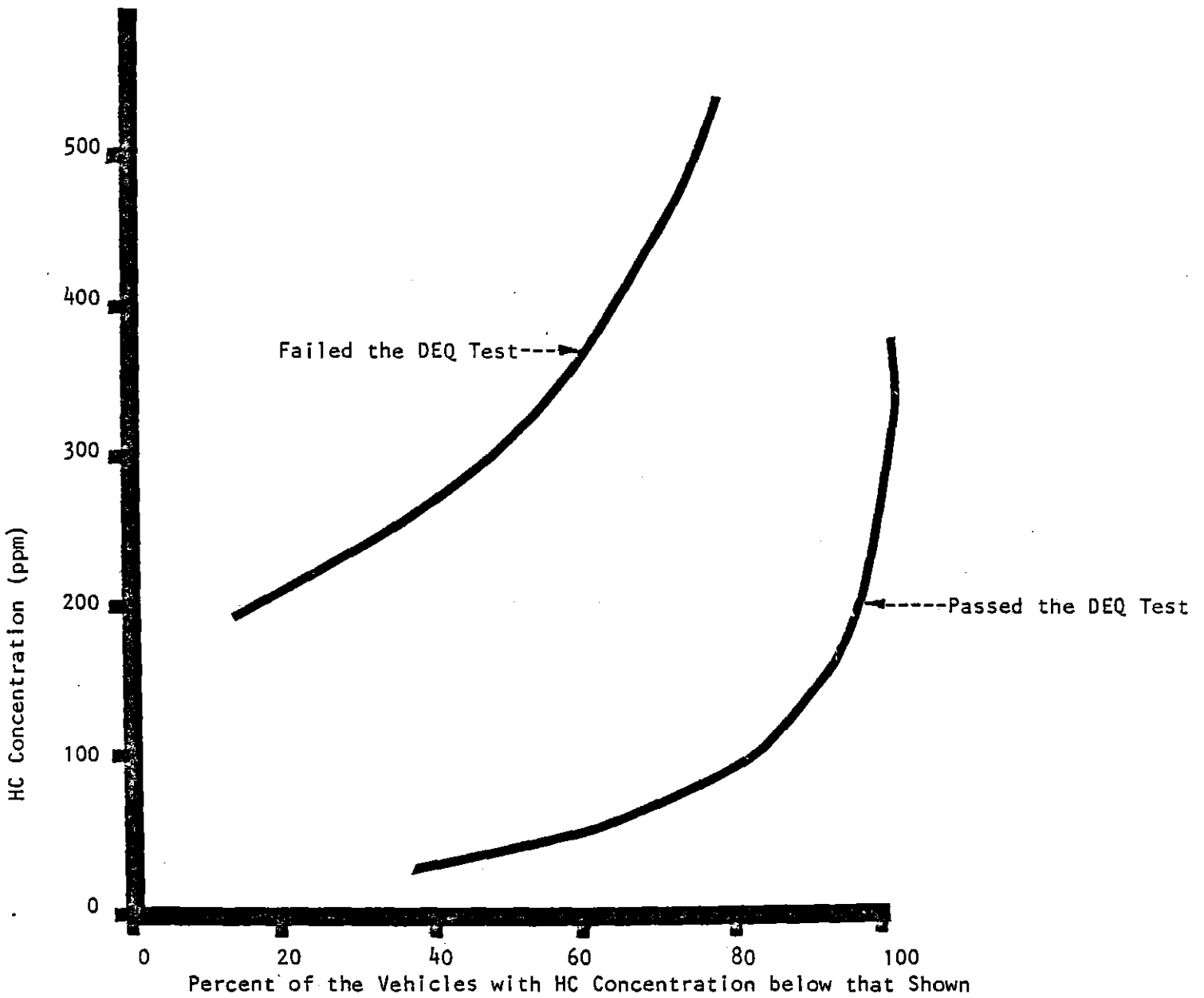


Figure 5

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Carbon Monoxide Emissions

1979 Popular Vehicle Make

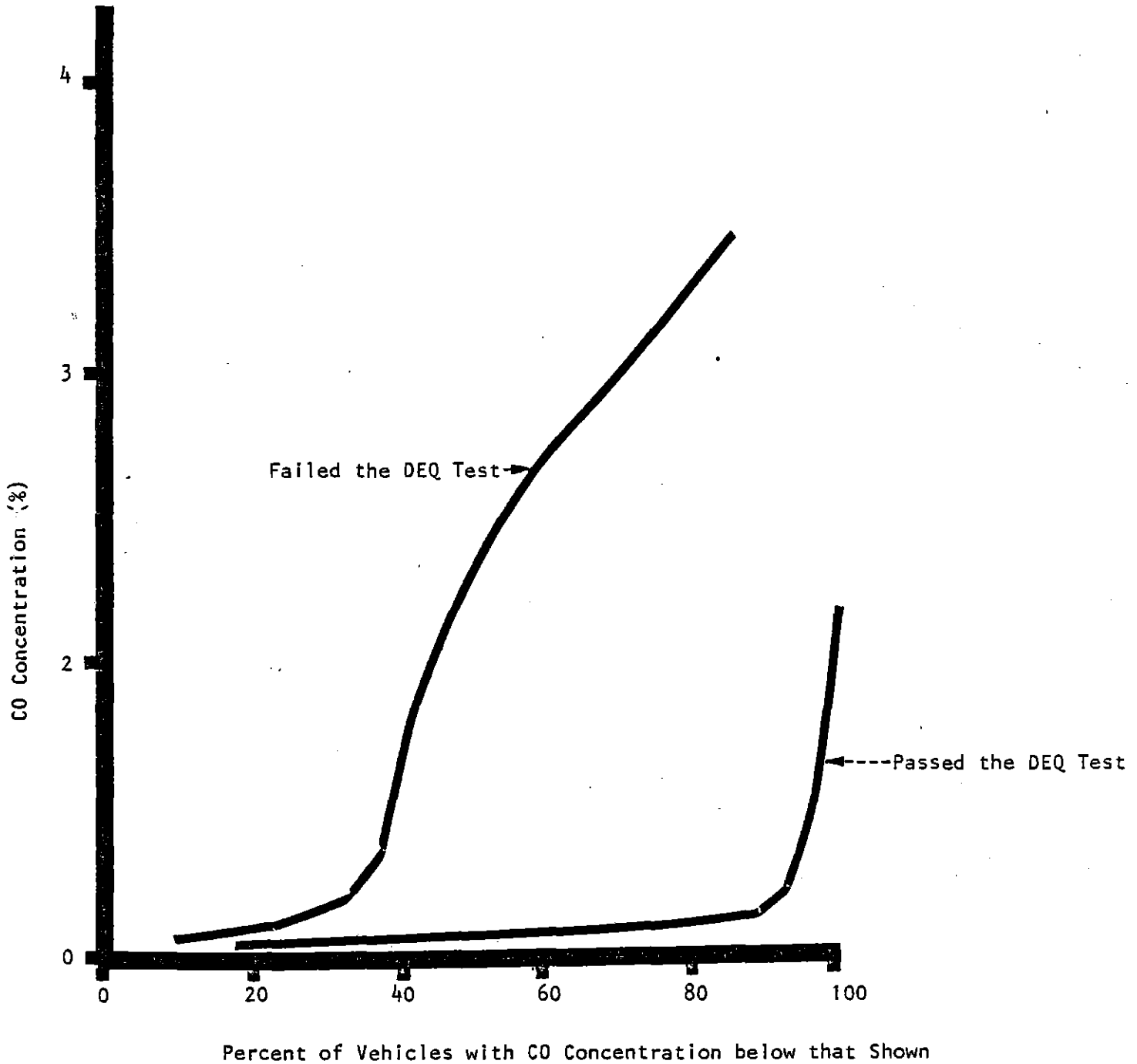


Figure 6

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Hydrocarbon Emissions

1979 Popular Vehicle Make

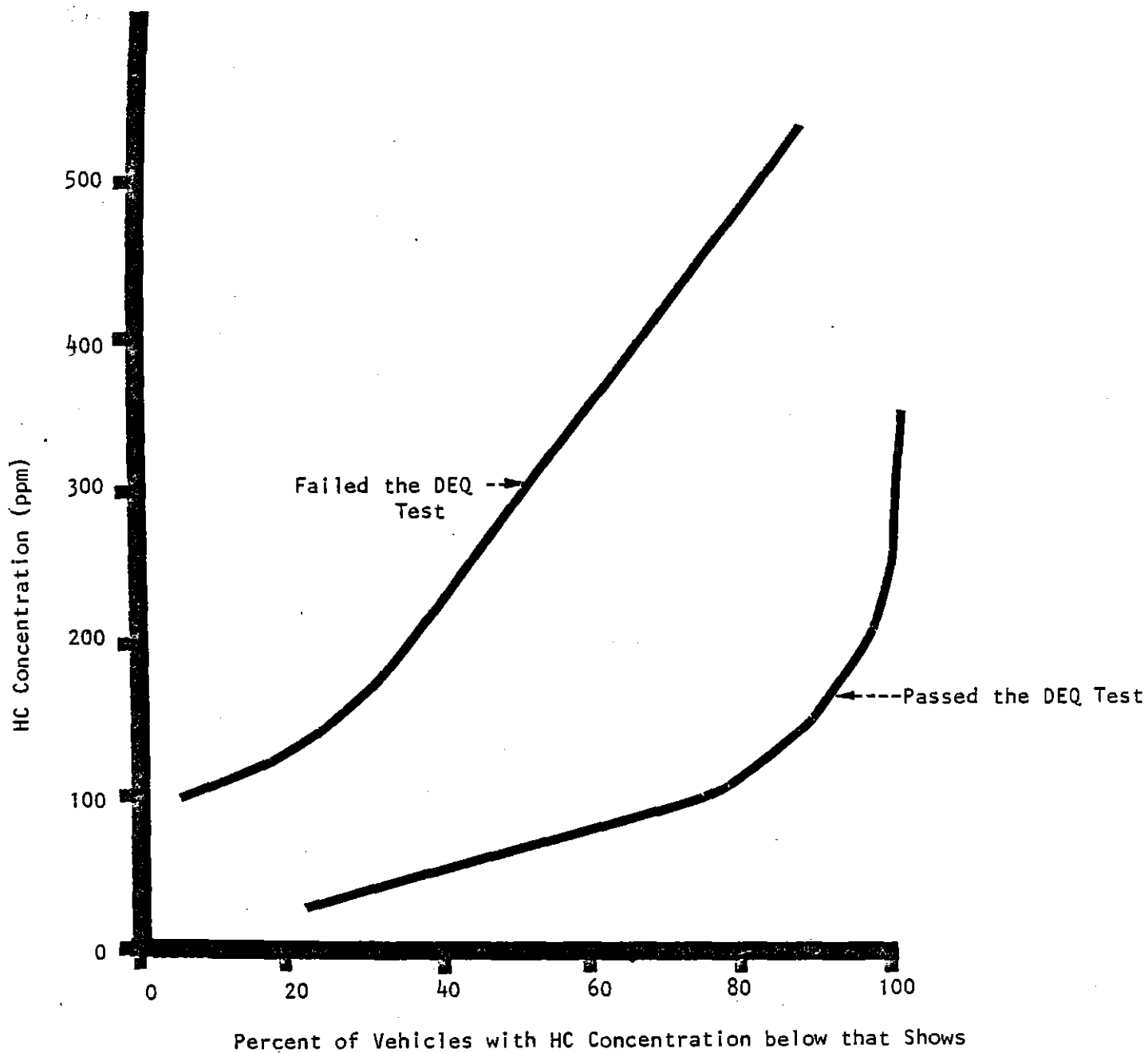


Figure 7

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Carbon Monoxide Emissions

1977 Popular Make

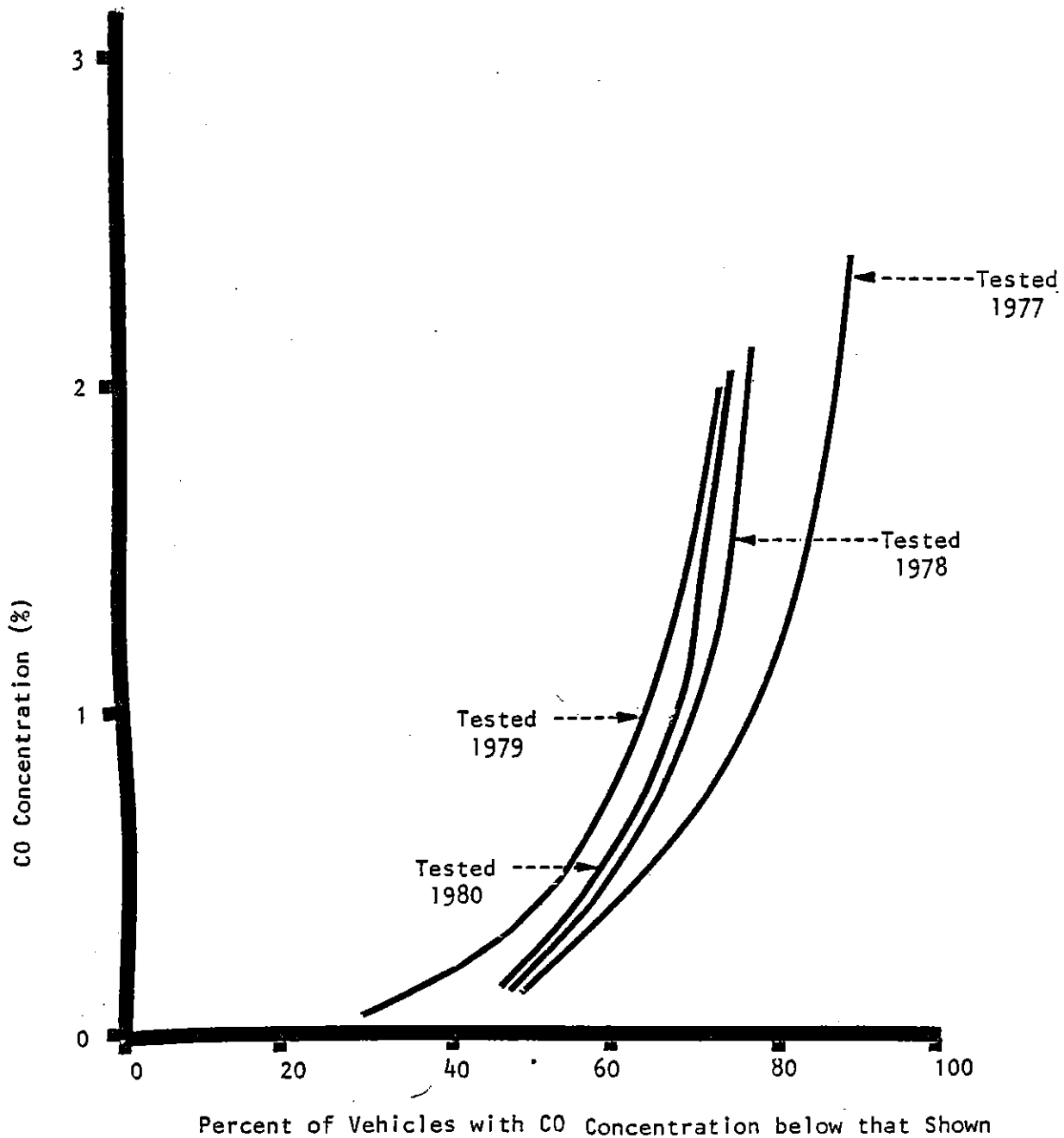


Figure 8

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Hydrocarbon Emissions

1977 Popular Make

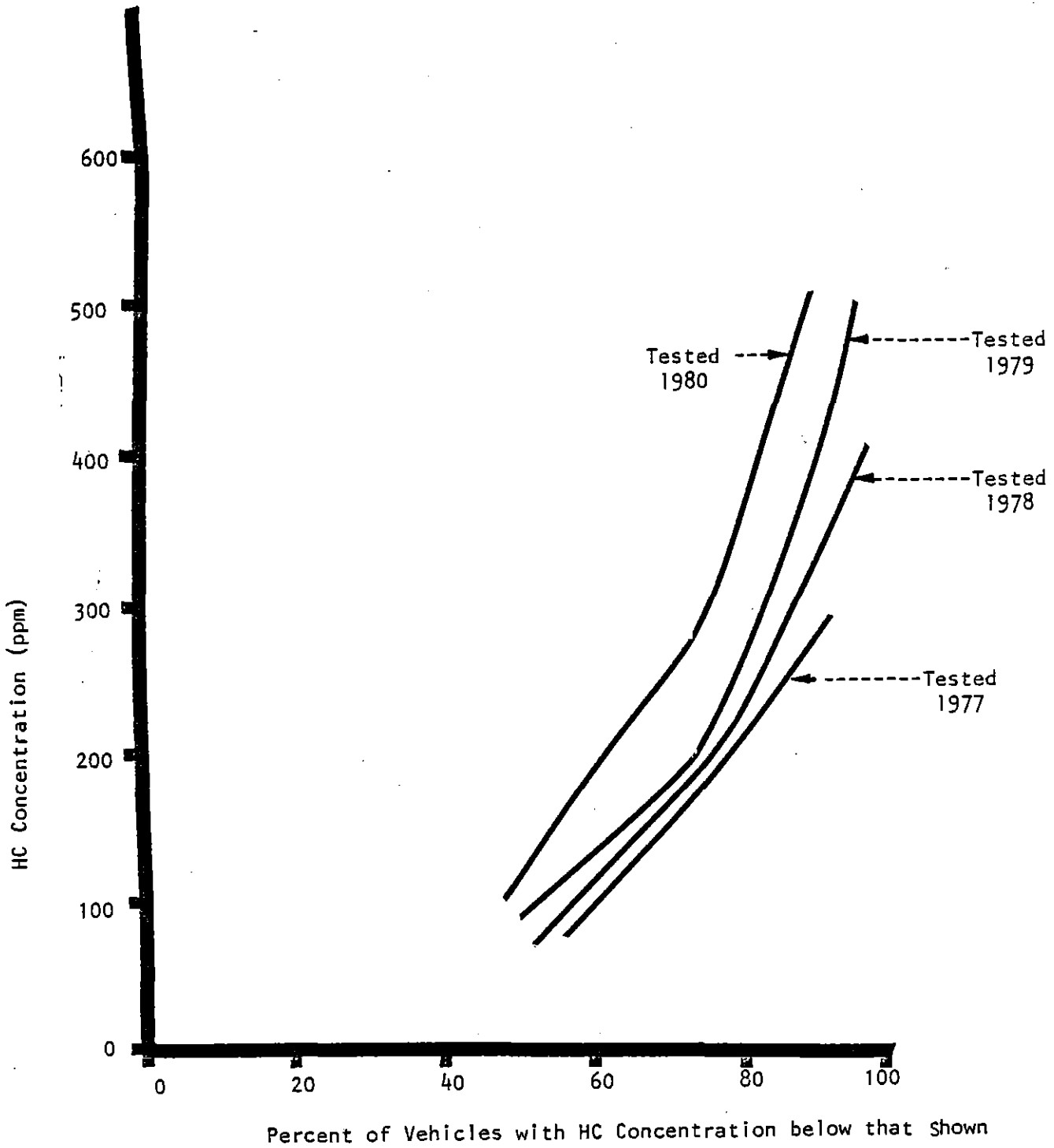


Figure 9

DEPARTMENT OF ENVIRONMENTAL QUALITY
VEHICLE INSPECTION PROGRAM

Idle Carbon Monoxide Emissions

1978 Popular Make

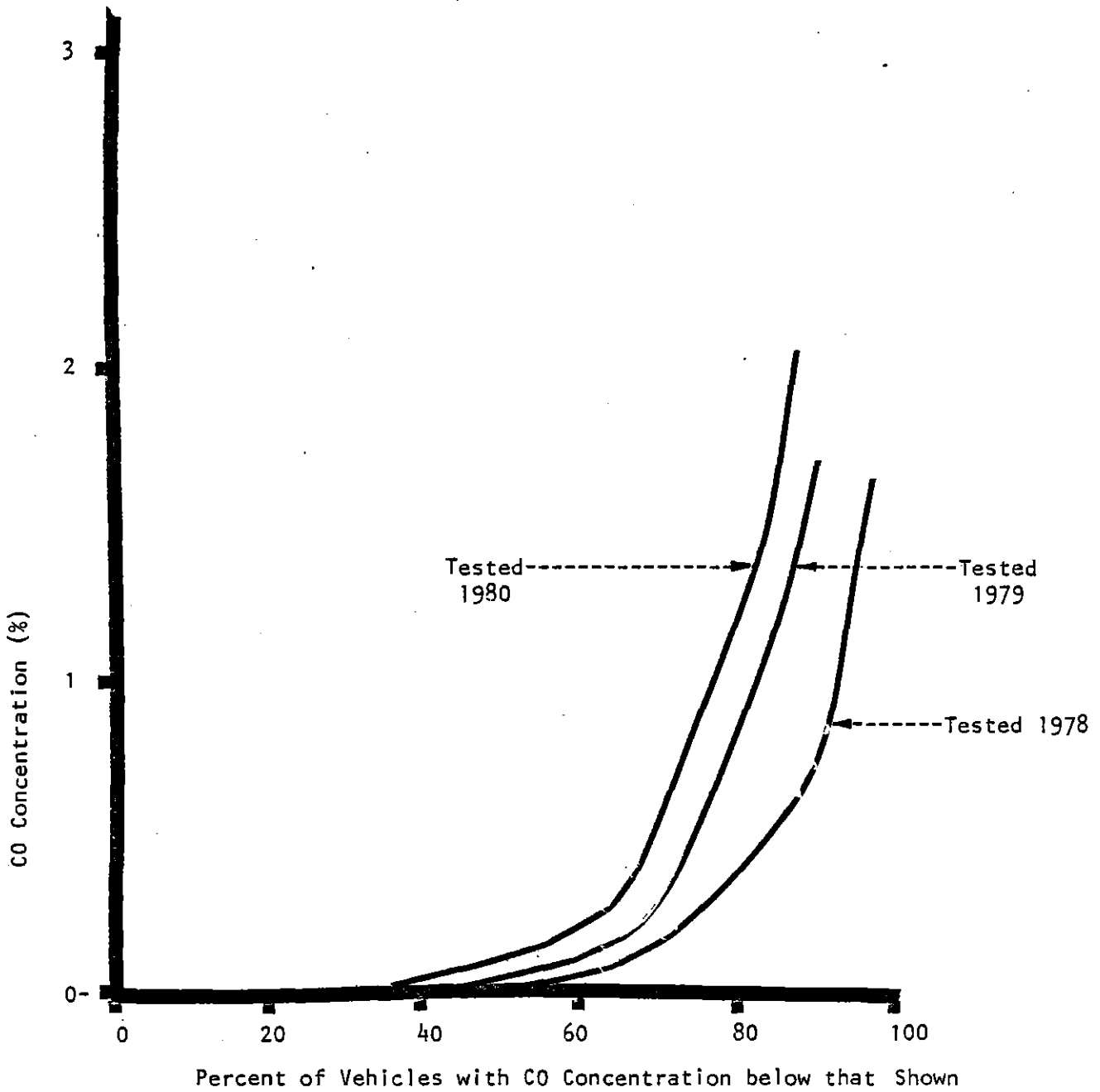


Figure 10

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Hydrocarbon Emissions

1978 Popular Make

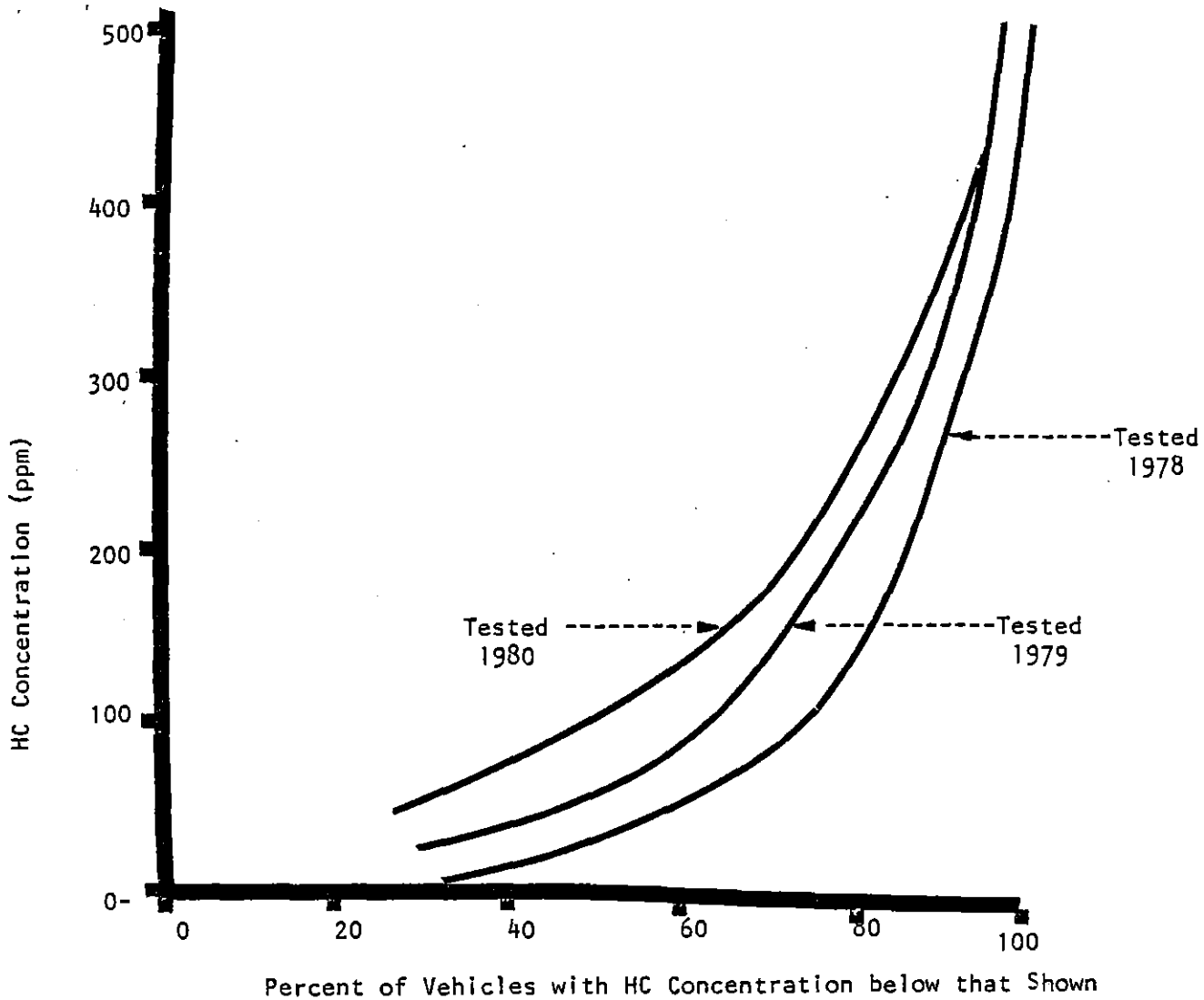


Figure 11

DEPARTMENT OF ENVIRONMENTAL QUALITY
VEHICLE INSPECTION PROGRAM

Idle Carbon Monoxide Emissions

1979 Popular Make

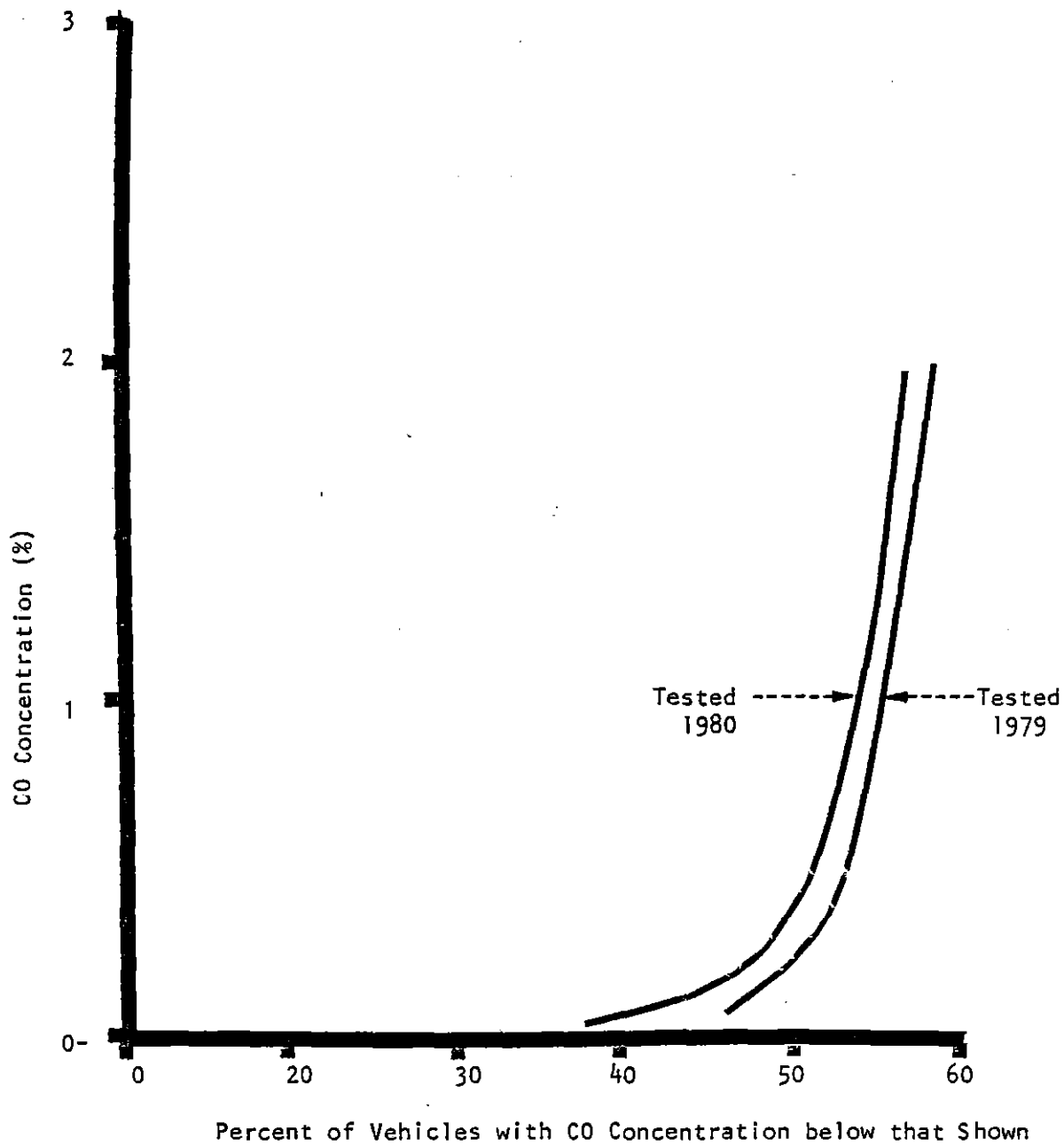


Figure 12

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Hydrocarbon Emissions

1979 Popular Make

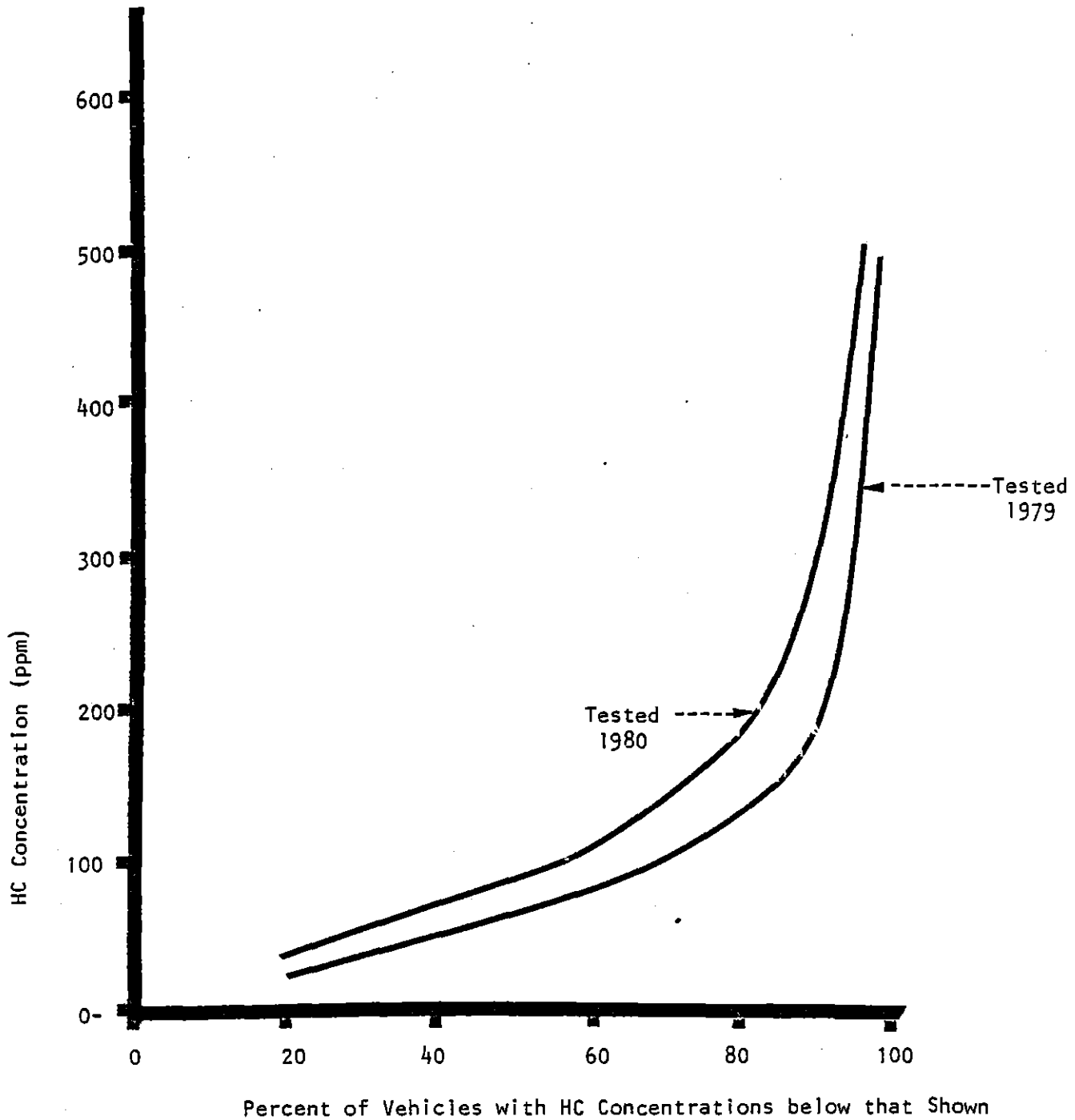


Figure 13

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Carbon Monoxide Emissions

1980 Popular Make

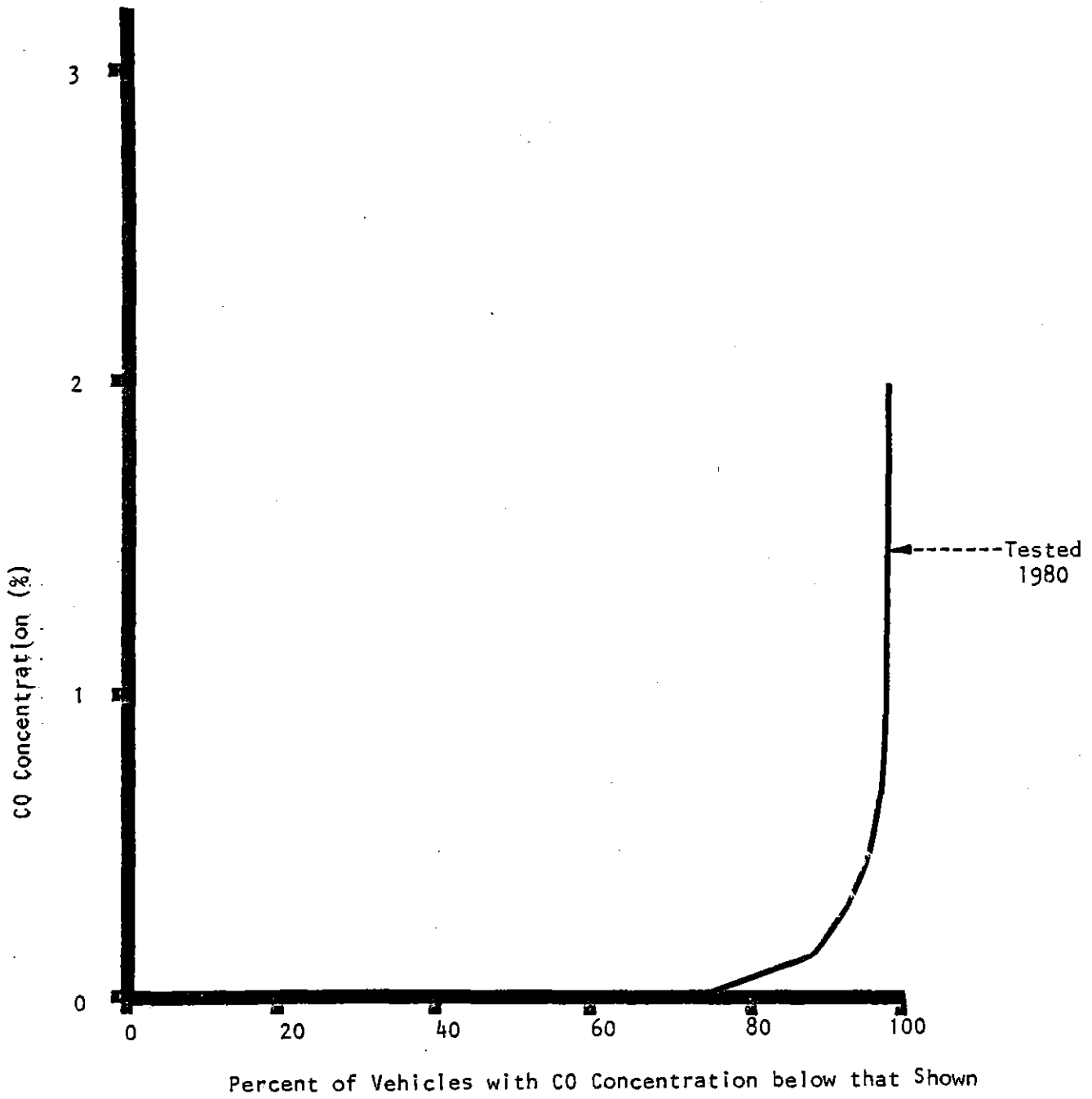


Figure 14

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Hydrocarbon Emissions

1980 Popular Make

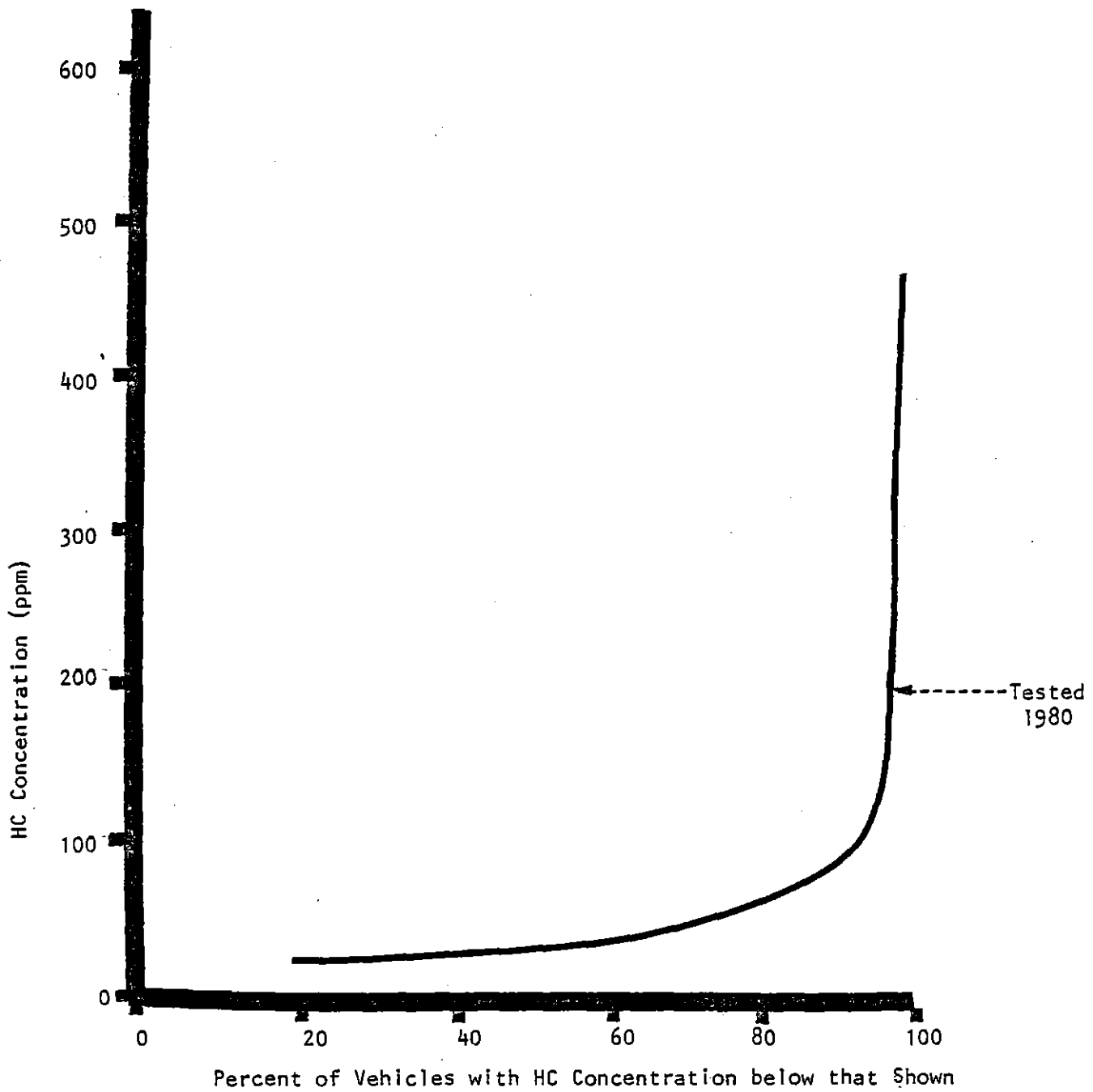


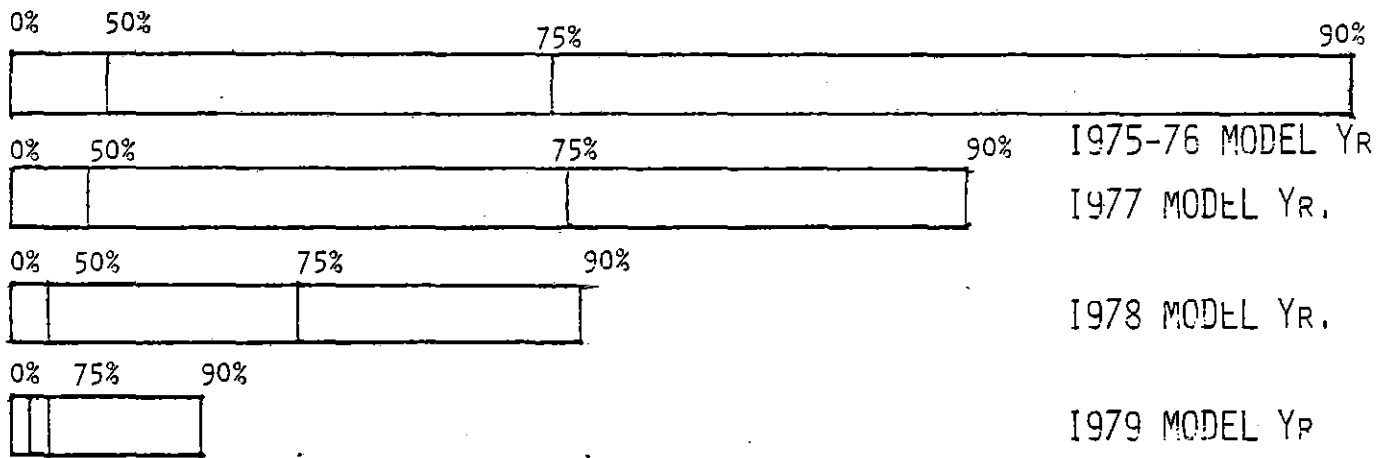
Figure 15

DEPARTMENT OF ENVIRONMENTAL QUALITY

Vehicle Inspection Program

Carbon Monoxide Idle Emission Distribution for a Popular Vehicle Make

BARS SHOW PERCENT OF POPULATION BELOW CONCENTRATION
TESTED IN 1979



TESTED IN 1980

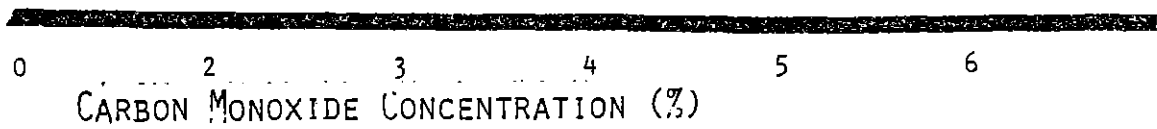
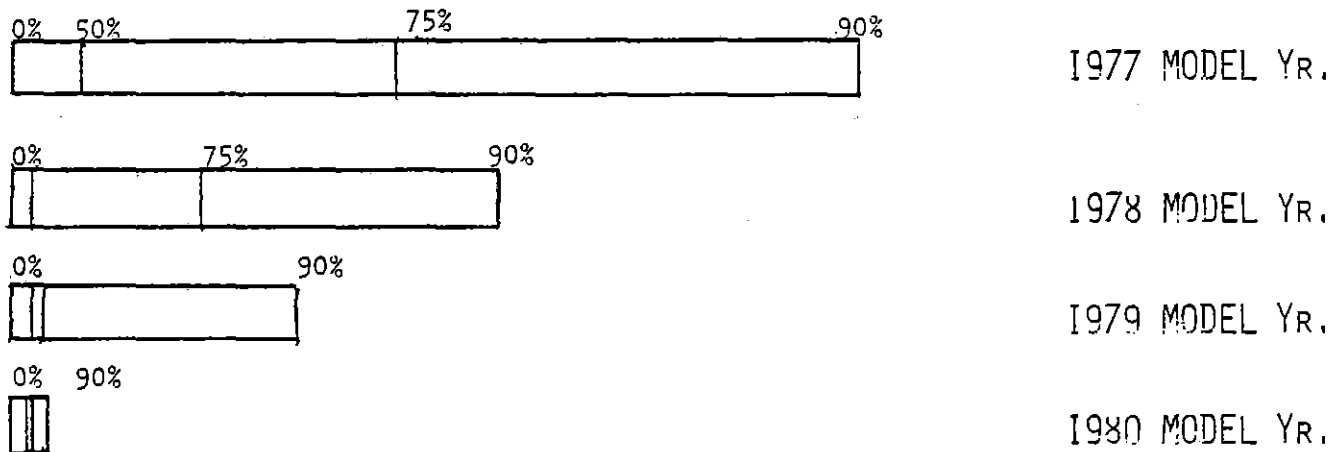


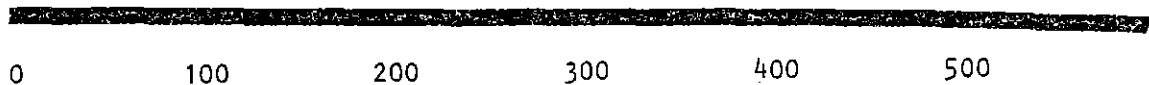
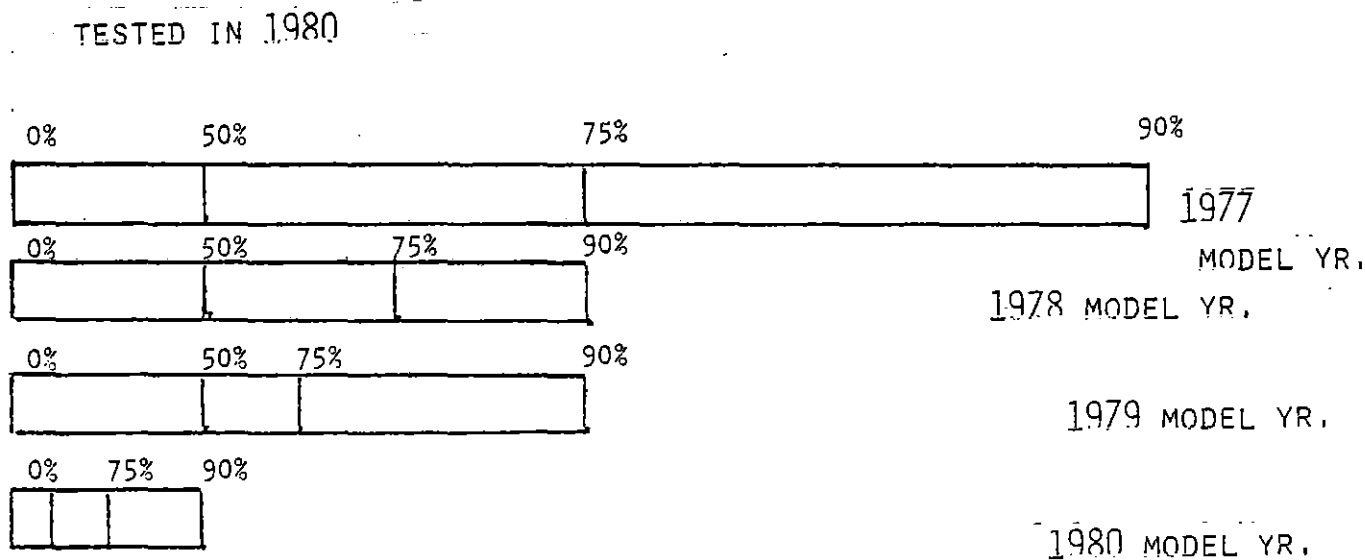
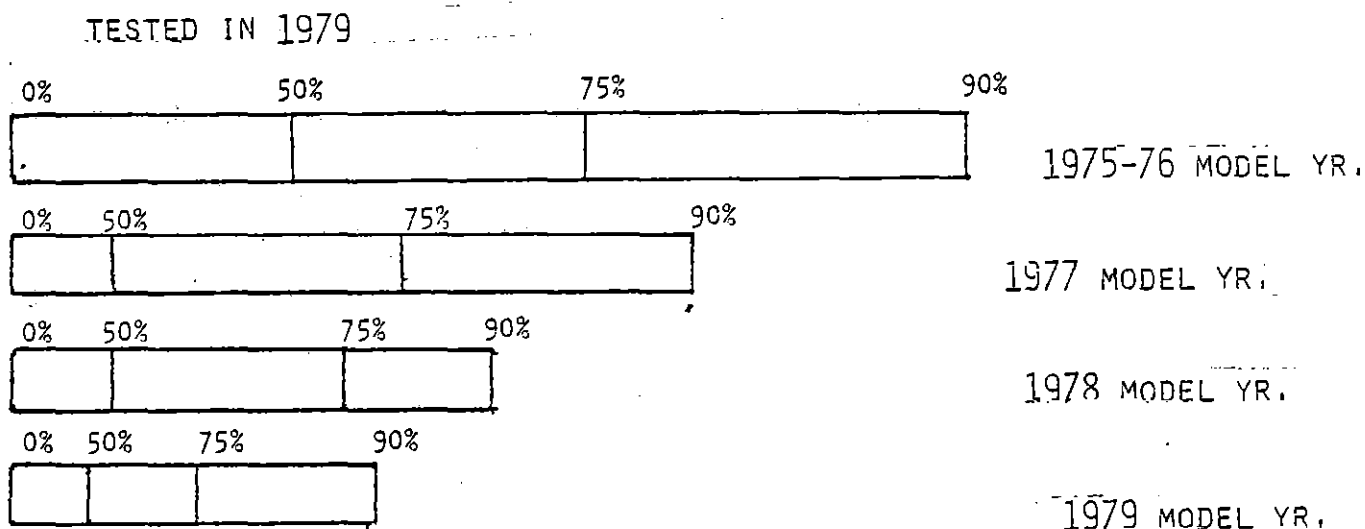
Figure 16

DEPARTMENT OF ENVIRONMENTAL QUALITY

Vehicle Inspection Program

Exhaust Hydrocarbons Idle Emission Distributions for a Popular Vehicle Make

BARS SHOW PERCENT OF POPULATION BELOW CONCENTRATION



HYDROCARBON CONCENTRATION (PPM)

APPENDIX D

HEAVY DUTY VEHICLE TESTING

The Department conducts inspections on heavy duty gasoline powered trucks for the purpose of compliance with the emission standards. The heavy truck is defined as a vehicle having a combined manufacture vehicle weight and maximum load rating of more than 3,855 kilograms (8,500 lbs.). This includes everything larger than 3/4 ton pickups and vans.

Most heavy duty vehicles that need to be certified are trucks with "T" license plates. The truck inspection program certifies trucks on an annual basis. Legislatively exempt from the emission certification program are farm vehicles, the class of vehicles referred to as "fixed load" vehicles and vehicles operating under reciprocity agreements with more than one state. Currently heavy duty diesel powered vehicles are not required to be emission certified for license renewal. The majority of these diesel vehicles are registered under reciprocity agreements and thus are legislatively exempt. Also the type of test necessary to certify diesel powered vehicles has not been developed to the point where it is economically feasible.

During the past two years over thirty thousand (30,000) heavy duty vehicles have been inspected. Table I lists the pass/fail statistics for the heavy duty trucks tested from November, 1979 through December, 1980. The abbreviated listing is due to an internal reporting change. Compared to the previous two year period, the overall pass rate for heavy duty vehicles is up three percentage points to 62%.

Over two-thirds of the heavy trucks tested at the inspection lanes were built to meet some level of emission control.

Emission distribution curves for heavy duty trucks are shown in figures 1, 2, and 3. Figure 1 is the composite idle carbon monoxide emission distribution. This set of curves shows the overall improvement obtained through the design changes that have occurred. Compared to data from two years ago, the idle emission distribution for the pre-emission controlled trucks has decreased about 5%. The up-swing of the tail was slightly reduced and overall the group did not degrade. The other curves represent different federal emission control levels that have been designed to by the truck engine manufacturers. The lowest group consisted of the newest trucks. Carbon monoxide emissions for each grouping were reduced 25% for the 1970-73 group and 18% for the 1974-78 group.

Figure 2, the distribution plot of the idle carbon monoxide at 2500 rpm, shows similar characteristics. Again, the type of separations shown can be expected due to design improvements combined with the lack of carburetor deterioration. This test has value in that it provides a measure of the overall engine performance at an engine operating condition other than the regular engine idle.

Figure 3, the distribution plot of idle hydrocarbons, shows similar separation, except for the 1979 model year grouping. Emission

distributions for the pre-1970 group remained essentially the same as reported two years ago. The 1970-73 group showed a 10% decrease and the 1974-78 group showed a 16% decrease. The data set for the 1979 curve was reviewed. It contained a large percentage of Ford trucks. The Ford emission control system uses a full manifold-vacuum spark retard. It is possible, though the data is inconclusive, that this system may have been disabled on a number of trucks. This would have affected the overall composition of the "composite" vehicle. Also, the data set was small (only 175 vehicles) and as such may simply be a misrepresentative sample. Review of new data will be continued.

Overall, heavy duty gasoline truck emissions have been reduced or remain the same as the previous data. As expected, higher emissions are observed from those vehicles which are older and of older design. The emission reductions from heavy duty gasoline trucks are important, for while they are given a minor portion of the emission inventory, these vehicles operate in the congested sectors of the metropolitan area where emission reductions are of greatest benefit. Maintenance of these emission reductions means decreased loading in the air and a closer compliance with the ambient air standards.

Table 1

DEPARTMENT OF ENVIRONMENTAL QUALITY
 VEHICLE INSPECTION PROGRAM
 522 Southwest Fifth Avenue
 Portland, Oregon

Heavy-Duty Gasoline Vehicle Test Summary
 November, 1979 - December, 1980

EMISSION INSPECTION TESTS	22,164
OVERALL PERCENTAGE PASS	62%
Pre-1970 Trucks (7042)	
Pass Emission Test	61%
Tests Failed for Carbon Monoxide (CO)	10%
Tests Failed for Hydrocarbons (HC)	12%
Tests Failed for Both HC & CO	4%
Tests Failed for CO @ 2500 rpm	8%
Tests failed for Other Causes	5%
1970-1973 Trucks (5458)	
Pass Emission Test	60%
Tests Failed for carbon Monoxide (CO)	12%
Tests Failed for Hydrocarbons (HC)	11%
Tests Failed for Both HC and CO	4%
Tests Failed for CO @ 2500 rpm	6%
Tests Failed for Emission Equipment Disconnects	3%
Tests Failed for Other Causes	3%
1974-1978 Trucks (8216)	
Pass Emission Test	63%
Tests Failed for Carbon Monoxide (CO)	13%
Tests Failed for Hydrocarbons (HC)	13%
Tests Failed for Both HC and CO	4%
Tests Failed for CO @ 2500 rpm	3%
Tests failed for Emission Equipment Disconnects	2%
Tests failed for Other Causes	1%
1979 and Later Trucks (1448)	
Pass Emission Test	75%
Tests Failed for Carbon Monoxide (CO)	6%
Tests Failed for Hydrocarbons (HC)	12%
Tests Failed for Both HC and CO	2%
Tests Failed for CO @ 2500 rpm	1%
Tests failed for Emission Equipment Disconnects	3%
Tests Failed for Other Causes	2%

Figure 1

Idle Carbon Monoxide Emission Distributions
For Heavy Duty Gasoline Powered Trucks

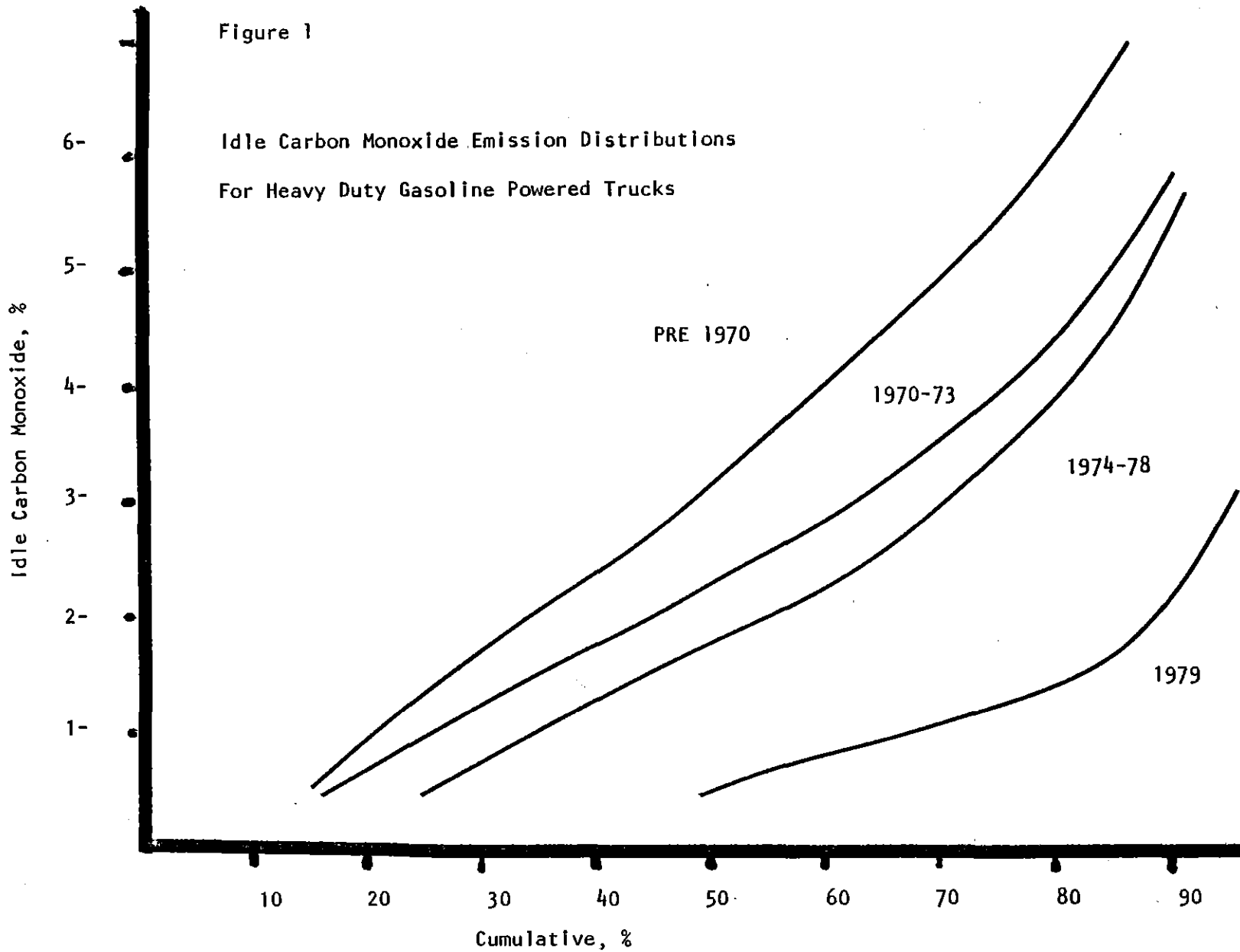


Figure 2

Carbon Monoxide Emission Distribution

At 2500 rpm for Heavy Duty Gasoline Powered Trucks

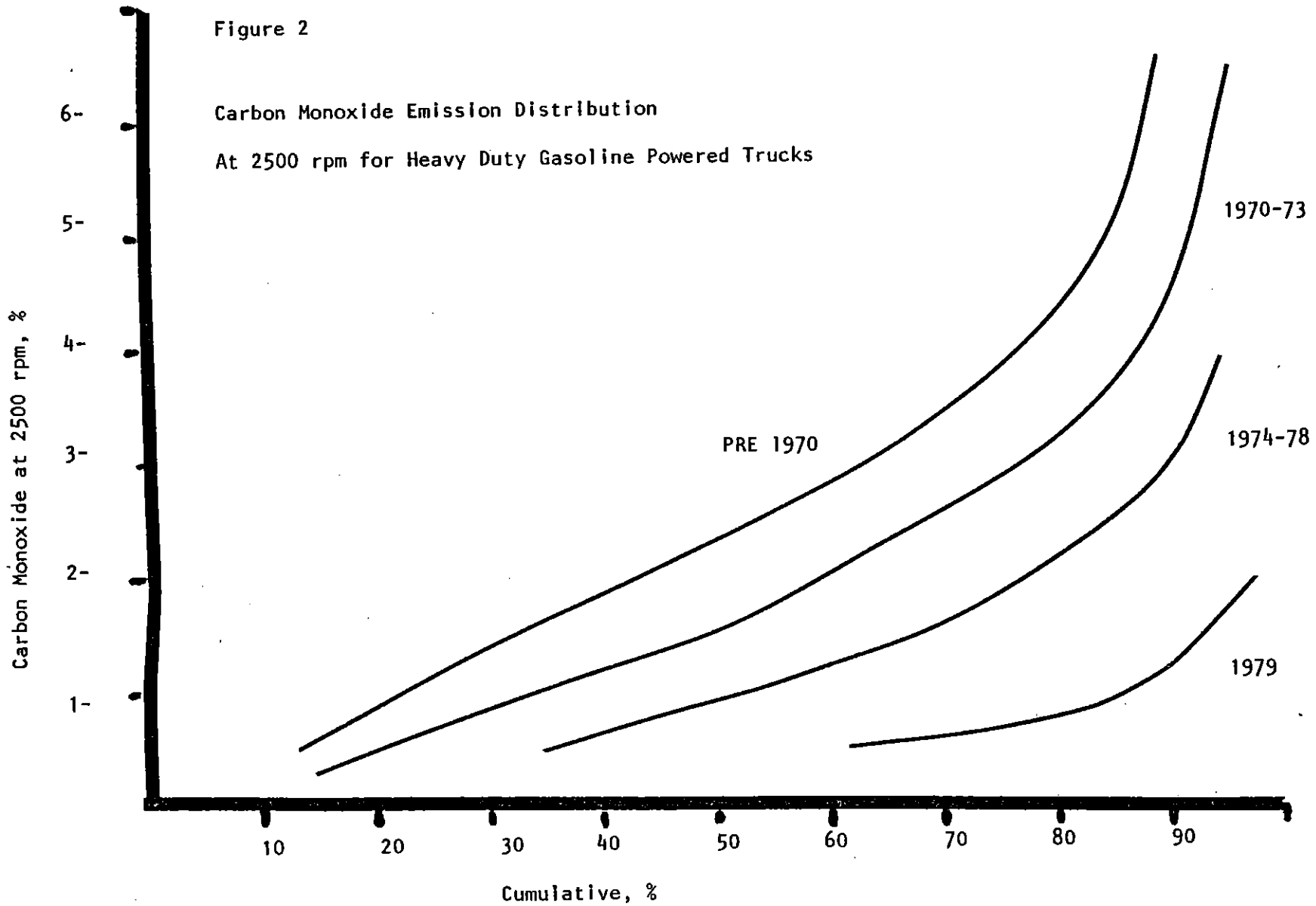
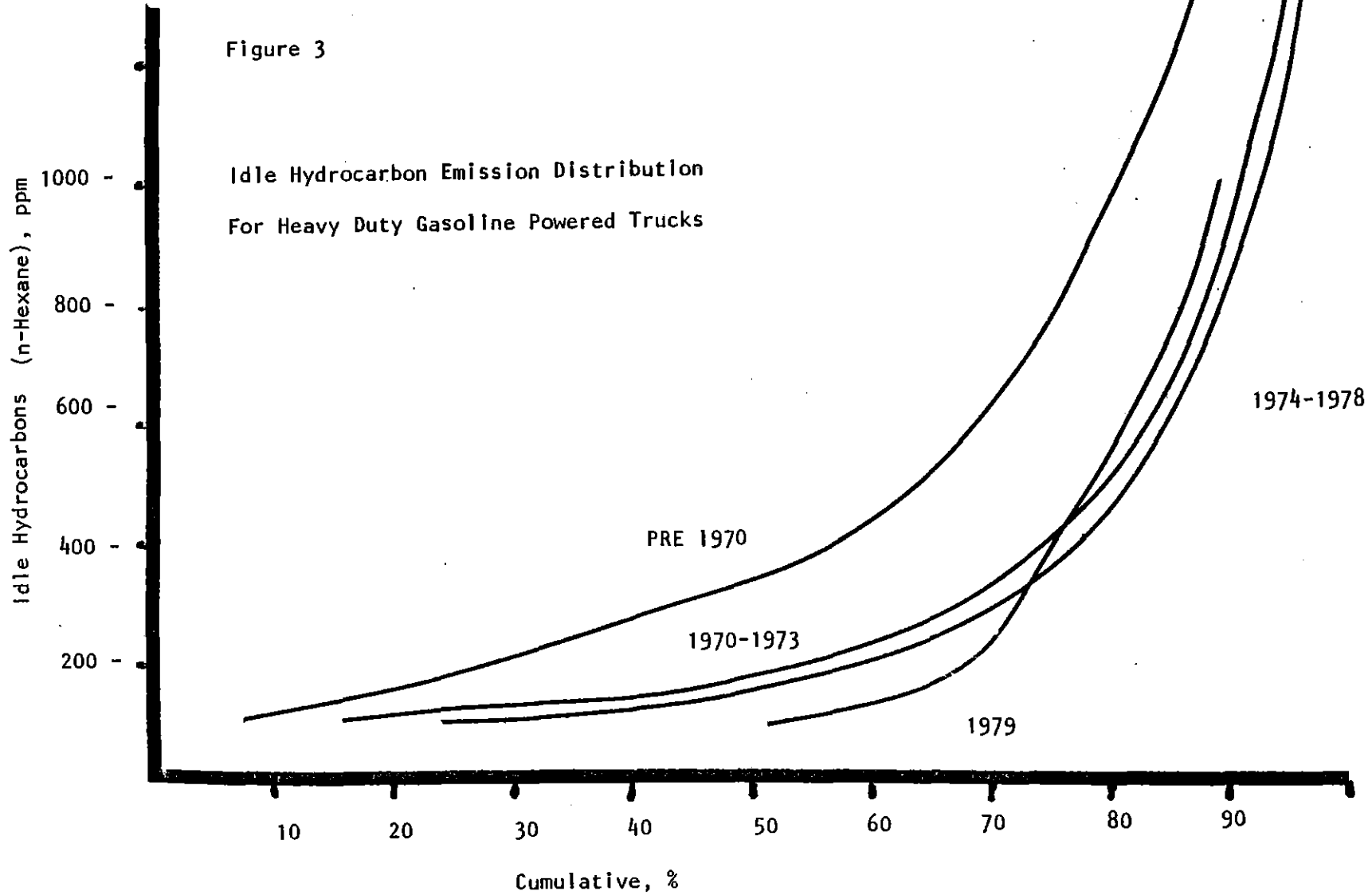


Figure 3

Idle Hydrocarbon Emission Distribution
For Heavy Duty Gasoline Powered Trucks



APPENDIX E

REPAIR COSTS ASSOCIATED WITH THE VEHICLE INSPECTION PROGRAM

A vehicle emissions inspection program is operated to protect the public health and welfare from the effects of automobile-created air pollution by inducing improved vehicle maintenance. Inspection standards and emission tests provide a means of measuring the individual motor vehicle's contribution to the total air pollution problem. Maintenance is the means of bringing the vehicle into compliance with emission standards. The retest provides a measure of effectiveness of that maintenance.

To monitor the costs associated with that maintenance, a questionnaire is sometimes incorporated into the non-compliance form that is given the motorists that fail the inspection test. When returning for the retest, many motorists provide information on the maintenance and the associated cost. It is these costs that are reported as the average repair costs.

The costs that are shared by all motorists are the inspection fee and the time necessary to have the inspection performed. The inspection fee is \$5 and currently is paid only once when a certificate is issued. The time spent by an individual will vary on the particular location and time of the month that is chosen. Travel time can vary between individuals depending upon their locations and choice of test stations. The Department goal is to have sufficient locations so that all stations are within five miles of most locations. Waiting time averages about 10 minutes. However, should the individual wait until the end the month, excessive waiting time may be experienced.

The \$5 fee charged is of concern of some citizens. This fee, however, is in keeping with fees charged by other I/M programs. See Table 1. The Oregon inspection fee can be compared to costs of other "State or Contractor Operated" programs. It should be kept in mind, however, that some of the programs in other states are subsidized. In Oregon fee income is the only source of program financing. The driving times are usually not considered significant cost items by most persons. The Department operates 7 permanent stations located throughout the MSD. Waiting times can be a different matter, since irritation increases with the increase in waiting time.

The types of work done to repair the vehicles that fail the DEQ idle emissions test, are illustrated in the first section of Table 2. The first data column shows an overview of all the survey cars. Approximately 60 percent of the work performed was related to the carburetor. As can be seen by the next three columns, no matter what caused the vehicle to fail the initial DEQ test, carburetor work was the predominant repair. Even though carburetor adjustments are most common, a variety of other work was performed.

The second section of Table 2 presents the after-maintenance retest pass rate or the pass rate after repairs were done. The overall retest pass rate, was 82.8 percent. As can be seen from the last three columns of this section, the retest pass rate did not vary much with the cause of initial test failure.

The costs of repair are itemized in the third section of the table. Most people whose vehicles failed the DEQ test, were able to either repair their vehicles themselves or have them repaired for less than \$10. Less than 4 percent of the vehicles which failed, require in excess of \$100 in repairs. The estimated average cost of repairs in Oregon was \$17. By contrast, the average cost of repairs to meet standards of the California program as reported by California Vehicle Inspection Program was \$29.

A special cost of repair survey was conducted at the Department's Hillsboro test station. This survey examined the types of work done by the three categories of maintenance facilities: self-maintenance, miscellaneous garages and mini-service garages. Mini-service garages were classified as those that did a relatively large number of tune-ups on cars that had failed the DEQ test.

The results of this survey are displayed in Table 3. Note, in the distribution of the types of work in the upper part of the table, that the self-maintenance and miscellaneous garage categories did very closely the same types of work. The other category, mini-service garages, did almost exclusively carburetor adjustment work. The limited scope of repairs performed by these mini-service garages in this sample, implies that they may not be properly diagnosing and repairing the actual vehicle problems, but instead are making inordinate carburetor adjustments solely to lower idle emissions. This type of repair could well result in a vehicle with poor driveability and potentially one with high overall emissions. The vehicle may have low emissions at idle allowing it to pass the DEQ test, but overall vehicle emissions while driving could be high if vehicle malfunctions have not been corrected. In the Hillsboro survey, approximately 20% of the retest repair work was done by these mini-service garages. It is suspected that some of their customers may return for an after-test readjustment of the carburetor to improve driveability. Interestingly, the DEQ test failure rate after repair for these garages was very low (6%) compared to the other two categories (23% and 22%). The low failure rate was probably due to the use of exhaust gas analyzers in making carburetor adjustments.

The category, miscellaneous garages, had the highest average repair cost at \$22.05. Self-maintenance was the lowest at \$7.89, and mini-service garages cost was \$15.64. Although mini-service garages on an average charge \$7 less than miscellaneous garages for initial repair, their overall direct cost may be higher if a readjustment is required. Of course, the indirect costs of reduced gas mileage and increased engine wear resulting from a malfunctioning vehicle could well outweigh the savings in initial repair costs.

The Department is concerned that a vehicle's actual malfunctions are repaired rather than quick fixes being done solely to pass the emissions test. The Department assists in coordinating and supports ongoing training programs to help mechanics to properly diagnose and repair problems with vehicle emissions control systems.

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TABLE 1

EMISSION INSPECTION FEES CHARGED OR PROPOSED BY SOME PROGRAMS

State or Contractor Operated Programs

<u>State</u>		<u>Cost</u>
Arizona*	\$5.75	(includes one free retest)
California*	\$11.00	(initial fee)
	\$7.00	(retest)
Connecticut	\$10.00	(includes one free retest)
District of Columbia*	\$5.00	(initial fee-emissions and safety)
	\$1.00	(retest)
Maryland	\$9.00	(includes one free retest)
New Jersey**	\$2.50	(emissions and safety)
Ohio*	\$5.00	(initial fee-unlimited free retests)
Oregon*	\$5.00	(charged only once after passing test)
Washington	\$10.00	(includes one free retest)

Private Garage Operated Programs

Colorado	\$10.00	(includes one free retest)
Georgia	\$6.00	(emissions and safety)
Massachusetts	\$10.00	(emissions and safety)
Michigan	\$10.00	(includes one free retest)
Nevada*	\$34 - 38/hr	(labor rate-no set test fee)
New York*	\$12.00	(initial fee-emissions and safety)
	\$6.00	(retest)
Rhode Island*	\$4.00	(emissions and safety, includes one free retest)
Virginia	\$3.50	

* Emission program currently in mandatory operation.

+ Program is known to be subsidized.

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Table 2

DEPARTMENT OF ENVIRONMENTAL QUALITY
 VEHICLE INSPECTION PROGRAM
 522 SW Fifth Avenue
 Portland, Oregon

Cost of Repair Survey
 (7832 Total Responses)

Summary for May - July 1980

<u>Repairs and Adjustments Performed for Retest</u>	<u>Total (3762 Responses)</u>	<u>Initially Failed for HC (633 Responses)</u>	<u>Initially Failed for CO and Both HC/CO (2853 Responses)</u>	<u>Initially Failed for Other Than HC and CO (276 Responses)</u>
A/F Mixture Adjustment	35.5%	26.5%	39.1%	18.8%
Idle Speed Adjustment	17.7%	15.6%	17.9%	21.4%
Air Cleaner Replacement	8.2%	6.8%	8.6%	7.6%
Choke Repair	3.4%	3.3%	3.4%	4.0%
Carburetion Repair	9.5%	9.0%	10.0%	5.4%
Dwell/Timing Adjustment	8.1%	13.1%	7.3%	4.7%
Spark Plug Replacement	6.1%	11.3%	5.2%	3.2%
Distributor Repair	2.8%	5.4%	2.3%	1.5%
Vacuum Hose Replacement	3.1%	5.2%	2.4%	4.3%
Other Adjustments or Repairs	5.5%	3.8%	3.7%	30.0%
<u>Passing Retest After Repair</u>	<u>Total (7832 Responses)</u>	<u>Initially Failed for HC (1892 Responses)</u>	<u>Initially Failed for CO and Both HC/CO (4662 Responses)</u>	<u>Initially Failed for Other Than HC and CO (1278 Responses)</u>
	82.8%	76.1%	83.8%	89.1%
<u>Reported Cost of Repair</u>	<u>Total (445 Responses)</u>	<u>Initially Failed for HC (47 Responses)</u>	<u>Initially Failed for CO and Both HC/CO (364 Responses)</u>	<u>Initially Failed for Other Than HC and CO (34 Responses)</u>
0 - \$5.00	27.4%	20.5%	28.4%	30.7%
\$5.01 - \$10.00	31.7%	27.7%	32.8%	16.3%
\$10.01 - \$20.00	24.8%	25.3%	25.4%	18.7%
\$20.01 - \$30.00	4.9%	8.7%	3.9%	9.1%
\$30.01 - \$50.00	4.2%	5.6%	3.1%	9.6%
\$50.01 - \$75.00	2.9%	4.4%	2.5%	3.0%
\$75.01 - \$100.00	1.9%	2.7%	1.4%	4.8%
Over \$100.00	3.4%	5.1%	2.5%	7.8%

Table 3

DEPARTMENT OF ENVIRONMENTAL QUALITY
VEHICLE INSPECTION PROGRAM
State of Oregon
522 SW Fifth Avenue
Portland, Oregon

Vehicle Repair Survey

Hillsboro Test Station
September-October, 1980

<u>Repairs Itemized*</u>	<u>Self Maintenance</u>	<u>Miscellaneous Garages</u>	<u>Mini-Service Garages</u>
A/F Mixture	62%	72%	88%
Idle Speed	38%	47%	64%
Air Cleaner	25%	10%	3%
Choke	6%	8%	0%
Carburetion	21%	32%	48%
Dwell/Timing	17%	22%	0%
Spark Plugs	10%	10%	0%
Plug Wires	3%	3%	0%
Distributor	6%	3%	0%
Vacuum Hoses	13%	12%	0%
Other	21%	24%	3%
<u>Costs</u>			
\$ 0 - \$ 4.99	70%	18%	2%
5 - 9.99	6%	18%	2%
10 - 24.99	18%	47%	94%
25 - 49.99	2%	1%	0%
50 - 74.99	1%	6%	0%
75 - 99.99	1%	5%	0%
\$100 +	1%	5%	2%
Failure Rate on Retest	23%	22%	6%
Number Vehicles in Sample Categories	77	59	33
Average Cost	\$7.89	\$22.05	\$15.64

* Numbers in this section represent the percent of vehicles on which a particular type of work was done. Columns do not total 100% since more than one task was performed on some vehicles.

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Appendix F

AIR QUALITY TRENDS

Background

Carbon monoxide and photochemical oxidants are two important contaminants which are related to motor vehicle emissions. Carbon monoxide is the most abundant air contaminant emitted in the Portland airshed. Motor vehicles are the predominant source of carbon monoxide emissions, contributing about 95% of the total carbon monoxide in the Portland metropolitan area.

The federal and state carbon monoxide health standard of 10 milligrams per cubic meter (8-hour average) was exceeded 88 days in 1970 at the Burnside (CAMS) monitoring station in downtown Portland. The worst day recorded that year had an average 8-hour reading of 20.8 milligrams per cubic meter. In 1980, the 8-hour average was exceeded only 21 times. Figure 1 shows the annual carbon monoxide violation days since 1970 at the CAMS Station. Also shown is the number of carbon monoxide violation days at the Sandy Boulevard Station in Portland.

In contrast to carbon monoxide, which usually shows health standard violations close to high emission areas, oxidants measured as ozone are more of a regional problem. Health standard violations are usually more wide spread and often occur away from the emission sources. In 1975 a monitoring station was placed south of Oregon City at Carus which drew attention to the extent of that problem. Between that time and 1978, hourly oxidant concentrations as high as 0.23 ppm have been measured. Since 1978, however, ozone violations have dropped drastically. There appear to be three major reasons for this decline: meteorology, monitoring method changes and reductions in precursor emissions.

Carbon Monoxide Trends

The State of Oregon Transportation Control Strategy adopted in 1973 strives to reduce carbon monoxide and ozone to compliance with ambient air standards. The transportation control strategy is in effect in the Portland metropolitan area. The major elements of these strategies include:

1. New motor vehicle program -- federal responsibility
2. Inspection/maintenance program -- state responsibility
3. Mass transit improvements -- Tri-Met responsibility
4. Traffic flow and circulation improvements -- local government responsibility

As a result of these strategies, carbon monoxide emissions, as well as the number of carbon monoxide health standard violation days, have decreased in the Portland area.

Implementation of the transportation control strategies has been discussed in previous reports on the inspection program. In summary, the goal of the federal new car program has been to reduce auto emissions by 90% from their uncontrolled levels. After the initial controls were placed upon motor vehicles, field studies indicated that these controls were not achieving the desired emission reductions. Inspection/maintenance programs were proposed as a means of reinforcing these new car controls. In the Portland metropolitan area additional transportation control strategies, as described, have been implemented.

The relationship between the ambient air concentrations and the motor vehicle sources is complicated by meteorology and traffic concentrations. Meteorology and traffic have previously been discussed, and by way of an update, the meteorological potential for carbon monoxide violations has been great during the last few winters. In the Portland area winters are the time at which there is normally high ambient carbon monoxide readings. Traffic also has an influence and has remained relatively constant.

Traffic on Burnside, where the CAMS station is located, was approximately 25,000 ADT in 1970. It peaked in 1979 at approximately 30,000 ADT and during 1980 dropped to approximately 29,000. At Sandy Blvd., near the Sandy air monitoring station, traffic counts in 1979 were approximately 24,000 ADT. In 1971 traffic counts indicated an ADT of approximately 23,000. The traffic counts are consistent with the data listed in the section on traffic and population. The data also indicates that Sandy Blvd. operates near its traffic handling capacity, while Burnside has some excess capacity available.

Carbon monoxide health standard violations are usually the result of high traffic volumes and congested traffic combined with poor meteorology. The meteorology has been conducive to high carbon monoxide concentrations for the past few years. Traffic volumes and speeds have remained relatively consistent over the past ten years at the two monitoring sites. Portland's main monitoring station, the CAMS station on S.W. Burnside has shown declining carbon dioxide concentrations as indicated in Figure 2. This is due to the effectiveness of the inspection/maintenance program, the federal new car program, and the other measures of the transportation control strategy. Carbon monoxide decreases have also been observed at the Sandy Blvd. monitoring site. At Sandy Blvd., violation days have declined from 51 in 1974 to 20 in 1980. This long term trend is shown in Figure 3. Figure 4 shows the violation days for carbon monoxide contrasted with the annual average of the monthly means for both Sandy Blvd and CAMS monitoring sites. As can be seen, these factors indicate reduced carbon monoxide emissions for the Portland metropolitan area.

In addition to these data, all of the ambient carbon monoxide data have been forwarded to the University of Wisconsin for a statistical analysis. The preliminary results from the draft report indicate that the ambient carbon monoxide improvements in air quality are directly related to the federal new car program and the inspection/maintenance program. The final report, which is scheduled to be available this year, is expected to

contrast the carbon monoxide data in Eugene with that in Portland in an attempt to better quantify how much of this reduction can be attributed to the federal new car program versus Portland's inspection/maintenance program.

The emission inventory data for the tri-county area of Clackamas, Multnomah, and Washington Counties for 1979 is shown in Table 1. As can be seen from that table, motor vehicles, both light and heavy duty, account for 95% of the carbon monoxide emissions as listed by the emission inventory. Light duty vehicles are credited with 93% of the total motor vehicle emissions.

Compliance with carbon monoxide ambient air standards unchanged since the last report, is projected to be achieved during 1985 with our existing control strategies.

Table 1
Emission Inventory for
Clackamas, Multnomah, and Washington Counties for 1979

	<u>Carbon Monoxide Tons per Year</u>	<u>Hydrocarbons Tons Per Year</u>
Light duty vehicles (cars and pick-ups)	429,474	48,616
Heavy duty vehicles (gasoline and diesel trucks and buses)	27,969	4,222
TOTAL	<u>457,443</u>	<u>52,838</u>
% of Tri-County Area Total	95%	61%

Oxidant (Ozone) Trends

In 1979, the EPA adopted a change in the ambient health standard for ozone. At that time the EPA also indicated that sampling method changes and calibration changes would have a negligible effect in ozone readings. However, two facts affect these changes. The first is that, given the same amount of ozone, the calibration methods may detect different amounts of that ozone and the second is that, since the ozone standard was largely based on data using the NBKI calibration method, the change in calibration affects the amount of ozone detected so the ozone standard may need to be adjusted.

Ozone data taken in the last two years show that ozone violations during this period have dropped dramatically. There are three probable causes for the decline in these ozone violations. The meteorology during 1979 and 1980 has not been as conducive to ozone formation as it had been in the previous years. There have been changes in the methods of calibrating

the ozone monitor which appear to be responsible for a 27% reduction in ozone concentrations. There have been overall emission reductions that could account for another 9% ozone reduction. The inspection/maintenance program for motor vehicles has been estimated to provide a 12,000 kilogram per day reduction in hydrocarbon emissions by 1987. This 12,000 kilogram per day emission reduction in hydrocarbons is in addition to a 27,000 kilogram per day reduction in hydrocarbons due to reduction in vehicle miles traveled, gasoline consumption reductions, stationary source controls, additional control measures on hydrocarbon emitting facilities and the federal new motor vehicle program.

Compliance with the federal ozone standard with planned 1979 control strategies had been projected not to occur until after 1987. However, compliance may now be projected prior to 1987 pending recalculation of reduction requirements after the 27% adjustment to 1978 and prior data is factored into the ozone computer model. In any case, needed reductions by 1987 will be considerably less than projected in 1979.

Summary

There have been continued reductions of carbon monoxide emissions which are credited to control of emissions from motor vehicles due to the new car program, the inspection/maintenance program, and the remaining transportation control strategies. Compliance with carbon monoxide standards via existing control strategies, including the inspection/maintenance program, is expected to be achieved by 1985. Some ozone reductions due to emission control improvements have been achieved in the last 5 years. The meteorological and monitoring changes that have occurred in the past two years tend to obscure slightly the benefit of this overall emission reduction, but, if meteorological conditions are factored out, it is estimated that existing control measures at a minimum will still be necessary in order to meet the federal ambient air standards for ozone between 1982 and 1987 as required by the Clean Air Act. A more precise determination of whether 1987 ozone levels will comply with federal standards should be completed in early 1981.

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Revised 2-24-81

FIGURE 1

NUMBER OF CARBON MONOXIDE VIOLATION
DAYS AT PORTLAND AIR MONITORING STATIONS

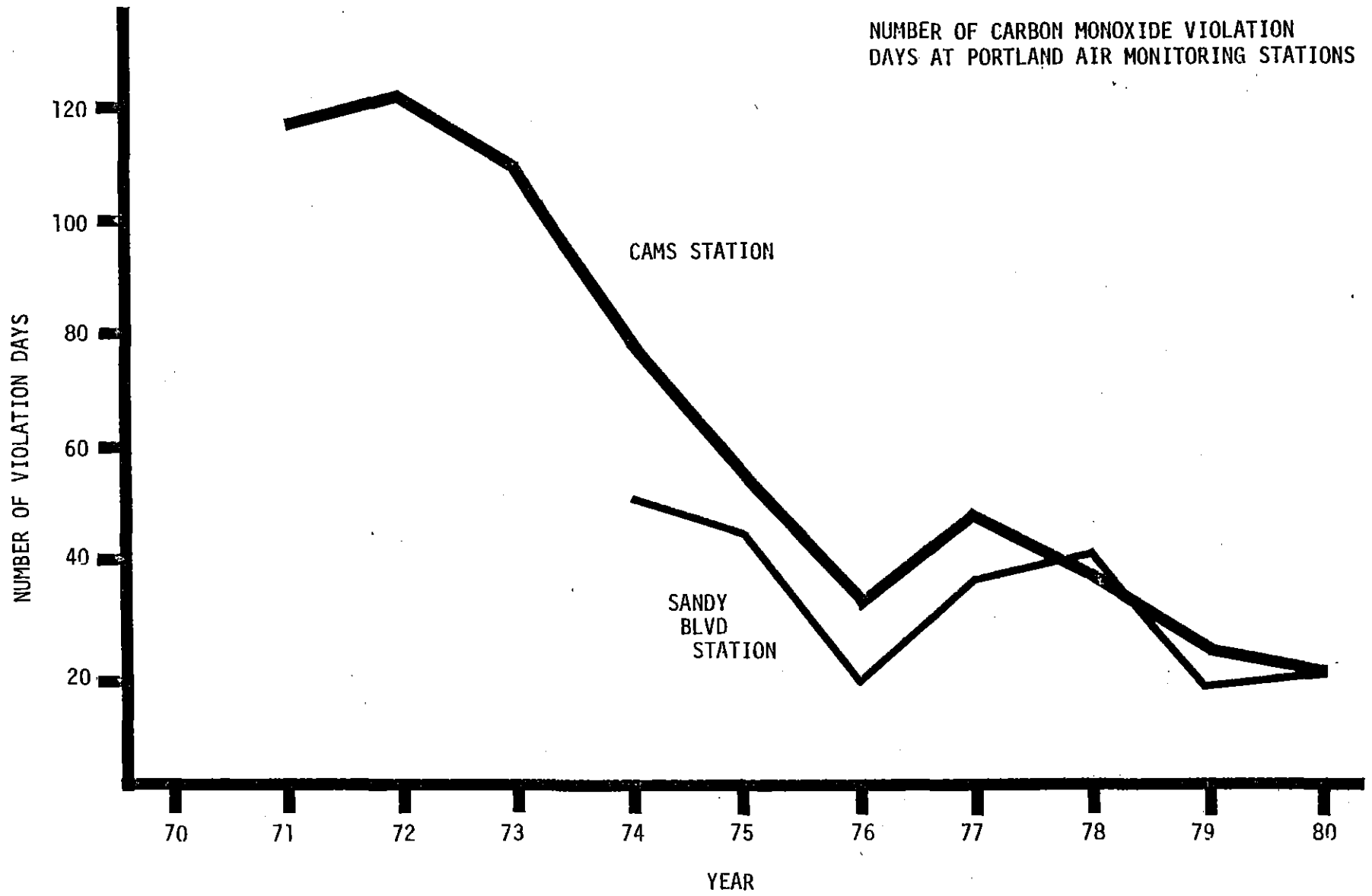


FIGURE 2

LONG TERM CO AT CAMS AIR
MONITORING STATION

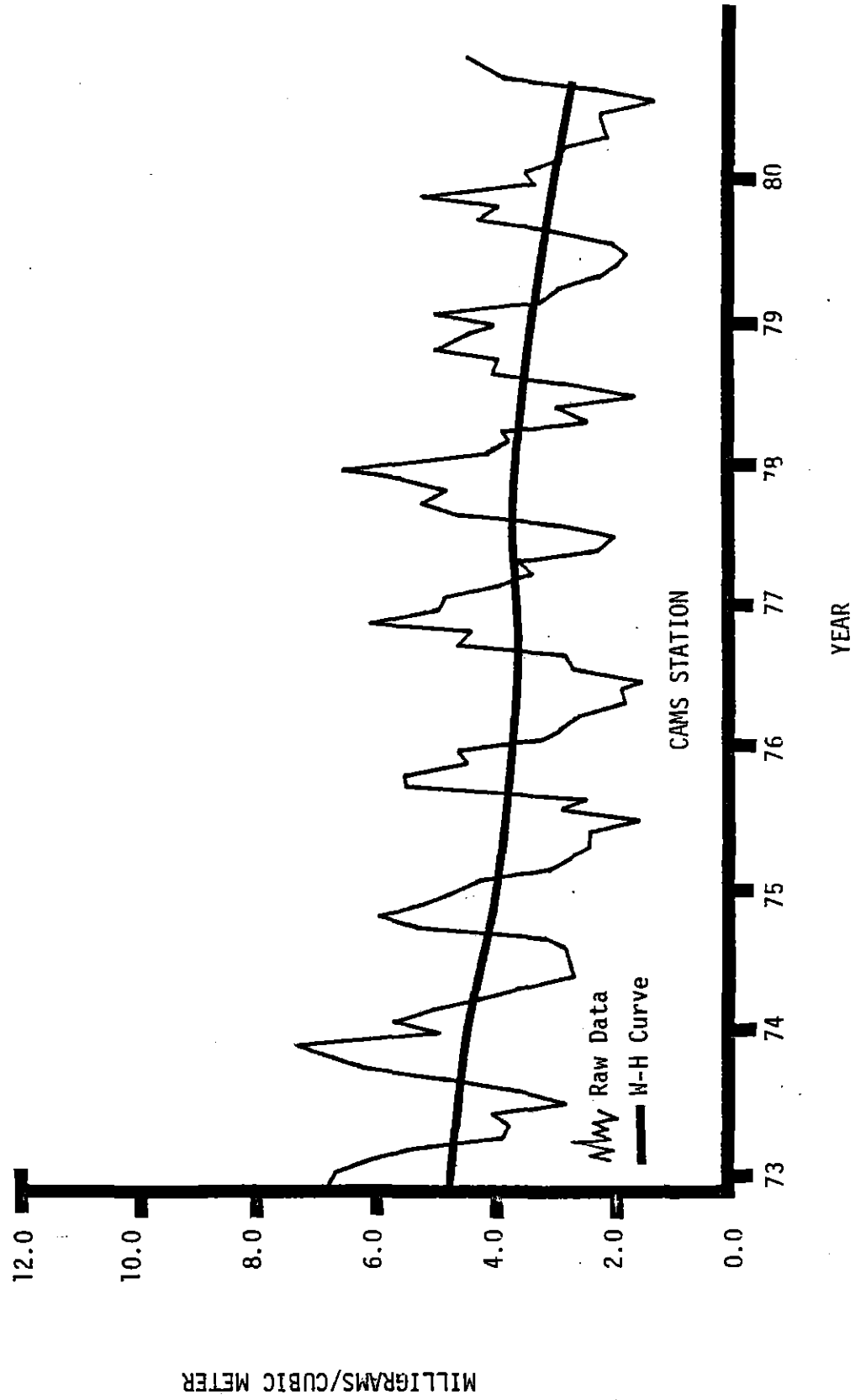


FIGURE 3

LONG TERM CO AT SANDY BLVD.
MONITORING STATION

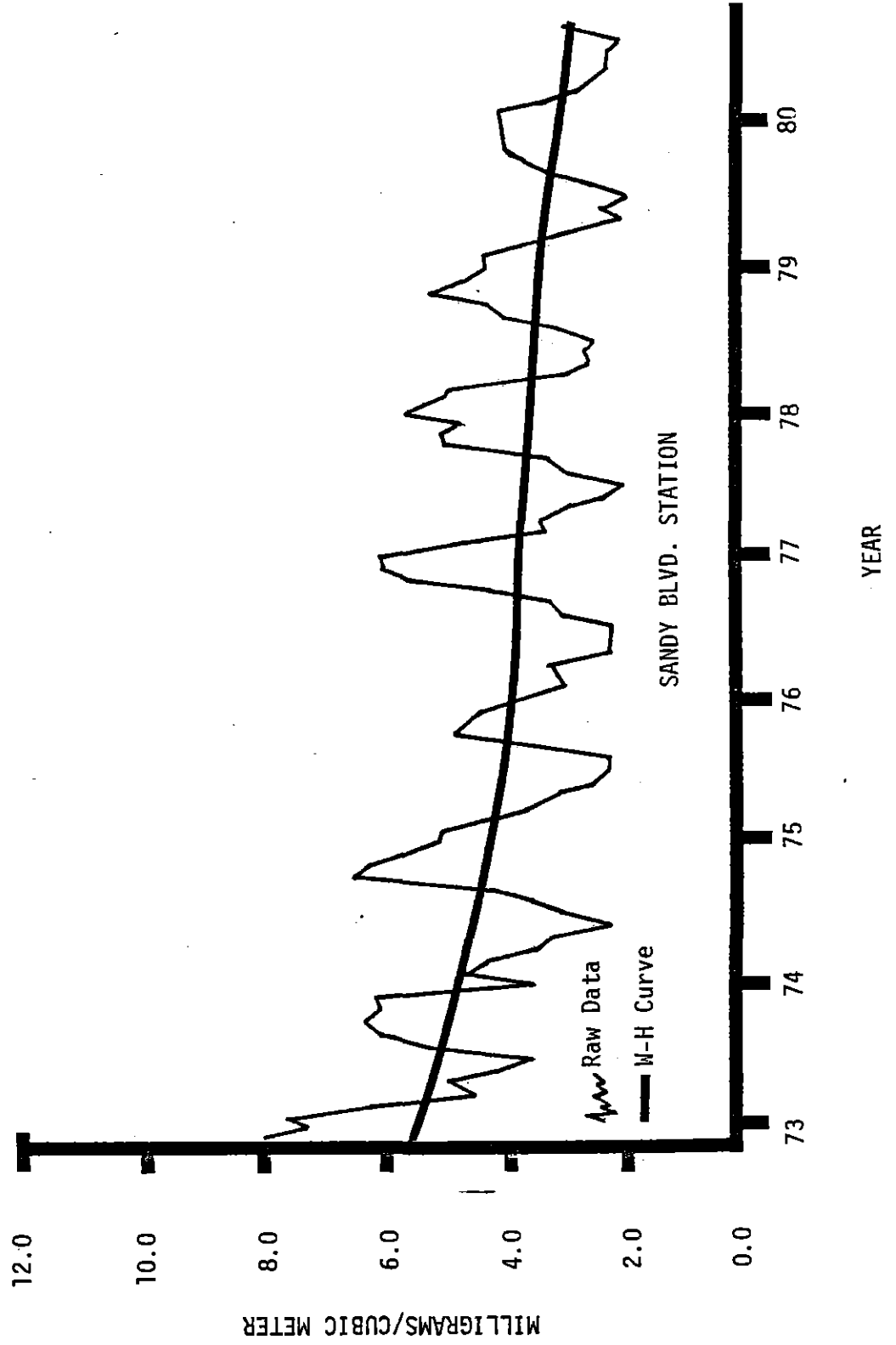
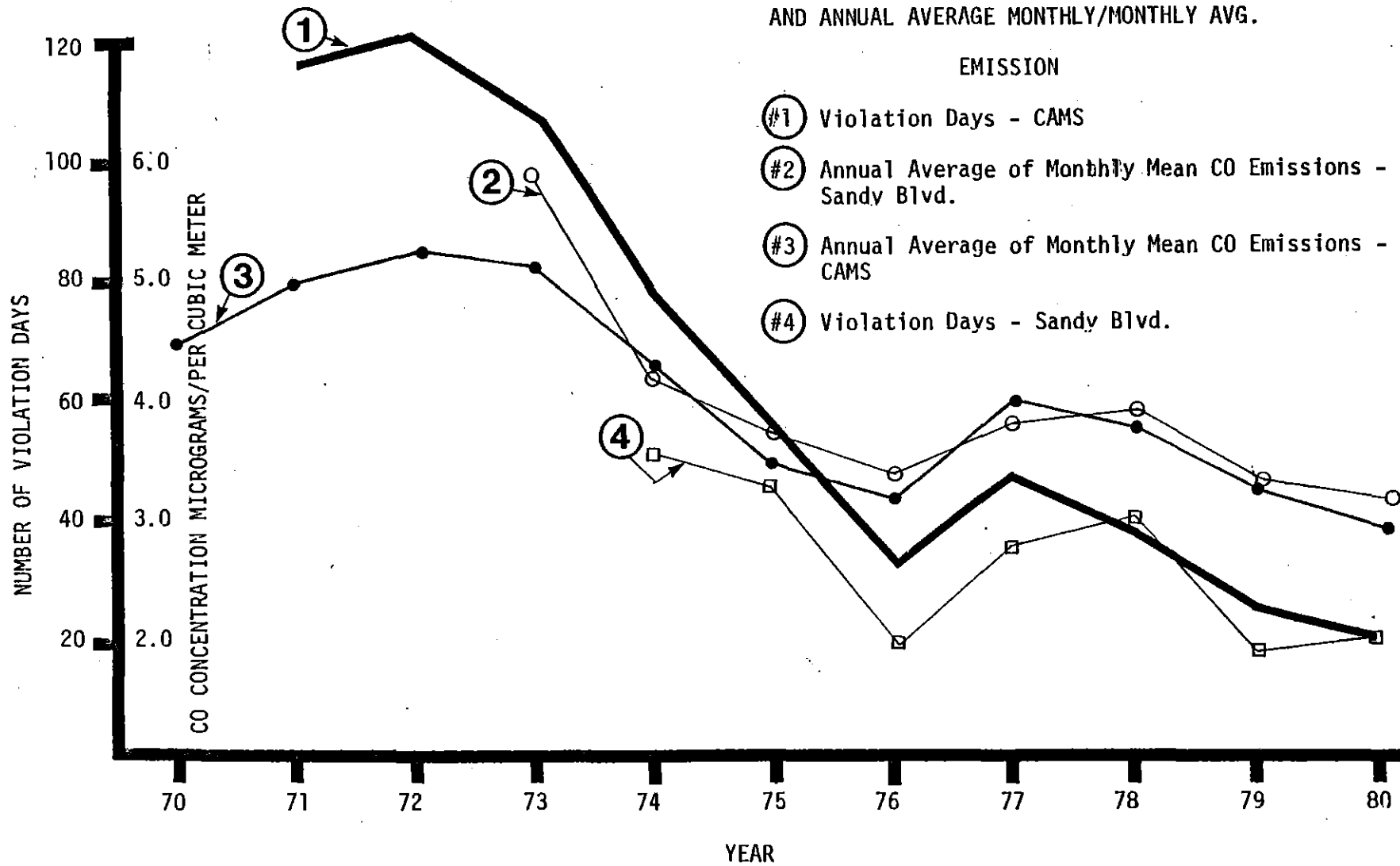


FIGURE 4

CARBON MONOXIDE VIOLATION DAYS
AND ANNUAL AVERAGE MONTHLY/MONTHLY AVG.

EMISSION

- #1 Violation Days - CAMS
- #2 Annual Average of Monthly Mean CO Emissions - Sandy Blvd.
- #3 Annual Average of Monthly Mean CO Emissions - CAMS
- #4 Violation Days - Sandy Blvd.



Appendix G

ENGINEERING ACTIVITIES

During the past two years several special engineering studies and activities have been conducted to complement the inspection program. In addition to the normal monitoring of program quality control, review of program waiting times, evaluation of data, and the like, there have been a number of specific studies conducted. Among these studies were aftermarket product evaluations made for the purposes of establishing procedures for determining and documenting the emission effects of aftermarket parts. The Department has also assisted other agencies within state government in the evaluation of aftermarket products when requested. The purpose of such evaluations is to document emission effects. The program staff obtained and coordinated several full scale federal test procedures on some aftermarket products and aftermarket vehicle designs.

Tests were made and reports written on these projects. Table I lists the engineering reports made within the past two years. Highlights of some of these studies follow.

TABLE I
TITLES OF DEQ/VIP REPORTS

<u>Report No.</u>	<u>TITLE</u>
79-01	An Emission Test of the Auto Jet Heater
79-02	An Emission Test of a 1977 Turbocharged Volvo
79-03	A Test of Alcohol Gasoline Mix Compared to Regular Unleaded Fuel.
80-01	The Emission History of the 1976 Dodge - E 125-124
80-02	Pollution Control System Tampering Survey
80-03	Cooperative Department of General Services/ Department of Environmental Quality Gasohol Program - April Status Report

One device tested was the Auto Jet Heater manufactured by the Auto Jet Heater Company of Medford, Oregon. The Jet Heater is an electrically heated carburetor adjustment needle, which is reported to improve both fuel economy and exhaust emissions. After testing the device, and after reviewing the test data, it was concluded that the Auto Jet Heater did not significantly increase or decrease emissions or mileage on the type of vehicle tested.

The program staff arranged for the test of a locally turbocharged Volvo sedan, including the full federal test and highway fuel economy test. The emission test results indicated that the vehicle exceeded its original emission standards for hydrocarbons. However, the experience gained from the testing and evaluation of this vehicle yielded a greater understanding and concern for problems in the automotive aftermarket product business. The Department staff has continued informal contacts with SEMA, an aftermarket trade association aimed at providing better mechanisms for aftermarket product evaluations and review.

The program staff tested a vehicle using gasohol fuel, and found that, compared to unleaded and regular fuel, the use of the gasohol fuel did not degrade the emission performance of the vehicle. These tests duplicated findings that had been reported in the technical literature.

The Department staff participated with the Department of General Services in recording baseline emission results for a gasohol field trial. Various short cycle tests were conducted on a fleet of vehicles which the Department of General Services was planning to use in its gasohol study. The initial evaluations of the vehicles were made prior to the start of the gasohol test program. However, to date no follow up has been made because of cost limitations.

With the eruptions of Mt. St. Helens last May and the subsequent eruption in June, there was concern that the effect of the volcanic ash might seriously affect vehicle operations in the Portland area. A review of the data both before and after the eruption dates was made and an attempt to determine if increased engine wear due to increased volcanic ash might give rise to premature engine failures. The review particularly focused on various inspection program failure modes. There was no evidence of changes in the failure modes at DEQ stations either before or after volcanic eruptions. The overall failure rate for the program remained the same during the study period as did the failure rates for the sub groups, carbon monoxide, and vehicle smoke. Based on the findings of the review of six months of data, the volcanic ash fall appears to have had no long term effect on motor vehicle operation as evidenced by increased failure rates for emission related causes that might be traced to increased engine wear.

As a part of the educational activities and to support the Medford training program, an engineering project was started in 1980 to construct a demonstration test engine. The purpose of such a demonstration unit was to show, for mechanic training sessions as well as seminars for other interested parties, the effect of proper maintenance on exhaust emissions. A 1980 Dodge pickup truck was donated to the Department by Chrysler Corporation. Department staff proceeded to modify the vehicle, instrumenting it and equipping it with necessary tools and gauges, to show the effect of proper maintenance. The project was completed in late January, 1981. Long range plans are to increase the level of sophistication of the test vehicle and to improve its usefulness as a training aid. A picture of the completed truck is shown in figure 1.

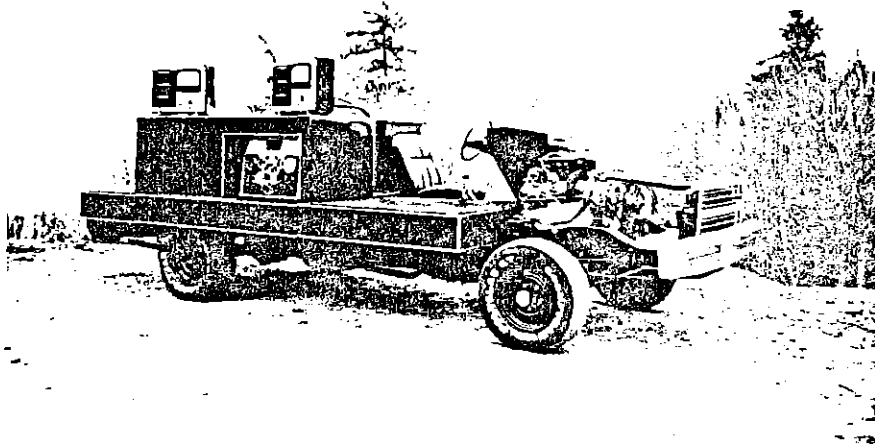


Figure 1. Emission Demonstration Project

Projects like those described above complement the inspection program operation. Long term projects that are proposed for the next two years include continued work with the automotive aftermarket product industry; complete review of the State's idle test procedure; and an analysis of the need for computerization of the program operations, especially as it relates to overall cost effectiveness.

During the past two years, the Environmental Protection Agency has continued its test program in the Portland metropolitan area. EPA originally established the Portland Study to determine correlation between short tests such as Portland's and the longer Federal test and to monitor the effectiveness of Portland's inspection program. As the EPA finished its initial tasks, additional testing was done, and new objectives were added--that is, the scope of the Portland Study was expanded.

The results of the initial study included:

1. The idle test is highly effective in identifying vehicles which are excessive hydrocarbon or carbon monoxide emitters;

2. Mechanics in the field are capable of maintaining cars to achieve significant emission reductions at reasonable costs;
3. Fleetwide emission reductions appear to be sustained for a period of about one year following maintenance;
4. If failed cars are maintained according to manufacturer's specification, both emission reductions and fuel economy improvements would increase.

The scope of the EPA work began to address new areas of concern. Among the areas that were evaluated were the following:

1. The evaluation of three-way catalyst vehicles.
2. A study of the effectiveness of EGR repairs.
3. A mechanic training evaluation program.
4. An evaluation of catalyst diagnostic tests.

The initial study of the three way catalyst tests continued to confirm the value of the idle test in identifying excessive carbon monoxide and hydrocarbon emitters. It also indicated that as the complexity of the new technology computer-controlled emission systems increases, the idle test may have to be modified to retain its effectiveness as a diagnostic tool. The early work done at the EPA laboratories in Ann Arbor and in Portland indicated that the idle test, or a simple variation on the idle test, appears to be an effective mechanism for screening out those first generation computer controlled vehicles. Further simple variations on the idle test were shown to be able to identify additional malfunctions in more advanced computer operated systems.

The study of the effectiveness of EGR repairs confirmed some serious problems that affect the automotive repair industry. The study showed how the complexity of the overall engine system and the parts distributions problems that exist in the automotive aftermarket can seriously impair a service technician's ability to properly repair a customer's motor vehicle. The results can be interpreted to indicate that there exists a need for additional training for auto repair technicians and that the training needs to be supported by an adequate parts inventory.

An initial evaluation of mechanic's training was done under the auspices of EPA's Portland Study Group. The initial class, developed by Colorado State University, was pilot tested in Portland. The shortcomings of this pilot study led to improvements in the class and to the development of a format that has now been successfully used by the Department in its Mechanic's Training Program in the Medford Jackson County area.

Programs now underway at the EPA Portland Study group include an in-depth analysis of the emission impact of light and medium duty trucks. This class of vehicles, which is included in the State's inspection requirement, has not been as thoroughly studied as the conventional passenger vehicle in terms of the quality of emission repairs. As these vehicles have made up an increasing portion of the overall vehicle population, the documentation of their emission impacts is important.

The EPA Portland study group has assisted local studies on alternative fuels development. EPA has worked with the Bonneville Power Administration in the evaluation of alcohol fueled vehicles. While all of the data is not currently available for review, several important observations have been made. Among these observations are that when modifications were made to emission control systems resulting in the disablement of the systems, and the vehicle is then operated on pure alcohol, emissions increase. This is the same result that occurs when a vehicle operates on conventional gasoline.

The EPA has worked with the Northwest Natural Gas Company and conducted a test on a liquified natural gas powered truck. While the results were obtained at an early stage of research, the findings will assist in further development of that potential source of fuel. Engineering studies, such as those described above, provide a better understanding of the problems and some of the solutions associated with automotive emission control.

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Appendix H

Population Growth and Traffic Pattern Trends

In 1974, the Oregon Legislature established the initial boundaries for the Vehicle Inspection Program. The legislatively set initial program boundaries were those of the Metropolitan Service District (MSD), covering portions of Multnomah, Clackamas and Washington counties. Vehicles registered within the MSD are subject to DEQ's clean air test. As of January 1, 1979, the MSD boundaries were reorganized to an area which includes a smaller area of Washington County and a larger area of Clackamas County. The legislature adopted the new MSD boundaries as the boundaries for the Vehicle Inspection Program, effective January 1, 1980. The Portland metropolitan area has grown both in population and in traffic volume. This section reviews trends in population and traffic patterns as they relate to the inspection program coverage.

Population

The MSD covers portions of Multnomah, Washington and Clackamas counties. The Metropolitan Service District estimates the MSD population in 1980 at 955,100. Since the MSD boundary was altered on January 1, 1979, a direct MSD population growth rate is not available. The MSD population growth rate, however, may be estimated from the county population data in Table 1. This estimate should be quite good since 91% of the tri-county (Multnomah, Clackamas and Washington) residents live within the MSD.

Table 1

Population Distribution* in Portland Metropolitan Area

<u>County</u>	<u>1969</u>	<u>1976</u>	<u>1978</u>	<u>1980</u>	(1969-78) Growth/yr	(1969-80) Growth/yr
Multnomah	559,600 (56%)	553,000 (50%)	549,000 (47%)	559,000 (45%)	-0.2%	0.0%
Washington	143,300 (14%)	196,000 (18%)	215,000 (19%)	247,800 (20%)	+5.5%	+6.6%
Clackamas	164,800 (16%)	205,800 (18%)	220,000 (19%)	240,900 (19%)	+3.7%	+4.2%
Clark Co,WA	129,000 (13%)	154,300 (14%)	169,900 (15%)	192,060 (16%)	+3.5%	+4.4%
Total of 3 Oregon Counties	867,700	954,800	984,000	1,047,700	1.5%	1.9%
Grand Total	996,700	1,109,100	1,153,900	1,239,760	1.7%	2.2%

* Data from Portland State University (Center for Population Research and Census)

Growth of the Tri-county population between 1969-80 has been at a rate of 1.9% per year. The most recent population growth (1978-80) was at a higher rate of 3.2% per year.

- Table 1 shows that the Portland Metropolitan area's growth has been occurring primarily in three counties around Multnomah County. Further, the growth has been at about the same rate in these three counties, with Washington County leading. Multnomah County, on the other hand, has displayed no overall growth. As compared to the greater Metropolitan area, Multnomah County population has decreased from 56% to 45% of the total population. Thus the population is increasing within the area but not evenly throughout the area. The fastest growth is occurring in the suburbs.

A look at working population will give some insight into traffic trends during week-day rush hours. Probably the best indicator of working population within the Metropolitan area is information from the Oregon Department of Revenue, Income Tax Filing by County. This is summarized in Table 2. The numbers in parentheses show the fraction of total population that is working.

Table 2

County	Oregon State Income Tax Filings			(1969-78)
	1969 Returns	1976 Returns	1978 Returns	Growth/yr
Multnomah	223,257 (40%)	229,500 (41%)	247,171 (45%)	1.2%
Washington	52,511 (37%)	81,700 (42%)	95,045 (44%)	9.0%
Clackamas	55,871 (34%)	81,500 (39%)	92,570 (42%)	7.3%
Clark Co., WA	12,804 (10%)	19,600 (13%)	23,560 (14%)	9.3%
Total of 3 Oregon Counties	331,639	392,700	434,786	3.4%
Grand Total	344,450	412,300	458,346	3.6%

* Data from Portland State University (Center for Population Research and Census).

Note that there has been a trend for a larger fraction of the population to be employed, especially in Washington, Clark and Clackamas Counties. Overall the growth in working population in the Metropolitan area has more than doubled the growth of the total population between 1969-78. Even in Multnomah County, a 1.2% per year growth in workers was seen, while the total population did not change. Note in Table 2 that the fraction of working people in Clark County, Washington is unusually low. This results from considering only Clark County residents who work in Oregon.

Vehicle Registration

Table 3 shows passenger car registration and population figures for the ten Oregon counties with the highest passenger vehicle registrations. As expected, the counties associated with the Portland metropolitan area are at the top of the list. Lane County is also high on the list. It includes the state's second largest metropolitan area.

Table 3

VEHICLE REGISTRATION AND POPULATION BY COUNTY

<u>County</u>	<u>Estimated 1979*</u> <u>Passenger Car</u> <u>Registrations</u>	<u>Growth</u> <u>Since</u> <u>1970</u>	<u>Estimated</u> <u>1980**</u> <u>Population</u>	<u>Growth</u> <u>Since</u> <u>1970</u>
1. Multnomah	383,933	16%	559,000	0.4%
2. Lane (Eugene)	210,757	64%	274,000	28.0%
3. Clackamas (Portland/Oregon City)	183,803	105%	240,900	45.0%
4. Washington (Portland/Beaverton)	173,741	97%	247,800	57.0%
5. Marion (Salem)	152,818	69%	205,800	36.0%
6. Jackson (Medford)	108,832	83%	132,700	40.0%
7. Douglas (Roseburg)	75,249	69%	93,600	30.0%
8. Linn (Albany)	71,164	64%	88,100	22.0%
9. Coos (Coos Bay)	51,200	51%	64,100	13.0%
10. Deschutes (Bend)	51,078	152%	61,968	104.0%

* Data from the Oregon Motor Vehicles Division.

** Data from Portland State University (Center for Population Research and Census).

Increases have occurred in both vehicle registrations and in population. However, vehicle registration in almost all counties has been growing at a rate of over twice that of the population. The highest growth rate (both in population and in vehicle registrations) are occurring in Deschutes, Clackamas, and Washington Counties. Multnomah County, the state's most populous, had a minimal population increase but still shows significant growth in vehicle registration. The overall Portland vehicle tri-county registration growth rate was 5% per year compared to a population increases of 1.9% per year (see Table 1) and a working population growth of 3.4% per year (see Table 2).

Morning Traffic Trends

Figure 1 gives the average morning weekday traffic into and out of Portland for June, 1980. Besides displaying total vehicle counts, it shows the growth in traffic count which has occurred since 1970 and the number of Oregon vs. out-of-state vehicles.

Morning traffic counts have substantially increased over the past ten years. The largest increase by far occurred at the Vista Ridge Tunnel (Highway 26), reflecting the population and business activity increases in Washington County. The average increase of the reporting stations was about 6% per year compared to a vehicle registration increase of 5% per year and working population growth rate of 3.4% per year. Notice that vehicle registration growth related very closely to increases in morning traffic.

Figure 1 shows that the ten year growth (%) in traffic leaving the downtown Portland area has in each of the reported cases out-distanced the growth in incoming traffic. The most dramatic example of this is at the Banfield Freeway. This appears to represent a relative growth in business activities in the areas adjacent to downtown.

Of some concern to Oregonians is the influx of vehicles from Washington, where cars are not currently required to pass an air pollution emissions test. The week-day traffic counts give a qualitative view of the number of people residing in Washington that work in Oregon. Each morning, about 8,400 out-of-state cars enter Oregon over the Interstate Bridge. By the time this I-5 southbound traffic reaches the Ainsworth Crossing (Minnesota Freeway), the count is reduced to about 3,000, and only about 400 of the original 8,400 out-of-state vehicles leave Portland on I-5 at Wilsonville (Baldock Freeway). It therefore appears that most of the out-of-state people are doing business in the north of Portland, never reaching the Portland central business district. In addition, essentially all of the southbound interstate bridge traffic stops somewhere in the Portland area.

Interstate Bridge traffic counts show approximately a 40% increase in traffic in both north and south directions over the past ten years. This growth in bridge traffic is of the same magnitude as the growth in vehicle population in the Portland tri-county area (54%). This indicates that bridge traffic has not inordinately increased in the last ten years. The actual out-of-state influx of approximately 8,400 cars a day is only 1% of the vehicle population in the Portland tri-county area. This does not represent a major impact in terms of pollution or traffic, to the Portland area. The 8,400 cars represent 5% of the registered vehicles in Clark County Washington.*

* Data from Department of Licensing, Olympia, Washington.

Existing Vehicle Inspection Boundaries

The vehicle inspection boundaries have been legislatively established as the Metropolitan Service District (MSD) boundaries. This area is shown in Figure 2. Figure 2 also shows the 1979 average daily traffic (ADT)

across those boundaries. During 1979, there was 226,800 ADT on the main roads in and out of the MSD. Assuming a worst case condition that all of the traffic is registered outside the MSD, then 14% of the passenger vehicles operating within the MSD would be from outside the vehicle inspection area.

Of these vehicles from outside the area, most travel on I-5. In the north, traffic from Clark County Washington accounts for almost half of the total cross traffic. In the south, I-5 accounts for an additional 21%.

The Department did an additional study of Oregon license plates observed in parking lots within the Portland area to gauge out-of-area impact. This study shows that about 12% of the Oregon vehicles were from outside the area.

Vehicle Usage

Pollution emitted into the Portland air shed is a function of both the average amount emitted per mile and the total vehicle miles traveled. The Vehicle Inspection Program provides an avenue for limiting pollutant emissions from vehicles. The program has no direct impact on the number of miles driven. Table 4 shows the trend of vehicle usage in the Portland area in the last five years. The numbers given are the estimated miles traveled per year on the primary and secondary streets in the tri-county area. There has been an overall 20% increase in traffic in the last five years. Note, however, that between 1978 and 1979 a slight reduction (0.4%) did occur. A look in Table 4 of the "Change in Total Miles" column, illustrates that the reduced driving is not a continuing trend but an occurrence which was initiated in 1979. Many factors, including the overall economic outlook and fuel costs could have stimulated such a reduction.

Table 4

Annual Vehicle miles Portland Metropolitan Area

Year	Miles			Total	Change in Total Miles
	<u>Multnomah</u>	<u>Clackamas</u>	<u>Washington</u>		
1975	1,518,000,000	597,000,000	686,000,000	2,801,000,000	-----
1976	1,619,000,000	659,000,000	751,000,000	3,029,000,000	+228,000,000
1977	1,682,000,000	708,000,000	796,000,000	3,186,000,000	+157,000,000
1978	1,724,000,000	782,000,000	870,000,000	3,376,000,000	+190,000,000
1979	1,713,000,000	792,000,000	855,000,000	3,362,000,000	-14,000,000

One of the factors affecting vehicle usage in the Portland Metropolitan area is bus ridership. Table 5 shows the number of boarding passengers in each of the last ten fiscal years.

Table 5

TRI-MET Bus Ridership

<u>Fiscal Year</u>	<u>Number of Trips</u>	<u>Increase in Number of Trips</u>
1970-71	19,596,000	-----
1971-72	20,564,000	968,000
1972-73	21,432,000	868,000
1973-74	24,523,000	3,091,000
1974-75	27,698,000	3,175,000
1975-76	34,615,000	6,917,000
1976-77	37,311,000	2,696,000
1977-78	39,368,000	2,057,000
1978-79	40,562,000	1,194,000
1979-80	48,499,000	7,937,000

Bus ridership has increased every year since 1970. The largest jump in passenger trips occurred in fiscal year 1979-80. This ridership information correlates well with the drop in vehicle miles travelled for 1979 shown in Table 4.

Summary

The population of the MSD is estimated at 955,100 with an annual growth rate over the last eleven years of 1.9%. In the last two years MSD population has increased at the faster rate of 3.2% per year. This growth is mainly occurring in the suburban areas. In fact, Multnomah County has shown no net population growth in the last eleven years.

Between 1979-78 working population in the metropolitan area has grown at a rate of about double that of the total population (3.4% per year). Working population growth correlates more closely to increases in vehicle registration than total population.

Vehicle registration in the metropolitan area has increased at a rate of 5% per year in the last ten years, more than double that of total population growth and somewhat faster than working population growth.

The increase in morning (6 AM-11 AM) traffic on major roads in the metropolitan area over the last 10 years was approximately 6% per year, very similar to the rise in vehicle registrations. Every week day morning approximately 8,400 out-of-state cars enter Oregon across the Interstate Bridge. Morning traffic across the bridge has increased at the relatively slow rate of 4% per year over the past ten years.

Currently it is estimated that 12%-14% of the vehicles operating within the MSD come from outside the area. This ratio has not changed significantly in the past few years. Approximately half of these out-of-area vehicles come from Washington State over the interstate bridge.

The vehicle usage (vehicle miles travelled) in the metropolitan area has increased by 4% per year in the last five years. In 1979, however, an actual drop in vehicle usage occurred (0.4%). This drop is associated with a major rise in Tri-Met bus ridership which occurred in fiscal 1979-80. It is too early to tell if this drop represents a trend toward reduced vehicle usage.

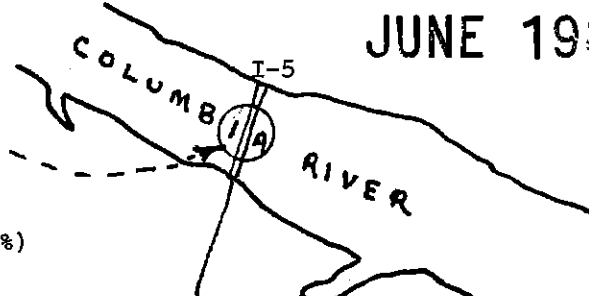
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Figure 1

FLOW OF VEHICLES ON THE PORTLAND FREEWAY SYSTEM FROM 6AM-11AM JUNE 1980

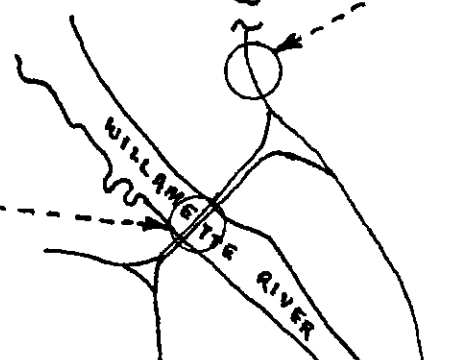
Interstate Bridge

North ▲	South ▼
2,802	5,657
4,155	8,388
9,664	19,508 (Up 38%)
(Up 43%)	



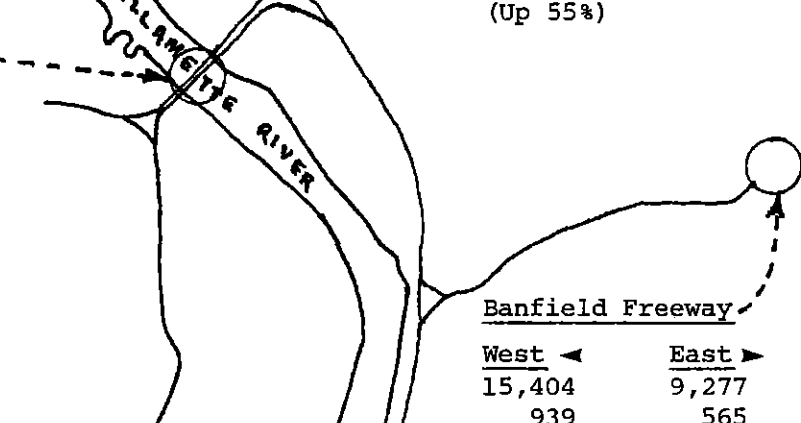
Minnesota Freeway

North ▲	South ▼
7,225	9,534
2,413	3,184
13,042	17,210 (Up 55%)
(Up 55%)	



Fremont Bridge

North ▲	South ▼
-	-
9,176	12,811



Banfield Freeway

West ◀	East ▶
15,404	9,277
939	565
20,873	12,570 (Up 63%)
(Up 20%)	

Vista Ridge Tunnel

West ◀	East ▶
-	-
9,959	16,942 (Up 126%)
(Up 143%)	

Baldock Freeway

North ▲	South ▼
2,507	2,249
442	397
4,916	4,410

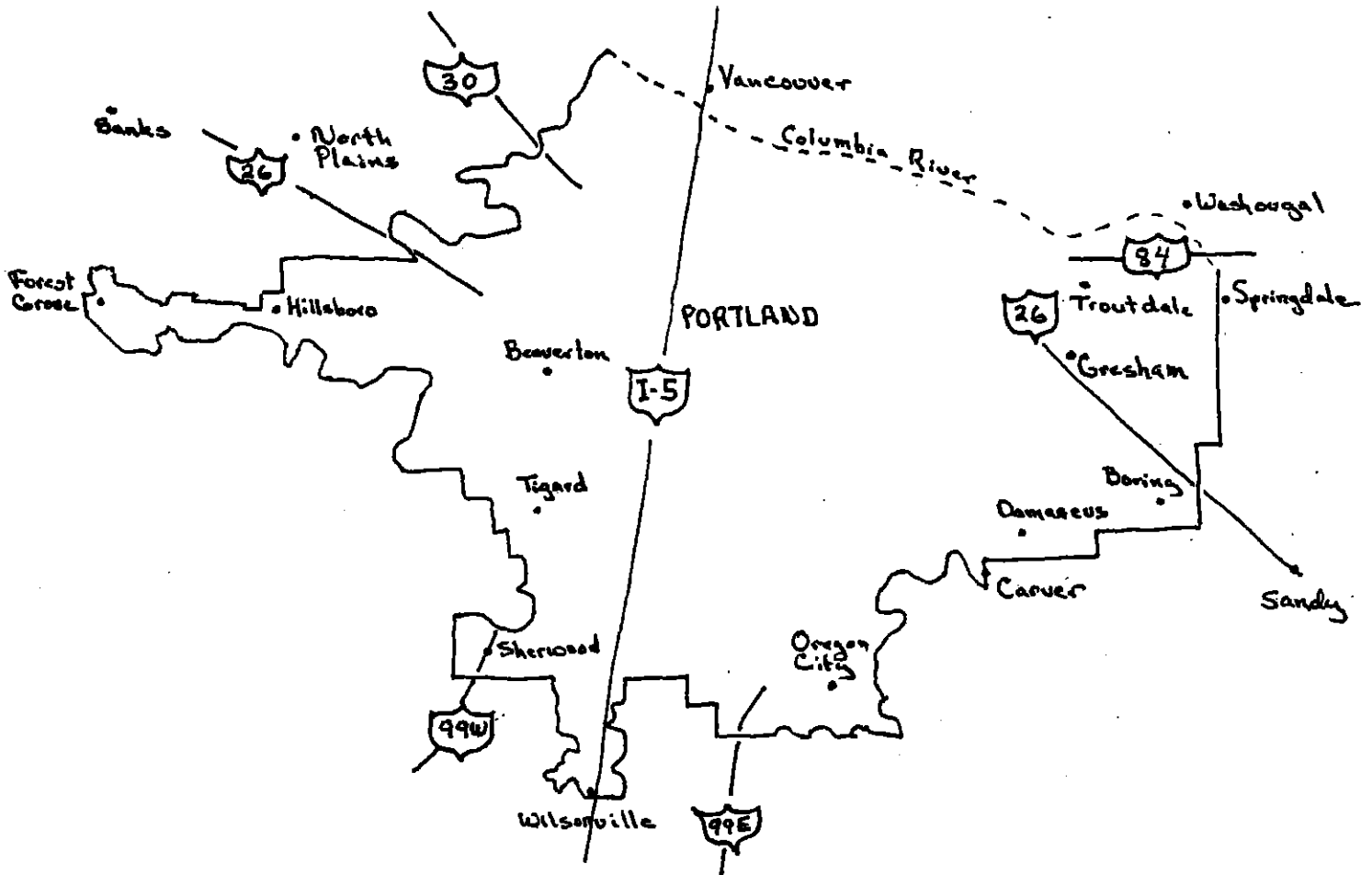


KEY:

- Numbers at points represent:
1. Oregon Passenger Cars
 2. Out-of-state Passenger Cars
 3. Total Vehicle Count
- 6 a.m. - 11 a.m.
(Numbers in parenthesis shows growth in traffic counts as compared to 1970 counts)

Figure 2

AVERAGE DAILY TRAFFIC (ADT) ACROSS CURRENT VEHICLE INSPECTION BOUNDARIES



AVERAGE DAILY TRAFFIC AT MSD BOUNDARIES

	<u>1977</u>	<u>1979</u>	<u>Difference</u>
I-5/Interstate Bridge	97,300	100,800	3,500
I-84N (East Boundary)	13,300	13,700	400
U.S. 26 (East Boundary)	12,500	13,100	600
U.S. 99E (South Boundary)	9,200	9,300	100
I-5 (South Boundary)	43,400	48,100	4,600
U.S. 99W (South Boundary)	14,200	14,700	500
U.S. 26 (West Boundary)	11,600	12,300	700
U.S. 30 (North Boundary)	<u>14,200</u>	<u>14,800</u>	<u>600</u>
SUM	215,700	226,800	11,100

Appendix I

Status of Other Inspection/Maintenance Programs

The Clean Air Act Amendments of 1977 extended the time schedule for compliance with National Ambient Air Standards to 1982. If a state implements all reasonable control measures - including a motor vehicle inspection/maintenance program - and is still unable to project compliance with the national standards, then an extension of the time schedule until as late as 1987 is possible. The following table, organized in terms of EPA regions - lists the status of the various inspection/maintenance programs in this country.

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INSPECTION/MAINTENANCE PROGRAM IMPLEMENTATION SUMMARY

10/29/80

Reg State Areas*	Design Values		I/M SIP Status		Implementation Chronology			Program Description					Comments			
	OX ppm	CO mg/m ³	N ² RM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Type	Test Mode	Model Years	Fee \$	Mech. Train		Cost Waiver	String Factor	LDT lbs.
VIII																
CO Denver area:	.170	26.0	5/11/79	10/5/79	Yes	MI/MM	Adopt regulations	D/SE	U	1968+	8	Yes	15/100	30/40	8500	SIP fully approved, sanctions lifted. *Parameter adjustment for pre-1981 cars and idle test mode for post-1981
Adams Co.			10/5/79	CA		1/81										
Arapaho Co.				2/5/80												
Boulder Co.				CA												
Douglas Co.				3/14/80												
Jefferson Co.				D												
Colorado Springs:		20.5		4/2/80												
El Paso Co.				7/16/80												
Fort Collins:		20		A												
Larimer Co. (< 200,000)																
Greeley:		17.8														
Weld Co. (< 200,000)																
UT Salt Lake City area:																
Salt Lake Co.	.170	16.7		5/16/79	Yes			CC/SE	I	1975+		Yes				SIP lacks schedules, agency commitment to implement and enforce, a legal opinion on enforcement mechanism, 25% reduction commit.
Davis Co.				2/19/79	Yes			PU/SE	I							
IX																
AZ Phoenix:	.150	26.1	7/5/79	8/11/80	Yes	MI/VM	1/76	CC/RE	I	last	5.75	Yes	\$75	25%	Yes	
Maricopa Co.				A		MI/MM	1/77			14						
Tucson:		19.7														
Pima Co.																
NV Las Vegas:																
Clark Co.	.130	21.7	5/7/79		Yes	MI/MM	7/74*	D/RE	R	last	12-17		\$25	30%	6000	*Change of ownership Fee includes adjustments. *Annual Inspection.
Reno		24.1				MI/MM	7/81+			14			\$75			
Washoe Co.						MI/MM	11/78*						\$75			
(< 200,000)						MI/MM	7/81+				labor		parts &			

Non-Attainment Key	I/M FRM Key	Program Phase Key	Program Type Key	Program Type Key	Test Mode
Number = design value non-attain.	CA = Conditional approval	VI = voluntary inspec.	D = decentralized	RE = registration-enforced	P = parameter
Blank = in attain.	A = approved	MI = mandatory inspec.	C = centralized	SE = sticker-enforced	I = idle
? = possible non-attainment	D = disapproved	VM = voluntary main.	CC = contractor-run	EU = enforcement undecided	L = loaded
	NA = no action on I/M	MM = mandatory main.	CS = state-run	RS = registration and sticker enforcement	U = undecided
			PU = program undecided		R = idle and RPM

INSPECTION/MAINTENANCE PROGRAM IMPLEMENTATION SUMMARY

10/29/80

Reg State Areas*	Design Values		I/M SIP Status		Implementation Chronology			Program Description					Comments																																				
	OX ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Type	Test Mode	Model Years	Fee \$	Mech. Train		Cost Waiver	String LDT Factor lbs.																																		
IX																																																	
CA South Coast					No			PU/EU	U						SIP lacks legal authority and schedule 176A funding limitations have been proposed for all non-attainment areas over 200,000.																																		
Air Basin	.510	33.3	4/1/80																																														
Ventura - Oxnard - Thousand Oaks	.210																																																
San Francisco Bay area	.190	22.4	4/1/80																																														
San Diego	.220	13.8	10/4/79																																														
Sacramento Fresno	.190 .190	18.3 22.9	D																																														
X																																																	
OR Portland area: Multnomah Co. Clackamas Co. Washington Co.	.180	17.4	1/21/80	6/24/80	Yes	MI/MM	7/75	CA	CS/RE	R	1968+	5	No	None	8500	Conditional approval proposed based on submittal of their legal authority.																																	
WA Seattle area: King Co. Snohomish Co. Vancouver area: Clark Co.	.160	18.32	11/9/79	6/5/80	Yes	MI/MM	1/82	A	CC/RE	I	1968+	10	Yes	\$50	30%	Contractor has been selected (9/80).																																	
<table border="0"> <tr> <td><u>Non-Attainment Key</u></td> <td><u>I/M FRM Key</u></td> <td><u>Program Phase Key</u></td> <td><u>Program Type Key</u></td> <td><u>Program Type Key</u></td> <td><u>Test Mode</u></td> </tr> <tr> <td>Number = design value non-attain.</td> <td>CA = Conditional approval</td> <td>VI = voluntary inspec.</td> <td>D = decentralized</td> <td>RE = registration-enforced</td> <td>P = parameter</td> </tr> <tr> <td>Blank = in attain.</td> <td>A = approved</td> <td>MI = mandatory inspec.</td> <td>C = centralized</td> <td>SE = sticker-enforced</td> <td>I = idle</td> </tr> <tr> <td>? = possible non-attainment</td> <td>D = disapproved</td> <td>VM = voluntary main.</td> <td>CC = contractor-run</td> <td>EU = enforcement undecided</td> <td>L = loaded</td> </tr> <tr> <td></td> <td>NA = no action on I/M</td> <td>MM = mandatory main.</td> <td>CS = state-run</td> <td>RS = registration and sticker enforcement</td> <td>U = undecided</td> </tr> <tr> <td></td> <td></td> <td></td> <td>PU = program undecided</td> <td></td> <td>R = idle and RPM</td> </tr> </table>														<u>Non-Attainment Key</u>	<u>I/M FRM Key</u>	<u>Program Phase Key</u>	<u>Program Type Key</u>	<u>Program Type Key</u>	<u>Test Mode</u>	Number = design value non-attain.	CA = Conditional approval	VI = voluntary inspec.	D = decentralized	RE = registration-enforced	P = parameter	Blank = in attain.	A = approved	MI = mandatory inspec.	C = centralized	SE = sticker-enforced	I = idle	? = possible non-attainment	D = disapproved	VM = voluntary main.	CC = contractor-run	EU = enforcement undecided	L = loaded		NA = no action on I/M	MM = mandatory main.	CS = state-run	RS = registration and sticker enforcement	U = undecided				PU = program undecided		R = idle and RPM
<u>Non-Attainment Key</u>	<u>I/M FRM Key</u>	<u>Program Phase Key</u>	<u>Program Type Key</u>	<u>Program Type Key</u>	<u>Test Mode</u>																																												
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Reg State Areas*	Design Values		I/M SIP Status		Implementation Chronology			Program Description				Comments		
	OX ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Test Type	Model Years	Fee Mech. Cost \$	String Factor		LDT lbs.	
V														
WI Milwaukee: Kenosha Co. Milwaukee Co. Ozaukee Co. Racine Co. Washington Co. Waukesha Co.	.288	16.1	6/17/80		Yes	MI/MM 1/83	Issue RFP 12/80	CC/RE L*	last 15	Yes	\$55	20%	8000	*Using loaded mode for diagnostic purposes, pass/fail on idle mode.
VI														
NM Albuquerque: Bernalillo Co.	24.4		8/9/79	4/10/80 NA	Yes	MI/MM 1/82	Issue RFP 12/80	CC/EU L, post 1981 man- datory I/L	1968+ 9-10 est.	Yes	\$75 or 15% of value		8500	Regs adopted 9/80 No action taken on SIP deficiencies: commitment to implement and enforce. Study on options being conducted.
TX Houston: Harris Co.	.27		8/1/79	12/18/79 A	Yes	MI/MM 1/83	Parameter inspection study 12/1/80	PU/EU						
VII														
MO St. Louis area: Jefferson Co. St. Charles Co. St. Louis Co.	.248	15.4	10/25/79	4/9/80 CA	Yes	VI/VM 10/79 MI/MM 1/83		D/RS I		Yes	none	30%		Need: expanded schedule (8/31/80), program type, stringency factor, resources in (12/1/80) report to legislature.

Non-Attainment Key

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I/M FRM Key

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Program Phase Key

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CC = contractor-run
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PU = program undecided

Program Type Key

RE = registration-enforced
SE = sticker-enforced
EU = enforcement undecided
RS = registration and sticker enforcement

Test Mode

P = parameter
I = idle
L = loaded
U = undecided
R = idle and RPM

INSPECTION/MAINTENANCE PROGRAM IMPLEMENTATION SUMMARY

10/29/80

Reg State Areas*	Design Values		I/M SIP Status		Implementation Chronology			Program Description					Comments		
	OX ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Type	Test Mode	Model Years	Fee \$	Mech. Train		Cost Waiver	String Factor
Y IL Chicago area:	.241	23.3	7/2/79	2/21/80	Yes	VI/VM 7/82	Adopt Regs	CC/RE I	last	6.50	Yes		30%		
Cook Co.				A		MI/MM 1/83	12/31/80		13	HDT:					
Du Page Co.										12.67					
Kane Co.															
Lake Co.															
McHenry Co.															
Will Co.															
St. Louis area:	.248														
Madison Co.															
St. Clair Co.															
IN Chicago subs:	.241	11	3/27/80			MI/MM 1/82		CC/EU I	last	10	Yes	\$100	20%		
Lake Co.			11/14/80						13			or 2.5%			
Porter Co.												value			
Louisville sub:	.198	18.3													
Clark Co.															
Floyd Co.															
MI Detroit area:	.23	15.2	8/13/79	6/2/80	Yes	MI/MM 1/83	Adopt regs	D/RE I	72+	10	Yes	\$50	20%	8500	
Macomb Co.			4/14/80	A			1/81								
Oakland Co.															
Washtenaw Co.															
Wayne Co.															
OH Cleveland*:	.23	24.7	3/10/80		Yes	MI/MM 12/82		C/EU							
Cuyahoga Co.															
Lorain Co.		Medina Co.													
Lake Co.															
Cincinnati*:	.22	18.3			Yes										
Butler Co.		Hamilton Co.													
Clermont Co.		Warren Co.													

* Specific areas will not be defined until Study Board Report is completed (7/1/81).

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? = possible non-attainment	D = disapproved	VM = voluntary main.	CC = contractor-run	EU = enforcement undecided	L = loaded
	NA = no action on I/M	MM = mandatory main.	CS = state-run	RS = registration and	U = undecided
		PU = program under	sticker enforcement	R = idle and RPM	

INSPECTION/MAINTENANCE PROGRAM IMPLEMENTATION SUMMARY

10/29/80

Reg State Areas*	Design Values		I/M SIP Status		Implementation Chronology			Program Description					Comments		
	OX ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Type	Test Mode	Model Years	Fee \$	Mech. Train		Cost Waiver	String LOT Factor lbs.
IV															
GA Atlanta: Cobb Co. DeKalb Co. Fulton Co.	.165	22	5/9/79	1/24/80 A	Yes	MI/VM 4/81 MI/MM 4/82	License garages, begin mech. train. 10/80	D/SE	I	last 10	3	Yes	\$50	6000	
KY Louisville: Jefferson Co. Cincinnati suburbs: Boone Co. Campbell Co. Kenton Co.	.198	19.9	11/15/79	1/25/80 CA	Yes	MI/MM 12/82		C/SE	I	All		Yes	\$100	All	Jefferson & Boone are submitting SIP's. 176A funding limita- tions proposed for Kenton & Campbell
NC Charlotte: Mecklenburg County	.190	20.9	10/23/79	4/17/80 CA	Yes	VI/VM 3/81 MI/MM 12/81		D/SE	I	Last 12	Max 8	Yes	\$50 or EPA min.	All gas	SIP submitted, under review.
TN Nashville: Davidson Co.	.175	16.8	7/24/79	2/6/80 CA	Yes	MI/MM 12/82		CS/SE				Yes			
Memphis: Shelby Co. (local programs)		15.1	10/2/79	8/13/80 CA	Yes	MI/MM 12/82		PU/SE	I			Yes			Memphis' schedule revision contains deficiencies.

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10/29/80

Reg State Areas*	Design Values		I/M SIP Status		Implementation Chronology			Program Description					Comments			
	OX ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Type	Test Mode	Model Years	Fee \$	Mech. Train		Cost Waiver	String Factor	LDI lbs.
III																
D.C. city-wide	.192	16.3	7/26/79		Yes	MI/VM 1/82 MI/MM 1/83		C/SE	I	last 25	NA	Yes	None	20%	6000	SIP lacks: commitment to 25% emission reduction, implementation schedule, commitment to retesting failures, clear enforcement authority. Contingencies on implementation must be removed.
DE Wilmington: New Castle Co.	.22		7/25/79 3/6/80	3/6/80 CA	Yes	MI/VM 1/81 MI/MM 1/82	Install equipment, begin mech. train 12/80	CS/SE	I	All		Yes				Deadline for developing cutpoints missed. New schedule has been submitted to region.
MD Baltimore: Anne Arundel Co. Carroll Co. Howard Co. Baltimore Co. Harford Co. D.C. suburbs: Montgomery Co. Prince Georges Co.	.190	14.0	8/1/79	8/12/80 A	Yes	MI/VM 1/82 MI/MM 1/83		CC/RS	I	last 12	9	Yes	\$75	-	10,000	Implementation schedule missing some dates. Proposed regs are now undergoing review. RFP is now under development.

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INSPECTION/MAINTENANCE PROGRAM IMPLEMENTATION SUMMARY

10/29/80

Reg State Areas*	Design Values		I/M SIP Status		Implementation Chronology			Program Description					Comments		
	OX ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Type	Test Mode	Model Years	Fee Mech. \$	Cost Train Waiver		String Factor	LDT lbs.
III															
PA Philadelphia: Philadelphia Montgomery Chester	.220	16.3	7/24/79	5/20/80 A	Yes	MI/VM 5/81 MI/MM 11/81		D/SE I		last 25	Yes	\$150- 250	25%	11,000	Started certification of garages in 8/80
Pittsburg: Allegheny Armstrong Westmoreland Scranton: Lackawanna Wilkes-Barre: Luzerne Allentown/Beth- lehem/Easton: Lehigh Northampton	.220	23.8													
VA D.C. Suburbs: Arlington Co., Fairfax Co. Prince William Co. Richmond: Chesterfield Co. Henrico Co.	.192		7/30/79	8/18/80 CA	Yes	MI/MM 1/82		D/RE I		last 8	Yes	\$75 or low emissions tune-up		6000	Implementation schedule, commitment to implement and enforce, and commitment to 25% reduction prior to FRM. Submittal received, all items adequate except details needed on schedule

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	OX ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Type	Test Mode	Model Years	Fee \$	Mech. Train Waiver		Cost String LDT Factor lbs.		
I																
CT statewide Hartford Bridgeport (Fairfield) New Haven	.145	17.6 35.1	7/2/80		Yes	MI/MM 12/82		CC/EU I		1968+	10	Yes	\$70	20%	6001	Submittal received. Presently under review all items addressed. Bid received on RFP.
MA statewide Boston Springfield Worcester Lawrence	.177 .169 .13	18.4 17.1 13.6	3/7/80	9/16/80 A	Yes	MI/MM 1/82		D/SE I		15 years	10	Yes	\$100 or 10% of value	20%	8000	
RI statewide Providence	.189		12/7/79		Yes	MI/VM 11/77 MI/MM 1/79		D/SE I		1967+	4	Yes	no guide- lines	20%	8000	SIP revisions submitted, presently under review.
II																
NO statewide Northeast Philadelphia AQCR (Trenton)		1.5ppm .323 .22	8/8/79	3/11/80 A	Yes	MI/MM 2/74		CS/RS I		all	2.50	Yes	none		6000	*Statistically derived annual average
NY NYC & metro area: Nassau Co. Rockland Co. Suffolk Co. Westchester Co.	.323	23.9	12/10/79	5/21/80 A	Yes	MI/VM 1/81 MI/MM 1/82		D/RS I		All	6.00	Yes		20%	8500	Details requested in FRM on stringency factor application, types of vehicles subject to I/M, and requirements for mechanic certifi- cation. Letter submitted

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? = possible non-attainment					

* This heading lists urbanized areas and counties within them that are required to have I/M; in some cases only part of a county may be included.

STATE OF OREGON
ENVIRONMENTAL QUALITY COMMISSION

REPORT ON MOTOR VEHICLE
EMISSION INSPECTION PROGRAM
1979-1980

February 1981

Prepared by
Department of Environmental Quality
Vehicle Inspection Program

TABLE of CONTENTS

<u>Summary Report</u>	<u>Page</u>
Background	1
Program Operations	2
Emission Reductions From Motor Vehicles	3
Air Quality Trends	4
Population and Traffic Trends	5
Status of Other Inspection/Maintenance Programs	5
Summary	5
 <u>Appendices</u>	
A. Summary of Legislative and Administrative Policy	
B. Program Operations	
C. Motor Vehicle Emissions	
D. Heavy Duty Truck Testing	
E. Cost of Repair	
F. Air Quality Trends	
G. Engineering Activities	
H. Population and Traffic Trends	
I. Status of Other Inspection Programs	

REPORT ON MOTOR VEHICLE INSPECTION PROGRAM
1979 - 1980

Background and Legislative History

Motor vehicles are a source of air pollution in the United States, as well as in many other industrialized countries of the world. Consequently at least 27 countries have vehicle emission control regulations and about 90% of all passenger cars manufactured in the world are designed to meet an emission control standard. The major air pollutants produced by motor vehicles are carbon monoxide, hydrocarbon gases, and oxides of nitrogen. Particulate matter, including lead compounds, and sulfur oxides are also produced. In many urban areas the buildups in the concentrations and the reactions in the atmosphere of these motor vehicle produced air pollutants have given rise to public health concerns.

As a result of the recognition of a national motor vehicle pollution problem, Congress enacted the 1965 Clean Air Act Amendments. This action initiated a federal motor vehicle pollution control program which applied the 1966 California auto emission standards nationally in 1968. This 1965 Act did not produce the results Congress intended. Subsequently, the Clean Air Act Amendments of 1970 was enacted.

The Clean Air Act Amendments of 1970 established a national air quality control program with specified goals, objectives, and time schedules. New motor vehicle emission standards were promulgated. The states were required to submit implementation plans that outlined how these national goals and objectives were to be met within the state and within the specified time schedule.

Oregon's Implementation Plan was originally submitted by the Governor in 1972. This was followed in 1973 by the Transportation Control Strategy which specified in greater detail the methodology chosen by the State to control automotive caused air pollutants. The State's plan relied upon a combination of control measures at various governmental levels to obtain compliance with the national standards. These control measures included traffic flow improvements in the city, a parking/traffic circulation plan, significant mass transit improvements, an annual motor vehicle emission control inspection program, and the federal new vehicle emission control program. The State's plan has not yet met its objective. This is primarily due to delays in the federal new vehicle program and enactment by the state legislature of a biennial inspection program rather than the projected annual program.

The Clean Air Act Amendments of 1977 extend the time schedule for compliance with national ambient air standards to 1982. If a state implements all reasonable control measures--including a schedule for a motor vehicle inspection/maintenance program--and is still unable to

project compliance with the national standards, then an extension of the time schedule until as late as 1987 is possible. A summary of federal and state motor vehicle emission control legislative and administrative action is contained in Appendix A.

Since July 1, 1975, the Department of Environmental Quality has operated a motor vehicle emission inspection program within the boundaries of the Metropolitan Service District which includes the City of Portland. The program boundaries are legislatively set. By State law, vehicles registered within these boundaries must comply with the emission control standards and obtain a certificate of compliance prior to motor vehicle registration renewal.

The certificates are available only from the Department-operated inspection centers. A five dollar (\$5) fee, which totally supports the program, is charged for the issuance of a certificate. To conduct the vehicle emission inspection and maintenance program, seven test centers operate in the Portland metropolitan area. During this last year over 600,000 emission tests were conducted. Table 1 summarizes the testing activity during 1979 and 1980 and Figure 1 shows testing volumes on a monthly basis for 1979 and 1980.

The Department's inspection program is part of Oregon's Clean Air Act State Implementation Plan. The inspection program's purpose is to reduce the amount of carbon monoxide and hydrocarbon gases of the area's motor vehicles by promoting proper maintenance. The emission reductions attained help meet ambient air standards.

Program Operations

The general discussion of the State's inspection/maintenance program is contained in Appendix B. Approximately 840,000 inspections were conducted at the seven inspection centers during 1979 and 1980. In this period over 500,000 certificates of compliance were issued. Inspector staff size during this past year peaked at 56 employees compared with 68 inspectors in 1978. During 1979 inspector staff size dropped to 30. As a complement to the State's inspection program, private motor vehicle fleets of 100 or more vehicles and publicly owned fleets of 50 or more vehicles can qualify for self inspection status. The 46 licensed fleets issued almost 6,400 certificates during 1980, 2% of the total. A discussion of the fleet inspection program is also contained in contained in Appendix B.

Among the highlights of the past two years has been the change in the Metropolitan Service District boundaries. The inspection program boundary changes resulted in removing portions of Multnomah and Washington Counties and the addition of portions of Clackamas County. As this affected the program operation the Department established temporary inspection sites in the Damascus/Boring area and in the Wanker's Corner area south of Lake Oswego. Unfortunately, test volumes at both facilities necessitated the withdrawal and the closing of these operations. The Department initiated a study and proposal to construct an inspection facility in Beaverton.

This facility, if approved, would greatly improve the service to the Department's eastern Washington County customers.

Training for both employees and for the private fleet inspectors has been maintained during these past two years. Additionally the Department participated in an EPA pilot study for mechanic training. The results of this pilot study aided in the development of a mechanic training course. With the aid of federal funds, training is being conducted in the Medford-Jackson County area. By early 1981 over 140 mechanics will have received training in emission related automotive repairs.

Emission Reductions From Motor Vehicles

The purpose of conducting an inspection/maintenance program is to improve ambient air quality by achieving reduced emissions from motor vehicles. The inspection/maintenance program operating in Portland is projected to just be sufficient to achieve the EPA's minimum requirement of a 25% reduction in both HC and CO by December 31, 1987. This is due to the biennial nature of the program. If the program was on an annual basis, emission reductions would be greater.

Emission reductions, such as that described above, are calculated by computer modeling techniques and projected over many years of program operation. This modeling technique is continuously being upgraded to reflect more accurately, real world situations. As part of this type of study, the EPA has been conducting an inspection/maintenance evaluation in the Portland area. As means of an update on that program, the findings from the EPA study indicate that the program achieved mass emission reductions of 34% carbon monoxide and 24% hydrocarbons for 1975-1977 model year cars over a year's period. This comparison was between cars operating in Portland and those operating in Eugene. Discussions of some of the EPA activities in Portland are included in both Appendices C and G.

Tailpipe emission measurements, obtained at the inspection stations, are the day-to-day tool used to measure compliance with the inspection program standards. The reduction in these emissions is another indicator of program effectiveness. A short test, like the test used in the inspection program, is an effective method of identifying high emitting vehicles. When a vehicle is first manufactured, it generally complies with the new vehicle emission standards. As the vehicle ages, emissions increase. This deterioration in emission control is due to many factors. Parts in the vehicle wear and lose their effectiveness and require replacement. Some repairs are made that do not adequately address the required maintenance. An inspection test readily identifies vehicles needing correction or additional maintenance, so that the vehicle operates consistent with the manufacturer's design criteria. When a vehicle is brought into total conformity with the vehicle manufacturer's design criteria, overall emissions are reduced, and the vehicle is then operating as originally intended. In past reports, the Department has presented emission distributions which show the effects of deterioration and the effects of proper maintenance. Emission distribution bar charts shown in Figures 2 and 3 indicate that increased emissions generally result with increased

vehicle age. The charts indicate that, while the majority of vehicles comply with the emission criteria, the number of cars exceeding the criteria in a given category grows each year and that the amount of pollutants they emit also increases. Repair of these high emitting vehicles dramatically reduces their emissions. The average mass emission reduction for repaired vehicles was 47% for carbon monoxide and 42% for hydrocarbons, as measured in the EPA Portland study. Idle emission reductions after repair for the vehicles which failed the DEQ test were over 90% for carbon monoxide and 80% for hydrocarbons. A more detailed discussion on emission characteristics and reductions is contained in Appendix C.

The reported costs for emission-related repair has generally been low, averaging \$17. Less than 4% of the vehicles which failed reported repairs in excess of \$100. A special study by the Department indicated that some repair facilities (approximately 20% in this study) may not be performing complete repairs, but instead just simple fixes to pass the DEQ test. The Department is attempting to reduce this type of activity by assisting in and coordinating training programs to help mechanics properly diagnose and repair vehicle emission control systems.

With the newer motor vehicles, advances in air pollution control technology are being implemented. These newer vehicles, which use closed loop sensors and computer technology are now on the market. It is too early to tell how well these vehicles will maintain their emission system performance. We are establishing baseline information on these vehicles so that changes can be determined.

Heavy duty gasoline powered trucks are included in the inspection program. A discussion on the heavy truck program is included in Appendix D. Emission reductions for these trucks were sizable, up to a 25% idle carbon monoxide emission reduction and a 16% idle hydrocarbon emission reduction compared to a period two years ago. Many of these vehicles operate in congested urban and shopping areas where the emission reductions have maximum benefit.

Air Quality Trends

The motor vehicle inspection program is an important element in the Portland area's overall transportation control strategy. The transportation control strategy strives to reduce carbon monoxide and ozone (oxidants) to comply with ambient air standards. Carbon monoxide concentrations measured at the area's monitoring stations have been reduced. Carbon monoxide violation days have also been decreased from 88 days in 1970 to 20 days in 1980. Compliance with the carbon monoxide ambient standard is projected to be achieved during 1985 with the inspection maintenance program.

A special statistical study of the effects of the inspection program is scheduled to be completed this April. The statistical study, being conducted by the University of Wisconsin, is analyzing Oregon ambient carbon monoxide data for Eugene and Portland. Preliminary conclusions

state that the federal new car program and the inspection maintenance program are directly responsible for the carbon monoxide decreases. The final report will attempt to quantify the relationship between the two programs.

Decreases in ambient ozone concentrations due to emission reductions have been achieved. The inspection maintenance program has been estimated to provide an approximate 12,000 kg/day hydrocarbon emission reduction by 1987. Ozone violations have dropped during the last two years in the Portland metropolitan area. The three probable causes for the decline in these ozone emissions are: the meteorology during the past two years has not been as conducive to ozone formation as it had been in previous years; there have been monitor methodology changes; and there have been emission reductions from various control strategies. It is estimated that all existing control strategies, including the inspection maintenance program will be necessary to meet the federal requirements for reductions in ambient air concentrations of ozone as outlined in the Clean Air Act.

Population and Traffic Trends

In previous reports population and traffic discussions were made. Traffic trend analysis has been reviewed and updated, and is presented in more detail in Appendix H. Traffic volumes have increased continuously over the past few years peaking in 1979. A slight traffic reduction was observed in 1980. Changes in traffic patterns with increased bus ridership and growing population in the suburbs have been noted. Increasing fuel and vehicle operating costs may be part of the causes of changing traffic patterns. Studies made during this past year indicate that there has been no great change in out-of-area vehicles consistently operating in the metro area.

Status of Other Inspection/Maintenance Programs

Appendix I lists the status of the ongoing and proposed inspection/maintenance programs in the United States. Currently there are 22 mandatory inspection programs now planned for implementation in the next two years. The State of Washington is initiating an inspection program. The Washington program is proposed to start January 2, 1982. Vancouver has been included in the Washington program because of Vancouver's contribution to the metropolitan Portland area's photochemical oxidant problem. All states, requiring inspection programs for ambient standard compliance, except California and Kentucky, have approved programs in some stage of implementation. Economic sanctions, as required by the Clean Air Act, have been proposed for California and Kentucky.

Summary

The Clean Air Act and its amendments established a national air quality control program with specific goals and objectives and time schedules. Oregon's Clean Air Act Implementation Plan includes a transportation control strategy geared to achieving these goals for the Portland

Metropolitan area. The inspection/maintenance program is an important element of that plan. The EPA has required that inspection/maintenance programs contribute a 25% reduction in both hydrocarbons and carbon monoxide emissions from motor vehicles by 1987. These reduction requirements are forecast to be met with Oregon's current program. Average idle emission reductions for individual cars of over 90% carbon monoxide and 80% hydrocarbons after repair have been observed. Mass emission differences for 1975 and newer vehicles operating in Portland compared to Eugene were 34% for carbon monoxide and 24% for hydrocarbons. These inspection/maintenance emission reductions will be retained for up to a year after vehicle repairs are completed as demonstrated by both the long-term federal studies and the data from the Oregon inspection program. Heavy duty gasoline powered trucks are showing good emission performance. Emission reduction benefits for heavy duty trucks of up to 25% idle carbon monoxide and 16% idle hydrocarbons have been observed.

With the biennial inspection program operating and with the other ongoing control measures, compliance with ambient air carbon monoxide standards is projected to be achieved by 1985. Compliance with the federal ozone standard is projected to be achieved by 1987 with all existing and currently planned control measures.

Oregon's inspection and maintenance program has been demonstrated to be effective in reducing emissions from motor vehicles, in maintaining those emissions reductions, and in contributing to the overall effort of meeting the clean air goals.

WPJ:g
VRD35 (1)

Table 1

DEPARTMENT OF ENVIRONMENTAL QUALITY
 VEHICLE INSPECTION PROGRAM
 522 Southwest Fifth Avenue
 Portland, Oregon

Activity Report for January, 1979 through December, 1980

EMISSION LIGHT DUTY INSPECTION TESTS 841,703

CERTIFICATES OF COMPLIANCE ISSUED* 509,628

Emission Inspection Tests

Pass Emission Test	501,597 = 60%
Tests Failed for Carbon Monoxide (CO)	128,496 = 15%
Tests Failed for Hydrocarbons (HC)	70,406 = 8%
Tests Failed for Both HC & CO	52,765 = 6%
Tests Failed for Emission Equipment Disconnects	40,514 = 5%
Tests Failed for Other Causes (i.e., smoke, dilution, idle RPM)	47,930 = 6%

Pre-Catalyst Vehicle Tests (June, 1979 - December, 1980)

Number of Tests	450,329 = 65% of all Tests
Percentage Pass	56%

1975 and Newer Vehicle Tests (June 1979 - December, 1980)

Number of Tests	238,649 = 35% of all Tests
Percentage Pass	66%

Total Light and Heavy Duty Emission Inspection Test by Location

Powell	-	169,827
Tigard	-	144,746
Milwaukie	-	121,684
Northeast	-	120,117
Rockwood	-	111,473
Hillsboro	-	88,631
Northwest	-	84,358
Mobile No. 6	-	12,769
Mobile No. 5	-	12,527

* includes heavy duty trucks

WPJ:r
 VDD14.B

Figure 1

MONTHLY TEST VOLUME AT DEQ INSPECTION STATIONS

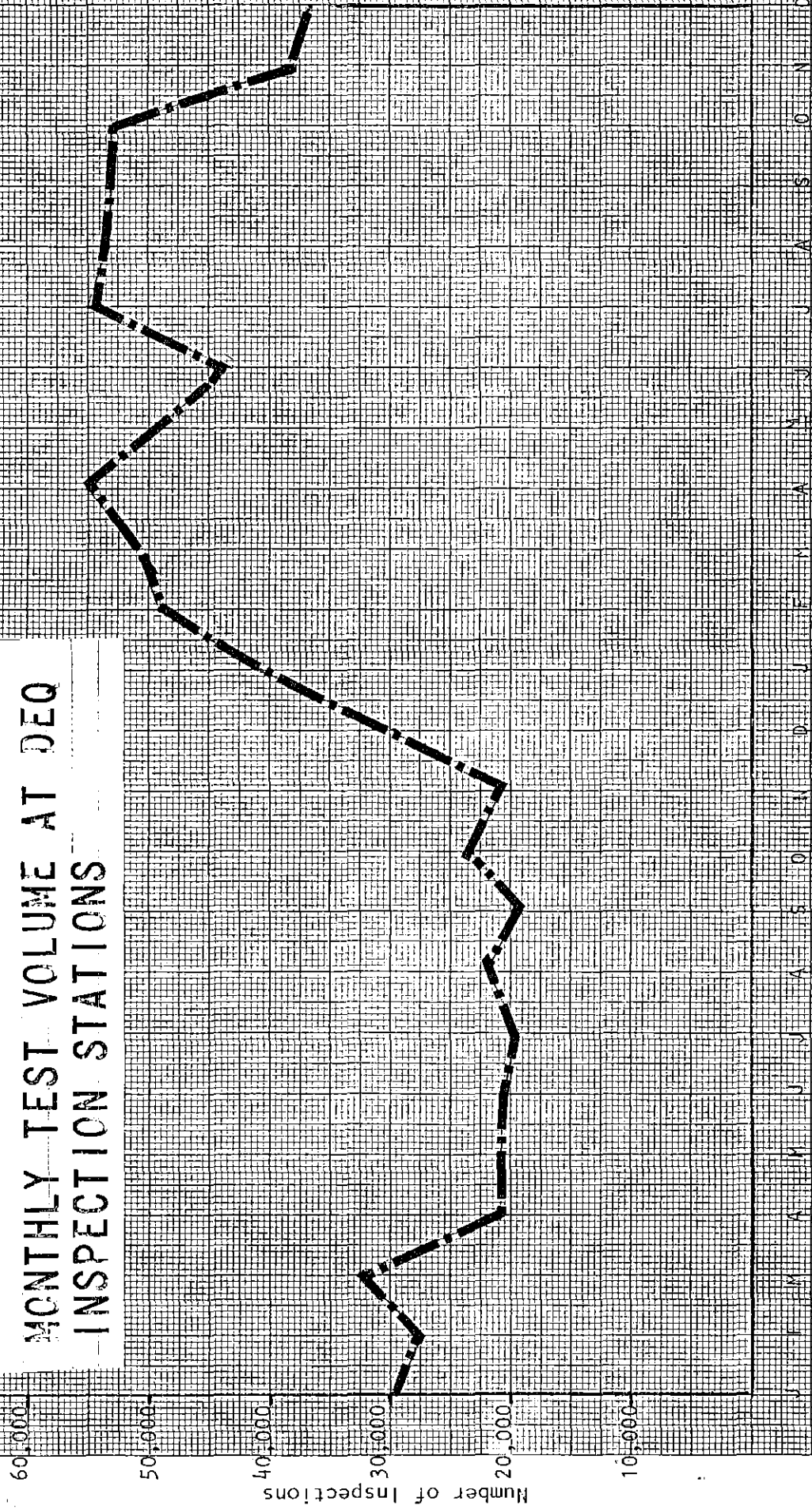
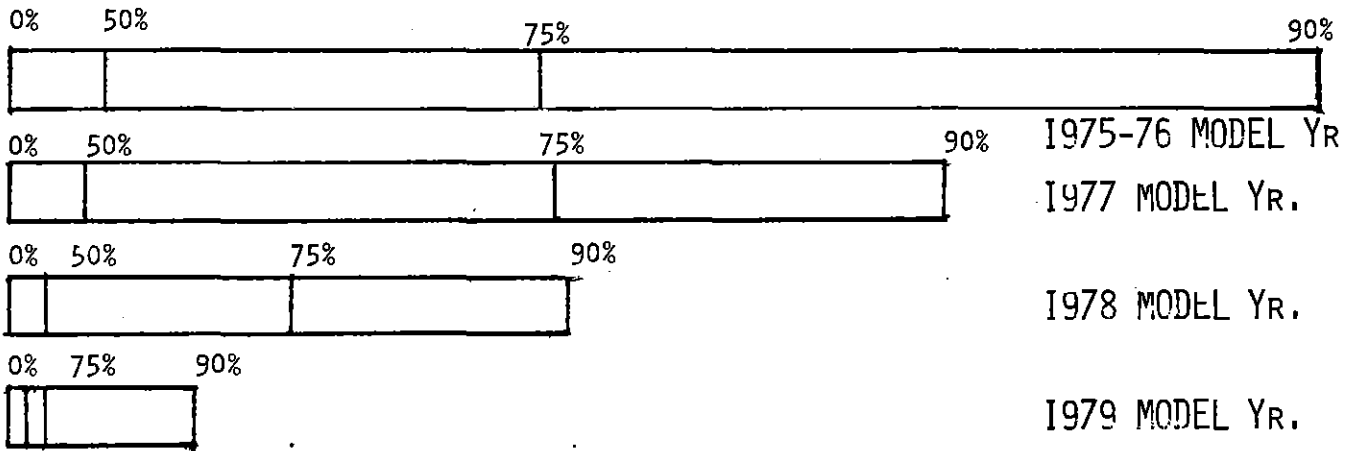


Figure 2
DEPARTMENT OF ENVIRONMENTAL QUALITY

Vehicle Inspection Program

Carbon Monoxide Idle Emission Distribution for a
Popular Vehicle Make

BARS SHOW PERCENT OF POPULATION BELOW CONCENTRATION
TESTED IN 1979



TESTED IN 1980

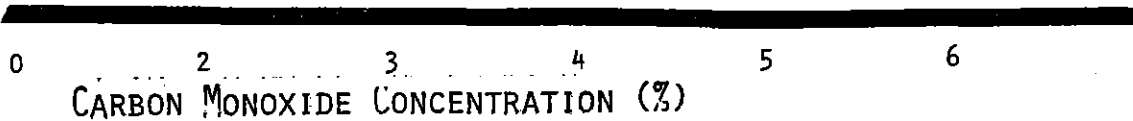
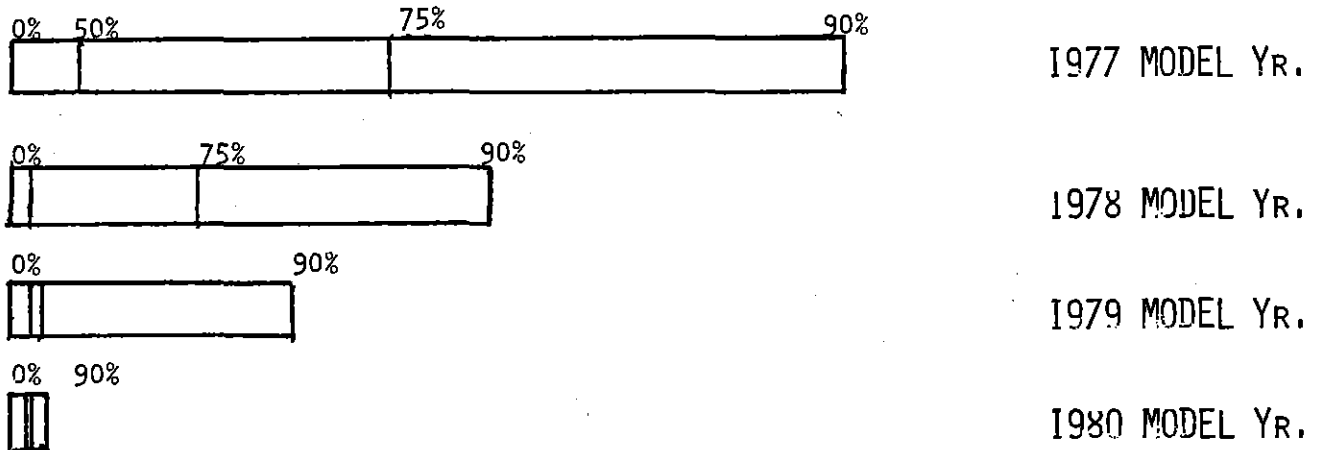


Figure 3

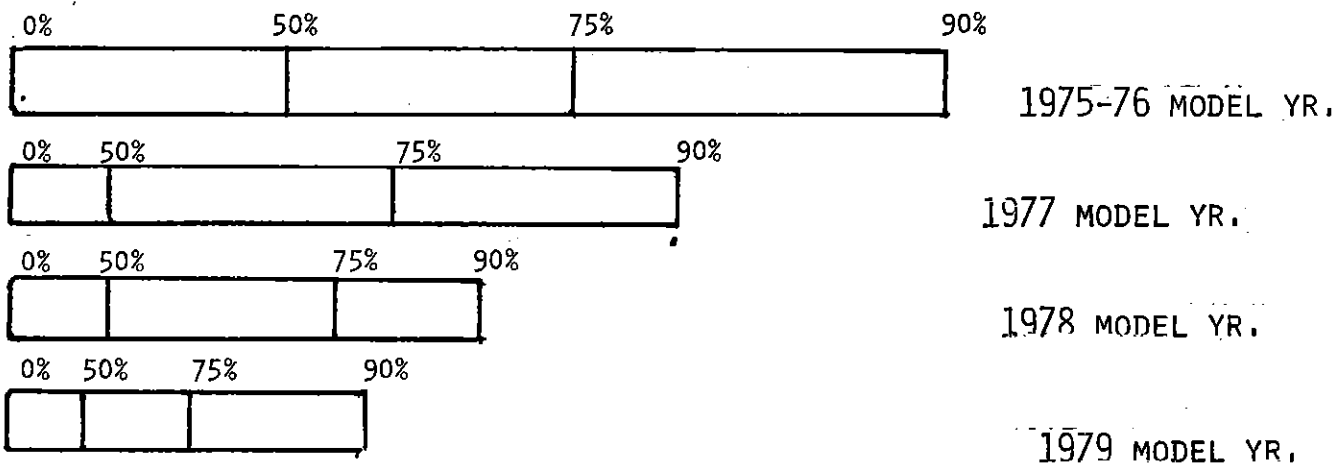
DEPARTMENT OF ENVIRONMENTAL QUALITY

Vehicle Inspection Program

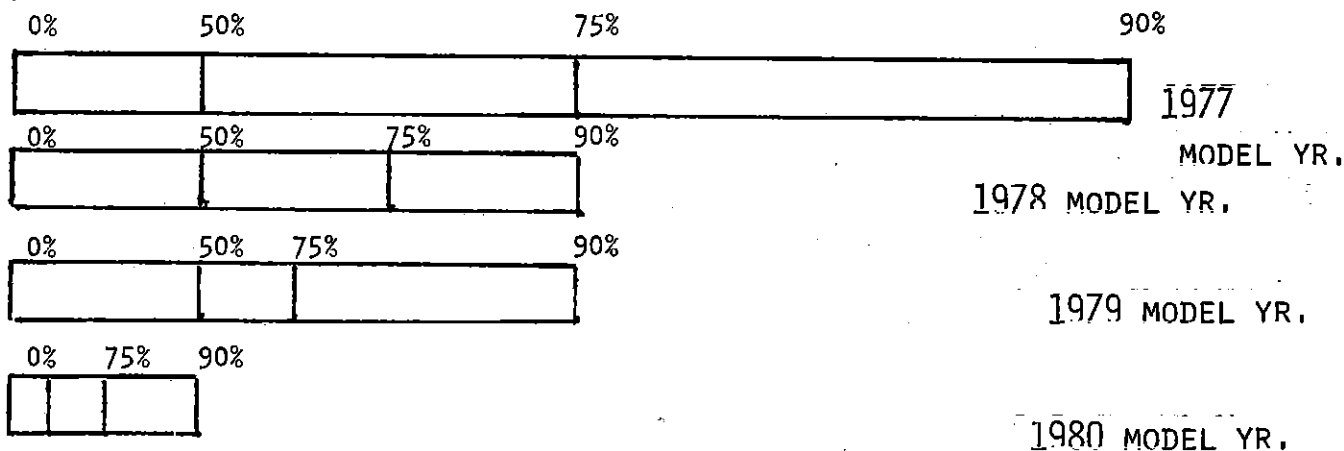
Exhaust Hydrocarbons Idle Emission Distributions for a Popular Vehicle Make

BARS SHOW PERCENT OF POPULATION BELOW CONCENTRATION

TESTED IN 1979



TESTED IN 1980



0 100 200 300 400 500

HYDROCARBON CONCENTRATION (PPM)

APPENDIX A

A SUMMARY OF LEGISLATIVE AND ADMINISTRATIVE ACTIONS

FEDERAL LEGISLATION

CLEAN AIR ACT OF 1965	Title II ("Motor Vehicle Air Pollution Control Act") empowers HEW to establish emission standards for sale in California beginning with model year 1966.
CLEAN AIR ACT OF 1967	Establish emission standards for pollutants from new motor vehicles manufactured for sales in remaining 49 states beginning with model year 1968. Emissions regulated by HEW were crankcase emissions (HC), fuel evaporative emission (HC), and exhaust emissions (CO and HC).
CLEAN AIR ACT OF 1970	Directs EPA to manage the national control of air pollution by developing Interstate Air Quality Agencies or Commissions, Air Quality Control Regions, establishing national primary and secondary air quality standards and requiring each state to submit implementation plans. Specifies 90% reduction in exhaust emissions of CO and HC from allowable 1970 levels by the 1975 model year and 90% reduction in NO _x emissions from average measured 1971 levels by the 1976 model year. Required manufacturers to warrant emission control equipment for 5 years or 50,000 miles; subjects certain persons to a civil penalty of not more than \$10,000 for tampering.
CLEAN AIR ACT OF 1970, AS AMENDED, JUNE 1974	Requires EPA to comply with provisions of Energy Supply and Environmental Coordination Act of 1974.
CLEAN AIR ACT AS AMENDED, AUG. 1977	Requires States to rewrite State Implementation Plans. Ties compliance with National Clean Air Goals to federal monies. Modifies compliance schedule for automobile exhaust emissions. Modifies mandated manufacturers emission performance warranty to 2 years, 24,000 miles. Requires States to implement all practicable control strategies. Allows States, under certain circumstances, to adopt California's emission standards for new cars.

SUMMARY
FEDERAL GOVERNMENT AGENCIES' ACTIVITIES

March 30, 1966

The initial Federal motor vehicle emission standards became applicable with the 1968 models. The standards and procedures were similar to those which had been employed by California and required specified control of exhaust hydrocarbons and carbon monoxide from light-duty vehicles and one hundred percent control of crankcase emissions from gasoline-fueled cars, buses, and trucks. The term light-duty vehicle refers to self-propelled vehicles designed for street or highway use, which weigh less than 6,000 pounds and carry no more than twelve passengers.

June 4, 1968

Revised Federal standards were published which require more stringent control of hydrocarbons and carbon monoxide from light-duty vehicles, of evaporative emissions from fuel tanks and carburetors of light-duty vehicles, of exhaust hydrocarbons, and carbon monoxide emissions from gasoline-fueled engines for heavy-duty vehicles, and of smoke emissions from diesel engines for heavy-duty vehicles. The fuel evaporative emission standards became fully effective with model year 1971. The other standards applied to 1970 model year vehicles and engines.

July, 1970

The Federal Government adopted a Constant Volume Sample or CVS procedure, during which the vehicle is run through a test cycle designed to simulate urban driving. The characteristics of the standard test drive were based on an elaborate study of Los Angeles traffic patterns in 1965. All emissions from ignition key-on after a 12-hour storage period to the end of the test cycle are collected and analyzed. EPA further refined the test procedure by later including both a cold start (after a 12-hour storage) and a hot start (after a 10-minute wait) and the computation of a weight average as a basis for 1975 and 1976 numerical standards. These changes, as well as certain minor modifications in analytical techniques, were intended to make test results more representative of emissions from in-use vehicles.

- November 10, 1970 Standards were published applicable to 1972 model light and heavy-duty vehicles and heavy-duty engines.
- April 30, 1971 National primary and secondary ambient air quality standards were published in final rulemaking, including standards for hydrocarbons, carbon monoxide and oxides of nitrogen. Also, the State of California was granted the first of several waivers of Federal preemption for motor vehicle emission standards more stringent than those currently in effect by Federal regulations.
- May, 1971 Three contracts were awarded to provide prototype cars for government testing and evaluation under the Federal Clean Car Incentive Program.
- June 18, 1971 The Low-Emission Vehicle Certification Board held its initial meeting and approved procedural regulations concerning preferential purchasing of low-emission vehicles for use in government fleets.
- June 29, 1971 The first Federal standards were issued requiring control of oxides of nitrogen emissions and prescribing measurement techniques for this pollutant applicable to 1973 model light-duty motor vehicles. Also, standards were promulgated to prescribe the 1975 exhaust hydrocarbon and carbon monoxide emission requirements and 1976 oxides of nitrogen emission requirement applicable to light-duty vehicles. In addition, modifications in test and analytical procedures were included.
- December 15, 1972 EPA ordered six motor vehicle manufacturers to eliminate certain emission control system disabling devices from their 1973 automobiles produced after specified dates.
- January 10, 1973 Fuel regulations were promulgated to insure that lead-free gasoline would be available by July 1, 1974 to owners of automobiles equipped with catalytic converters. Also, regulations were promulgated requiring the amount of lead in gasoline to be reduced to an average of 1.25 grams per gallon by January 1, 1978.

- April 11, 1973 EPA suspended for 1 year the statutory 1975 model year light-duty vehicle emission standards for hydrocarbons (HC) and carbon monoxide (CO) and established interim standards.
- July 20, 1973 EPA suspended for 1 year the statutory 1976 model year emission standards for nitrogen oxides (NO_x) and established interim standards. The 1976 standards are applicable to light-duty vehicles and engines manufactured during or after model year 1976.
- August 7, 1973 Regulations for the control of exhaust pollutants from diesel-powered light-duty passenger vehicles to be effective with the 1975 model year were promulgated. These vehicles were now required to meet the same emission standards that were applicable to gasoline-fueled light-duty vehicles. Also, regulations for the control of emissions from light-duty gasoline-fueled trucks, effective with the 1975 model year were promulgated. (A light-duty truck is defined as any motor vehicle weighing 6,000 pounds or less, which is designed primarily for transporting property, or is a derivative of such a vehicle, or has special features enabling off-street operation). This action was in response to the U.S. Court of Appeals' decision regarding emission standards for 1975 model year light-duty vehicles (International Harvester Company vs. Ruckelshaus, D.C. Cir. No. 72-1517, February 10, 1973) in which the court ordered EPA to remove light-duty trucks from the light-duty vehicle category. The new emission standards for light-duty trucks were significantly more stringent than the 1974 standards, but were slightly less stringent than the interim 1975 standards for light-duty vehicles.
- January, 1974 EPA published the first of yearly fuel consumption results in a booklet for consumer use.
- January 27, 1974 EPA promulgated regulations designed to accomplish three main purposes: (1) to clarify certain requirements pertaining to vehicle emissions certification, and provide that certification may be denied (or revoked) on account of a failure to comply with such requirements; (2) to clarify

that the Administrator would not certify any vehicle employing Auxiliary Emission Control Devices which have been determined by the Administrator to be "defeat devices;" and (3) to provide that once the regulations are in effect, production vehicles which do not conform in all material respects to the same design specifications that applied to a certification vehicle would not be covered by the Certificate of Conformity.

June 25, 1974

Under the Recall Program, EPA tested in-use vehicles and announced that four manufacturers of certain 1972 model year vehicles appeared to be in violation of Federal air pollution emission standards.

September 4, 1974

Regulations were promulgated which provided for the exclusion and exemption from emission standards for certain motor vehicles and motor vehicle engines.

October 15, 1974

EPA and the Federal Energy Administration (FEA) published a notice of Voluntary Fuel Economy Labeling for 1975 model year vehicles.

October 22, 1974

EPA published the final rulemaking concerning the control of emissions from light-duty powered trucks.

November 18, 1974

EPA promulgated regulations which required manufacturers to certify new motor vehicles designed for initial sale at high altitude to comply with emission standards at those altitudes. These amendments are applicable to light-duty gasoline-fueled vehicles, light duty diesel vehicles, and light-duty trucks beginning with the 1977 model year.

November 21, 1974

EPA promulgated regulations for the emissions control of 1976 and later model year light-duty diesel powered trucks.

December 23, 1974

EPA promulgated regulations governing the recall of motor vehicles and motor vehicle engines which failed to conform to emission standards for their useful life.

May 30, 1975

EPA promulgated regulations to establish the certification procedures for 1977 model year light-duty diesel powered trucks offered for sale in high altitude regions.

- June 5, 1975 EPA established standards for 1976 model year light-duty vehicles and light-duty trucks and emission standards for 1977 and later model year light-duty vehicles, light-duty trucks and diesel-powered light-duty trucks.
- June 23, 1975 EPA promulgated regulations to deny importation, except as a bonded entry, to all vehicles certified with a catalyst which were driven outside the United States, Canada, and Mexico unless the vehicles were included in an internal control program.
- February 6, 1976 EPA announced it was considering amendments to increase in the upper weight limit for 1978 and later model year light-duty trucks from 6,000 to 8,500 pounds gross vehicle weight (GVWR). Also proposed was a reduction of the current light-duty truck emission standards which would represent more than a 10% reduction from the present limits for current light-duty trucks, and more than a 67% reduction for vehicles to be added to the class.
- May 11, 1976 EPA published proposed revised regulations for 1979 and later model year heavy-duty gasoline-fueled and diesel engines.
- July 20, 1976 EPA promulgated regulations establishing a testing program for new automobiles coming off the assembly line in order to insure that these vehicles conform to the pollution control requirements of the Clean Air Act.
- November 3, 1976 EPA published an advance notice that it was considering the development and promulgation of regulations to provide general clarification concerning the coverage of Section 207(a) of the Clean Air Act (the emission control production warranty) for light-duty vehicles and light-duty trucks. In EPA's view, this was necessary because the Section 207(a) warranty has not developed into an effective remedy for the consumer, despite its presence since the 1972 model year.
- November 10, 1976 EPA promulgated regulations which require manufacturers of 1977 and later model year automobiles and light-duty trucks to label each vehicle with fuel economy information.

November 16, 1976 EPA issues advanced notice of rulemaking regarding the Emission Control warranties for light duty cars and trucks.

December 28, 1976 EPA issues the revised light duty truck regulation for 1979 and later model year vehicles. The revisions increase the weight on light duty trucks from 6,000 lbs to 8,500 lbs gross.

January 5, 1977 EPA issues regulation for the emission certification and test procedures for new motorcycles.

April 20, 1977 EPA issues final rule on the sale on the high altitude vehicles.

May 2, 1977 Proposed EPA estimates of emission reduction achievable through inspection and maintenance of light duty vehicle, motorcycles, and light duty trucks are made. (Appendix N)

May 19, 1977 EPA issues final rule on regulation of fuels and fuel additives. The rule clarifies EPA's regulation for phased reduction of lead additives in motor gasoline and does not preempt state or local governments from controlling other aspects of fuel and additives used in motor gasolines.

May 25, 1977 EPA issues emission control system performance regulations and proposed rule for the short test cycle establishment. Issues the procedures and tests that will invoke section 207B of CAA.

June 6, 1977 EPA issues fuel economy and emission testing procedures for 1978 and later model vehicles. The EPA proposes several changes to its fuel economy labeling regulations.

June 8, 1977 EPA issues certification test results for 1977 model year.

June 28, 1977 Republication of the 1977, 1978, and 1979 model year vehicle certification regulations. One aspect of this publication was the inclusion of the motorcycle test procedure.

August 10, 1977 EPA issues notice of interim final rulemaking on regulations which established evaluation criteria and test procedures for evaluating fuel economy improvement claims for retrofit devices.

August 11, 1977 EPA issues final light duty vehicle exhaust emission standards for 1978 model year.

August 25, 1977 EPA issues notice of availability that procedures for measuring exhaust sulphuric acid content are available.

August 29, 1977 EPA issues notice to the public that emission control system performance warranty regulation public workshops are available and sets dates. One of the meetings held September 30th, was in Portland.

October 21, 1977 EPA issues notice of proposed rulemaking changes to the emission test procedures. Such revisions to the testing procedures would allow for certification testing within any range of engine adjustment available.

January 6, 1978 EPA issues a notice of intent to propose regulation to include new motorcycles and in the selective enforcement auditing procedures.

February 2, 1978 EPA issued rulemaking for the selective enforcement auditing procedures.

June 7, 1978 EPA issues notice of hearing for the MMT waiver request. The outcome of this hearing was that MMT the fuel additive methylcyclopentadienyl manganese tricarbonyl was banned.

June 22, 1978 EPA issues correction notice on a final rulemaking early in the year requiring fuel economy labeling procedures for 1979 and later model year vehicles.

July 20, 1978 EPA issues some miscellaneous amendments and corrections regarding the fuel economy regulations.

August 24, 1978 EPA issues a final rule for the evaporated emission regulation for light duty vehicles and trucks, applicable with the 1981 model year.

August 29, 1978 EPA issues notice of proposed rulemaking which announces a set of regulations for testing fuels and fuel additives.

September 5, 1978	EPA issues the final rule on the fuel economy calculation and test procedures for 1979 and later model light trucks.
January 29, 1979	EPA issues a change in the ambient oxidant health standard from 0.08 ppm to 0.12 ppm.
January 21, 1980	EPA issues final rule increasing the stringency of hydrocarbon and carbon monoxide emissions limits and revising the certification test procedures for heavy-duty gasoline-fueled and diesel engines.
March 3, 1980	EPA issues final rule extending the privilege of making engine modifications for research purposes to individuals other than vehicle manufacturers.
March 5, 1980	EPA issues final rule establishing a standard for emission of particulate matter from diesel-fueled light-duty vehicles.
April 17, 1980	EPA issues notice of decision denying fuel additive waiver request by Beker Industries, Inc. for use of 0-15 percent methanol in unleaded gasoline.
June 22, 1980	EPA issues final rule establishing emissions "short tests" which will be used to enforce the pollution control equipment warranty for 1981 and newer vehicles. On a two speed idle test, if emissions exceeded 1 percent CO or 200 ppm HC, a vehicle owner will be entitled to pollution control equipment repairs at the manufacturer's expense during the effective time of the warranty.
August 13, 1980	EPA issues decision to deny a fuel additive waiver request by Conservation Consultants of New England Inc. for use of specific methanol/ethanol mixtures at 10 percent in unleaded gasoline.
August 27, 1980	EPA issues results of certification tests for 1980 new motor vehicles.
September 25, 1980	EPA issues the final gaseous emissions regulations for 1984 and later model year light-duty trucks.
October 8, 1980	EPA issues the final high altitude emissions standards for 1982 and 1983 model year light-duty motor vehicles.

November 25, 1980

EPA issues the final regulations governing aftermarket parts certification. Under these regulations aftermarket manufacturers may serve notice that their part is equivalent to the original equipment part with respect to its impact on emissions.

SUMMARY
OREGON LEGISLATIVE ACTION

- 1969 Adopted legislation which prohibited the removal or rendering inoperative of factory-installed pollution control equipment.
- 1971 Legislation was adopted which directed the Department of Environmental Quality to develop a periodic Motor Vehicle Emission Inspection Program.
- 1973 Assembly reviewed Motor Vehicle Emission Control Inspection proposals, but adjourned without providing budget for a mandatory program.
- Emergency Board authorized the Department to implement a voluntary pilot program using \$1,000,000 in funds appropriated during the regular session.
- 1974 During the Special Session, action was taken to provide for an increase of inspection fees to \$5.00; restricted the program to within the Metropolitan Service District; required annual emission control inspection; and set the start-up date as July 1, 1975.
- 1975 Legislative Assembly again reviewed the implementation of the program and at the end of the session changed the laws so that an inspection would be required only every other year with vehicle license renewal as of July 1, 1975.
- Emergency Board approved a revised budget reflecting the reduced fee income resulting from bi-annual inspection of vehicles.
- 1976 Speaker of House of Representatives assigned a five member Task Force on Auto Emission Control to review the program and forward recommendations.
- 1977 Legislation was adopted requiring publicly owned vehicles to comply with emission inspection regulations; exempted "fix load" vehicles and vehicles operating in interstate commerce from inspection requirements; direc-

ted EQC to determine most cost effective method of conducting inspection; and enacted legislation prohibiting visible emissions from motor vehicles operating on the public roads, setting limitations and establishing penalty.

1979

Legislation was adopted that amended ORS 481-190 updating the DEQ vehicle inspection boundaries to be identical with the current boundaries of the Metropolitan Service District.

Legislation was adopted that amended ORS 483-825 to include the use of turbochargers on motor vehicles provided their installation did not significantly affect the control of air pollution.

SUMMARY
ENVIRONMENTAL QUALITY COMMISSION ACTION

March 30, 1970	Adopted motor vehicle visible emission regulation.
October 25, 1972	Approved the projected inspection/maintenance program after reviewing a comprehensive staff report.
March 2, 1973	Held public hearings to designate those Oregon counties in which the vehicle inspection program would be instituted.
March 21, 1973	Designated Clackamas, Columbia, Multnomah and Washington counties and set an effective starting date for the program of January 1, 1974.
May 29, 1973	Adopted the Portland Transportation Control Strategy as an Amendment to Oregon's Implementation Plan (Clean Air Act).
November 26, 1973	Commission authorized the deletion of Columbia County from the inspection program requirements and to extend the effective date of the program to May 31, 1974.
January 25, 1974	Adopted criteria for Certification of Motor Vehicle Control Systems which precluded the use of retrofit devices.
December 20, 1974	Gave authorization for Public Hearings to adopt Motor Vehicle Inspection Program Criteria.
March 28, 1975	Adopted proposed Motor Vehicle Emission Control Inspection Test Criteria, Methods and Standards.
June 25, 1976	Adopted Emergency Rules Extending Enforcement Tolerance for the Motor Vehicle Inspection Program through June 30, 1977.
August 27, 1976	Repealed the Emergency Rules adopted June 25, 1976 and adopted Revisions to OAR Chapter 340, Sections 24-320 through 24-330 pertaining to Motor Vehicle Inspection Standards.

January 14, 1977	Transmitted report to legislature on Motor Vehicle Emission Inspection Program.
February 25, 1977	Authorization for Public Hearing for proposed heavy-duty truck inspection criteria.
April 1, 1977	Authorization for Public Hearing for proposed revisions to light-duty inspection criteria.
May 27, 1977	Adopted inspection criteria for heavy-duty trucks.
June 24, 1977	Adopted inspection criteria revisions for light-duty vehicles.
November 18, 1977	Authorized Public Hearing for testing procedures for publicly owned vehicles.
February 24, 1978	Adopted procedures for testing publicly owned vehicles.
April 28, 1978	Authorized Public Hearing for revisions to inspection criteria.
June 30, 1978	Adopted revisions to motor vehicle inspection criteria.
September 22, 1978	Conducted Public Hearing and adopted minor revision to inspection criteria.
September 22, 1978	Received status report on contractor vs. state operation of inspection program and issued finding.
February 23, 1979	Accepted "Report on Motor Vehicle Emission Inspection 1977-1978".
April 27, 1979	Gave authorization for public hearing to update vehicle emission standards for 1979 model year vehicles and others.
June 29, 1979	Adopted updates to vehicle emissions standards for 1979 model year vehicles and others, also adopted certain clarifications in the tampering portion of the inspection.
November 16, 1979	Gave authorization for public hearing to make housekeeping regulation changes and regulations to clarify the allowable engine changes.

January 18, 1980

Adopted housekeeping regulations and regulations to clarify allowable engine changes.

April 18, 1980

Gave authorization for public hearing to update vehicle emission standards for 1980 model year vehicles and others.

June 20, 1980

Adopted update to vehicle emission standards for 1980 model year vehicles and others.

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Appendix B

PROGRAM OPERATIONS

ORS 481.190 provides that all motor vehicles, with certain exceptions, registered within the boundaries of the Metropolitan Service District, which includes the City of Portland, comply with the emission criteria established by the Environmental Quality Commission in order to register or reregister a motor vehicle. The passenger car registrations, which constitute the bulk of the inspection workload, are on a biennial registration renewal system and are tested every two years. Heavy duty and government owned vehicles are tested on an annual basis.

The primary goal of the inspection program is to reduce air pollution from the area's motor vehicles by promoting proper maintenance. Providing a good level of service for the public at the inspection facilities is also one of the program goals. Service levels are maintained by providing sufficient and convenient inspection facilities; by maintaining reduced customer waiting times; by maintaining a trained and helpful staff; and by maintaining the test equipment in good operation.

The Department of Environmental Quality operates seven motor vehicle emission inspection centers with two lanes each and a mobile unit to service the Portland metropolitan area. The general locations of these stations are in Southeast Portland, Northeast Portland, Northwest Portland, Milwaukie, Gresham, Tigard, and Hillsboro. The Department augments its inspection program operations with a fleet inspection program, which allows for licensed fleets to self-inspect their own vehicles.

With the biennial cycle, the motor vehicle passenger car registrations and the emission inspections are not spread evenly throughout the two years. They remain concentrated more in the even years, 1980, than in the odd years, 1979. Figure 1 is the plot of monthly testing activities during 1979 and 1980.

During the first six months of 1979 testing volume remained at about the anticipated reduced level at our stations. These stations were able to operate at reduced staff level. In July 1979 testing volume began to increase as expected. Vacant inspector positions were filled. Testing hours for the stations were expanded to 8 a.m. to 6 p.m., Tuesday through Saturday, and mobile units were placed in the Damascus and Wanker's Corners area.

During the past two years approximately 840,000 light duty vehicle inspections were conducted at the Department's facilities. In this period, over 500,000 Certificates of Compliance were issued. The activity summary is shown in Table I. At the beginning of November, 1980, testing operations were reduced at two of our stations because of expected decline in registration activities.

To increase testing availability to the public, the planning for an inspection station in Beaverton has been started. Initial architectural plans have been drawn. The proposal was submitted to the December, 1980 Emergency Board. The Emergency Board recommended that the plans be deferred pending review during the 1981 Legislative Session. If a Beaverton inspection center is completed, plans call for the closing of current mobile operation inside a drive-in theatre in Tigard. The overall impact of this action should provide increased service level for the eastern Washington County area residents.

Customers waiting times at the inspection station has been closely monitored. During the past two years overall waiting times at the Powell Street facility have dropped and Tigard has replaced Powell as the station with the longest waiting times. Peak waiting times occur at the end of the month. Waiting times at Tigard during these periods often exceed 1 hour. At non-peak periods, customers are served in a quick and timely manner. Typical waiting times are shown in Table 2.

Training of inspection program personnel has continued and provides the necessary background to insure proper inspection skills. New inspection program personnel receive 40 hours of class room training followed by a month of on-the-job training. Training is also provided for the licensed fleet inspectors. Licensed fleet inspectors are employes of private fleets that are licensed for self inspection. The fleet inspection program is discussed below. The fleet training program provides for 24 hours of classroom instruction. Following the classroom instruction, all attendees must pass a written test. During 1980, twenty fleet inspectors were trained.

The Department staff has participated in programs aimed at increasing mechanic training. In early 1980, a pilot study on mechanic training was done in Portland. The results of that study led to a 30 hour training course which has been conducted in the Medford-Jackson County area. By early 1981, approximately 140 mechanics will have completed this training course.

There are currently 45 licensed inspection fleets. These fleets operate as an adjunct to the regular inspection operation. To qualify as a fleet, a company or governmental agency must have a fleet of 100 vehicles (50 for governmental agencies) and have approved exhaust gas analysis equipment. Its employes must complete a Department operated training session. During 1980 the inspection fleets issued 6390 certificates of compliance. This represents about 2% of the total certificates of compliance issued. A Summary of Fleet Activity is listed in Table 3.

Maintenance activities and calibration checks of the programs equipment have been maintained. Variations in emission measurements at the stations have remained generally within the design limits of the equipment. Maintenance has been designed to keep the equipment operating in an efficient and cost effective manner.

Summary

During the past two years, over 840,000 inspections were conducted. This activity has been augmented by the fleet inspection program. Continued efforts in training have been effective for our inspection program personnel. A special training program is underway in the Medford-Jackson County. The maintenance operations are conducted in an efficient manner.

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Revised 2-17-81:r

Figure 1

MONTHLY TEST VOLUME AT DEQ INSPECTION STATIONS

Number of Inspections

60,000
50,000
40,000
30,000
20,000
10,000

JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

1979

1980

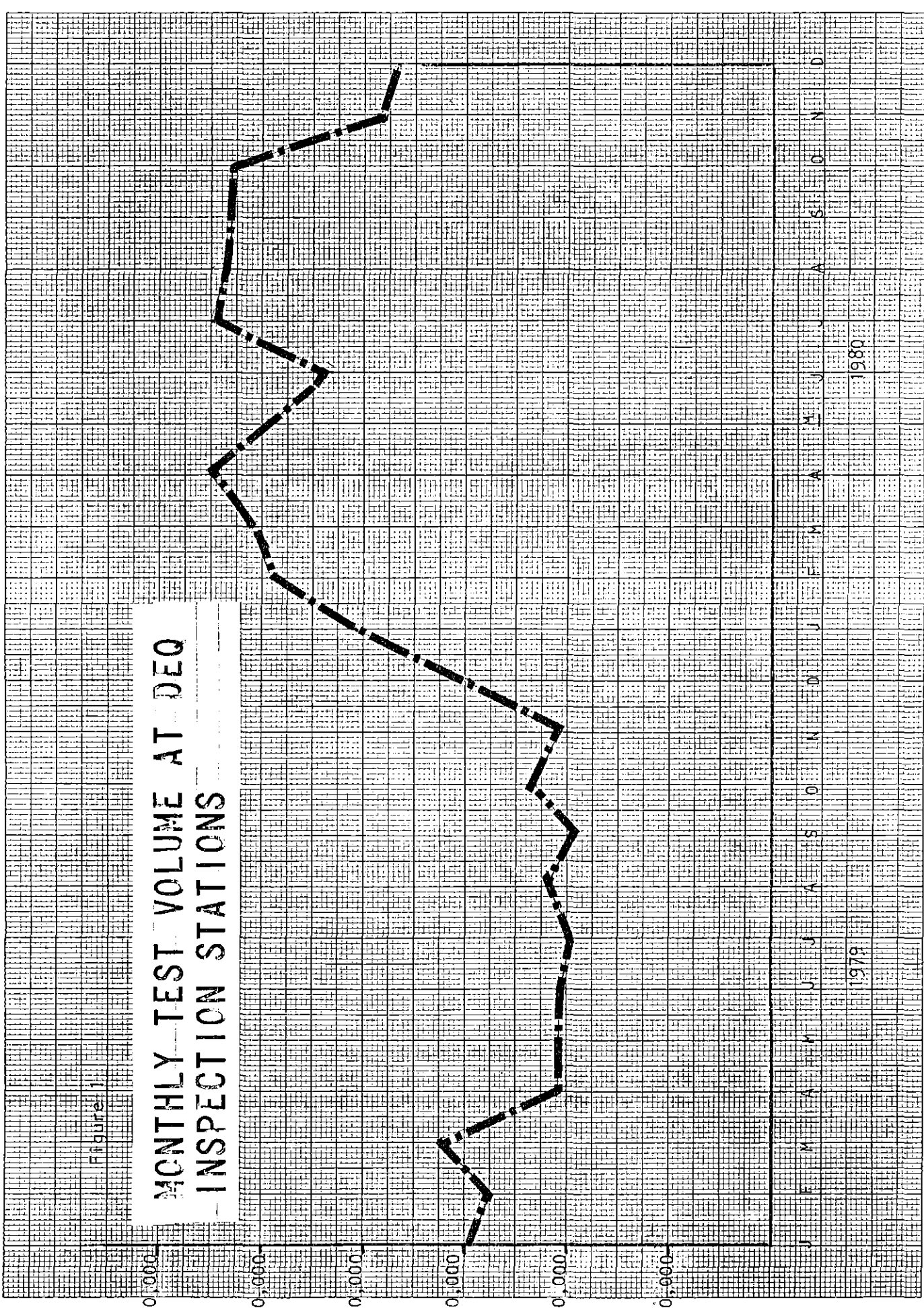


Table 1

DEPARTMENT OF ENVIRONMENTAL QUALITY
 VEHICLE INSPECTION PROGRAM
 522 Southwest Fifth Avenue
 Portland, Oregon

Activity Report for January, 1979 through December, 1980

LIGHT DUTY INSPECTION TESTS	841,708
CERTIFICATES OF COMPLIANCE ISSUED*	509,628

Emission Inspection Tests

Pass Emission Test	501,597 = 60%
Tests Failed for Carbon Monoxide (CO)	128,496 = 15%
Tests Failed for Hydrocarbons (HC)	70,406 = 8%
Tests Failed for Both HC & CO	52,765 = 6%
Tests Failed for Emission Equipment Disconnects	40,514 = 5%
Tests Failed for Other Causes (i.e., smoke, dilution, idle RPM)	47,930 = 6%

Pre-Catalyst Vehicle Tests (June, 1979 - December, 1980)

Number of Tests	450,329 = 65% of all Tests
Percentage Pass	56%

1975 and Newer Vehicle Tests (June 1979 - December, 1980)

Number of Tests	238,649 = 35% of all Tests
Percentage Pass	66%

Total Light and Heavy Duty Emission Inspection Test by Location

Powell	-	169,827
Tigard	-	144,746
Milwaukie	-	121,684
Northeast	-	120,117
Rockwood	-	111,473
Hillsboro	-	88,631
Northwest	-	84,358
Mobile No. 6	-	12,769
Mobile No. 5	-	12,527

* includes heavy duty trucks

Table 2

Department of Environmental Quality
 Vehicle Inspection Program
 Waiting Time Survey
 Minutes Average Waiting Time

<u>Date</u>	June 1980							
	<u>Powell</u>	<u>Northwest</u>	<u>Northeast</u>	<u>Tigard</u>	<u>Milwaukie</u>	<u>Rockwood</u>	<u>Hillsboro</u>	<u>Mobile 6</u>
June 3	15.6	4.1	10.7	21.1	4.5	7.6	1.2	0.0
June 5	4.8	2.8	3.9	4.9	---	2.5	0.6	0.2
June 10	11.6	6.0	9.6	26.0	4.7	4.4	2.4	0.0
June 14	1.2	0.0	1.1	---	0.1	1.0	0.0	0.0
June 19	2.9	1.5	4.5	3.7	---	1.1	0.1	0.0
June 27	5.8	3.6	5.9	8.6	---	2.9	2.2	0.5
June 28	5.2	1.9	3.7	17.1	2.4	---	5.9	0.9
Average	6.7	2.8	5.6	13.6	2.9	3.2	1.8	0.2
	November 1980							
November 1	7.0	0.7	4.4	10.0	2.0	1.7	0.7	
November 6	4.5	4.2	6.3	10.1	2.2	4.2	2.7	
November 8	---	---	5.2	4.1	4.7	3.5	6.7	
November 20	15.5	8.2	3.7	5.2	---	2.7	2.2	
November 28	18.2	24.2	19.1	25.8	---	7.9	19.4	
November 29	6.1	2.7	6.4	3.2	5.2	4.0	6.4	
Average	10.3	8.1	7.5	9.7	3.5	4.0	6.3	

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VWTS (7/80)

Table 3
FLEET SUMMARY
1-1-80 to 12-31-80

Fleet No.	Fleet	Inspectors	Vehicles	Cert. Purchased
001	General Service- St. of Ore.	4	740	500
002	Canteen Mobile Chef Inc.	1	115	100
003	City of Portland	7	1150	600
004	U. S. Postal Service	2	900	200
005	Dept. of Trans.-St. of Ore.	2	185	---
006	Washington County	2	250	250
007	General Telephone Co.	3	400	200
008	G.S.A., U. S. Government	3	400	200
009	N.W. Natural Gas Co.	4	255	300
010	Portland General Electric Co.	11	400	500
011	Pacific N.W. Bell Telephone Co.	12	850	400
012	Clackamas County	6	300	200
013	Multnomah County	4	600	400
014	United Parcel Service	2	165	200
015	Port of Portland	6	300	200
016	Portland Public Schools	3	225	200
017	Pacific Power & Light Co.	2	150	---
018	Beaverton School Dist. #48	2	200	150
020	Carnation Company	1	108	---
021	Columbia Bus Co.	1	255	300
022	City of West Linn	2	50	---
024	Tri-Met Transportation	1	60	50
026	City of Lake Oswego	2	80	100
027	North Clackamas School Dist. #12	2	160	100
028	Washington Co. Fire Dist. #1	3	73	50
029	Lake Oswego School Dist. #7	1	51	80
030	Consolidated Freightways	2	96	50
031	City of Oregon City	2	70	100
032	Oregon City School Dist. #62	1	60	100
033	City of Milwaukie	1	50	50
034	Portland Bottling Co.	2	105	80
035	Unified Sewerage Agency	3	80	50
036	Parkrose School District	1	55	50
037	Tektronix, Inc.	2	200	100
038	David Douglas School District	1	91	100
039	City of Forest Grove	1	60	50
040	Oregon Army National Guard	1	400	200
041	Reynolds School District	2	70	50
042	City of Beaverton	2	69	30
043	Hillsboro Union High School	1	62	150
044	Oregon Air National Guard	4	175	50
045	American Rent-a-Car	1	185	50
046	City of Hillsboro	1	70	50
	TOTALS	118	10,720	6,390

Appendix C

EMISSIONS FROM MOTOR VEHICLES

Currently about 90 percent of all passenger cars manufactured throughout the world are designed to meet the emission control standards. Over twenty-seven countries have enacted legislation restricting emission levels from automobiles. Automobiles, motorcycles, and light and heavy duty trucks manufactured for sale in the United States must be certified as meeting the national emission standards.

The United States federal emission standards for new automobiles, motorcycles, and light-duty trucks requires that vehicles be tested under specific modes of operation. The test procedure is designed to represent an urban driving pattern, including cycles under both cold and hot operations. In addition to this driving cycle, which required about 22 minutes to complete, the certification of vehicles undergo a 50,000 mile durability test. The purpose of the durability test is to ensure that the emission levels remain within the standards as the vehicle ages. The federal emission standards specify the maximum weight (mass) of pollutant allowed to be emitted during the testing procedure regardless of vehicle size, or design characteristics. Consequently, the methods to meet the emissions standards used by the manufacturers vary considerably. The manufacturer uses production prototype vehicles for this certification so that certification can be complete at the time of new model introduction.

When actual production vehicles are new, they meet or exceed compliance with pollution standards. As the vehicle accumulates miles there is a gradual emission deterioration which is easily offset with proper maintenance. However, when there is a system malfunction which is not observed or corrected during the normal maintenance cycle, the rate of deterioration on emissions may increase. As the vehicle accumulates miles through the owner use, this deterioration and regular wear begins to take its toll, and emission levels tend to rise. If wear and component failures occur, routine periodic maintenance may not be sufficient to offset the increasing emissions, declining fuel, and declining performance.

Within the Portland metropolitan area, motor vehicles produce about 95% of the CO and 61% of the HC pollutants in the airshed. A reduction in vehicle emissions is necessary to meet clean air standards. Although new, better controlled vehicles, and transportation strategies are instrumental in reducing automobile emissions, the vehicle inspection program is a required complement to these approaches. The Department has seen that new vehicles are generally low emitters. However, after a year or so, emissions can increase substantially. The purpose of the I/M program is to limit the vehicle emissions system deterioration by promoting improved maintenance.

The actual calculation of overall emissions reductions in CO and HC that is due to inspection maintenance (I/M) in the Portland area is quite complex. It involves knowing the vehicle year mixture, initial I/M improvements, the deterioration rates of different vehicles, and a variety of other factors which are input into a computer model. EPA has run this model to determine the benefits of the Portland I/M program. In a letter to the Department dated February 5, 1980, EPA reported the results from the model. They calculated a reduction in both HC and CO emissions, due solely to the Oregon inspection program, of 25%.

The DEQ idle test has been shown by EPA in their Portland study to be an effective means of identifying highly polluting vehicles. Of primary concern now, and especially for the future, are the emissions from the catalyst technology cars. These cars make up almost half of the vehicles currently operating in the Portland area. This proportion is expected to continue to grow. The average emissions of a 1975-77 catalyst-equipped vehicle which fails the DEQ test is:

CO 41 grams/mile HC 2.8 grams/mile

On the other hand the average emissions of a passing vehicle is:

CO 13 grams/mile HC 1.2 grams/mile

Once the DEQ emission test has recognized a highly polluting vehicle, maintenance is performed. The after maintenance emissions of the vehicles which originally failed is reduced to:

CO 22 grams/mile HC 1.6 grams/mile

This is a reduction in actual driving emissions of a failed vehicle of 47% in CO and 42% for HC.

The DEQ's exhaust gas analysis equipment is used to measure emissions while the vehicle is idling. Examples of idle emission of catalyst technology cars are given in Figures 1-6. The graphs contrast vehicles which failed the DEQ test with those which passed. Table 1 summarizes the 50 percentile values of the graphs. HC reductions at 50 percentile range between 80-83 percent, while CO reductions were 92-96 percent. These are major reductions in idle emissions of the dirty cars which are induced by I/M.

The California vehicle inspection program has recently reported idle emissions results from their inspection program. Idle emission reduction results are summarized in Table 2. Note in Table 2 that the improvement in idle emissions due to I/M in California is somewhat larger for 1975-80 models (catalyst equipped) than for the older cars. This reveals the increased effectiveness that I/M has as the catalyst equipped cars become a larger percentage of the vehicle population. The latest major improvement in emissions control systems is that of the three-way catalyst

with a computer controlled fuel feed system. The three-way catalyst was initially field tested on some California cars in 1977. It is now a common control system in most 1981 model year vehicles nationwide. The idle emission I/M benefits for this control technique is shown in Table 2 to be even greater than for 1975-80 vehicles. The trend for the future displayed in Table 2 seems to be one of increased importance of the I/M program as an auto emission reduction mechanism.

The deterioration of idle emissions control systems for vehicles in the Portland area can be seen in Figures 7 through 14. Bar charts representing these graphs are shown in Figures 15 and 16. The figures show the idle emissions distributions for light-duty vehicles 1977-80 when the vehicles were new and for subsequent years as the vehicles aged. Almost all of these vehicles use catalyst technology emission systems. Increases in HC and CO idle emissions with time is seen with each model year for which this comparison was available. Note an aberration in this deterioration data for 1977 model year CO emissions. Here vehicles tested in 1980 were cleaner than those tested in 1979. Since the curves are quite close together, a statistically small data sample may have resulted in this inconsistency. The CO emissions for the 1977 and 1978 models showed a marked increase after one year and then stayed relatively steady. The HC readings did not have such a pronounced first year increase, but showed continual deterioration with the years. An increase in HC and CO emissions also occurred in 1979 model year vehicles. It is too early at this time to evaluate the deterioration of the very clean new 1980 vehicles.

Table 3 gives the 50 and 90 percentile new car CO and HC idle readings for several model years. The data in this table are emissions concentrations which were exceeded by 50% and 10% of the vehicles tested. In general the idle pollutant emissions of new cars has been less in the later model years. Major improvements in idle emissions at 90 percentile has occurred in the last two years. It is possible that these improvements result from the new limited-adjustment carburetors. These emissions reductions may have also stemmed from control equipment improvement brought about by the tightening of the federal emissions standards in 1980.

In summary, a large share of the CO and HC pollutants in the Portland airshed results from automobile emissions. These vehicle related pollutant emissions are being reduced by the addition of better emission control equipment and by the use of transportation control strategies. I/M is a complement to these programs. The DEQ I/M program is estimated to reduce overall automobile emissions of HC and CO by 25%.

The Department's vehicle inspection test has been shown to be an effective tool in identifying highly polluting vehicles. After repairs are done on these polluting vehicles a reduction in overall emissions of 47% for CO and 42% for HC has occurred. The Department's test results show an idle emissions reduction due to I/M of 80-83% for HC and 92-96% for CO.

The idle emissions reductions due to I/M have been seen to be greater for the new catalyst technology cars and especially for the 3-way catalyst cars. This indicates increased effectiveness of I/M in the future as catalyst technology cars become a larger share of the vehicle population.

Deterioration in idle emission with vehicle age has been shown for all model years of vehicles for which data were available through 1979. I/M is an effective element to limit this deterioration.

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Table 1

Idle Emissions of Some Oregon Vehicles
50 Percentile Values

<u>Class of Vehicle</u>	<u>Vehicle Which Failed the DEQ Test</u>		<u>Vehicles Which Passed the DEQ Test</u>		<u>Percent Difference</u>	
	<u>CO (%)</u>	<u>HC (ppm)</u>	<u>CO (%)</u>	<u>HC (ppm)</u>	<u>CO</u>	<u>HC</u>
1975	1.6	220	0.1	45	93%	80%
1977	2.7	300	0.1	40	96%	87%
1979	1.2	300	0.1	50	92%	83%

AI866

Table 2

Average Idle Emissions
State of California
Vehicle Inspection Program

<u>Class of Vehicles</u>	<u>Vehicles Which Failed the Emissions Test</u>		<u>After Maintenance Retest</u>		<u>Percent Difference</u>	
	<u>CO (%)</u>	<u>HC (ppm)</u>	<u>CO (%)</u>	<u>HC (ppm)</u>	<u>CO</u>	<u>HC</u>
Pre 68	6.0	850	3.9	471	35%	44%
1968-70	4.7	542	3.2	334	32%	38%
1971-74	4.9	472	2.7	268	44%	43%
1975-80	3.2	254	1.3	135	59%	47%
1977-80 (3-way Cat)	2.6	160	0.9	52	65%	67%

AI866

Table 3
90 Percentile New Car
Idle Emission Readings

<u>Year</u>	50 Percentile		90 Percentile	
	<u>CO</u>	<u>HC</u>	<u>CO</u>	<u>HC</u>
1976	0.2	100	3.1	350
1977	0.2	70	2.7	290
1978	0.2	50	1.3	325
1979	0.1	50	1.0	175
1980	0.1	20	0.1	80

AI866

Figure 1

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Carbon Monoxide Emissions

1975 Popular Vehicle Make

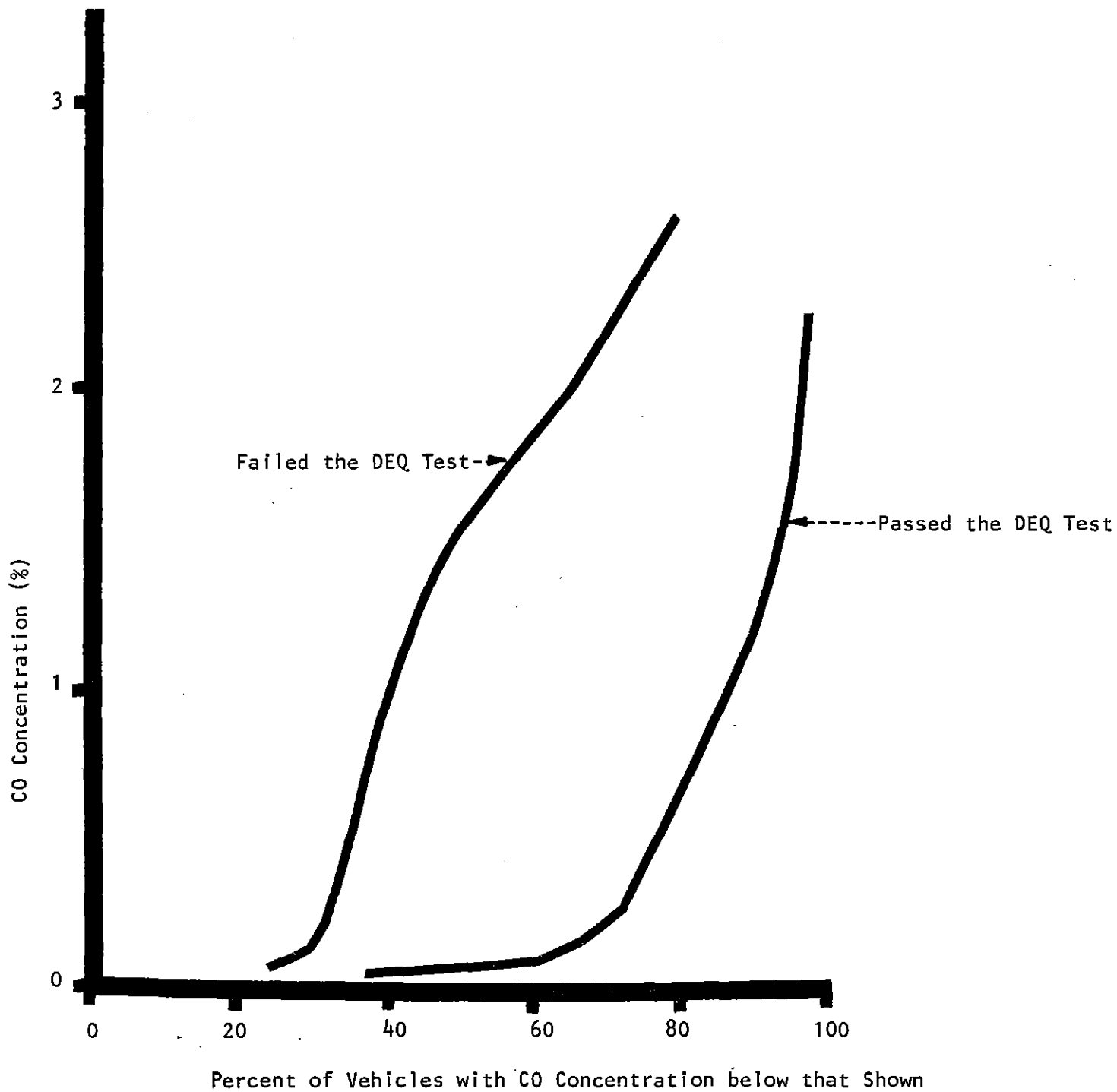


Figure 2

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Hydrocarbon Emissions

1975 Popular Vehicle Make

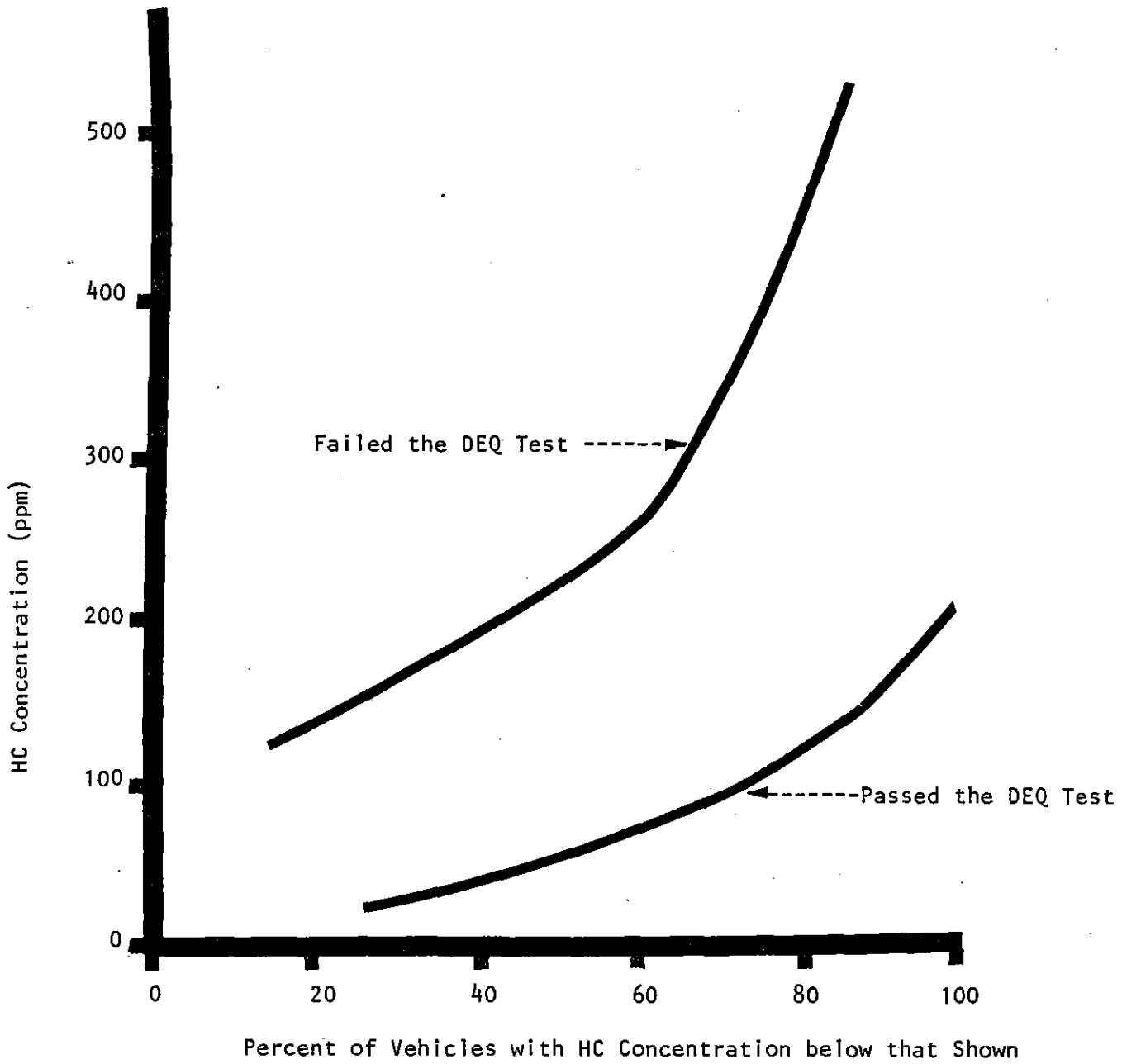


Figure 3

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Carbon Monoxide Emissions

1977 Popular Vehicle Make

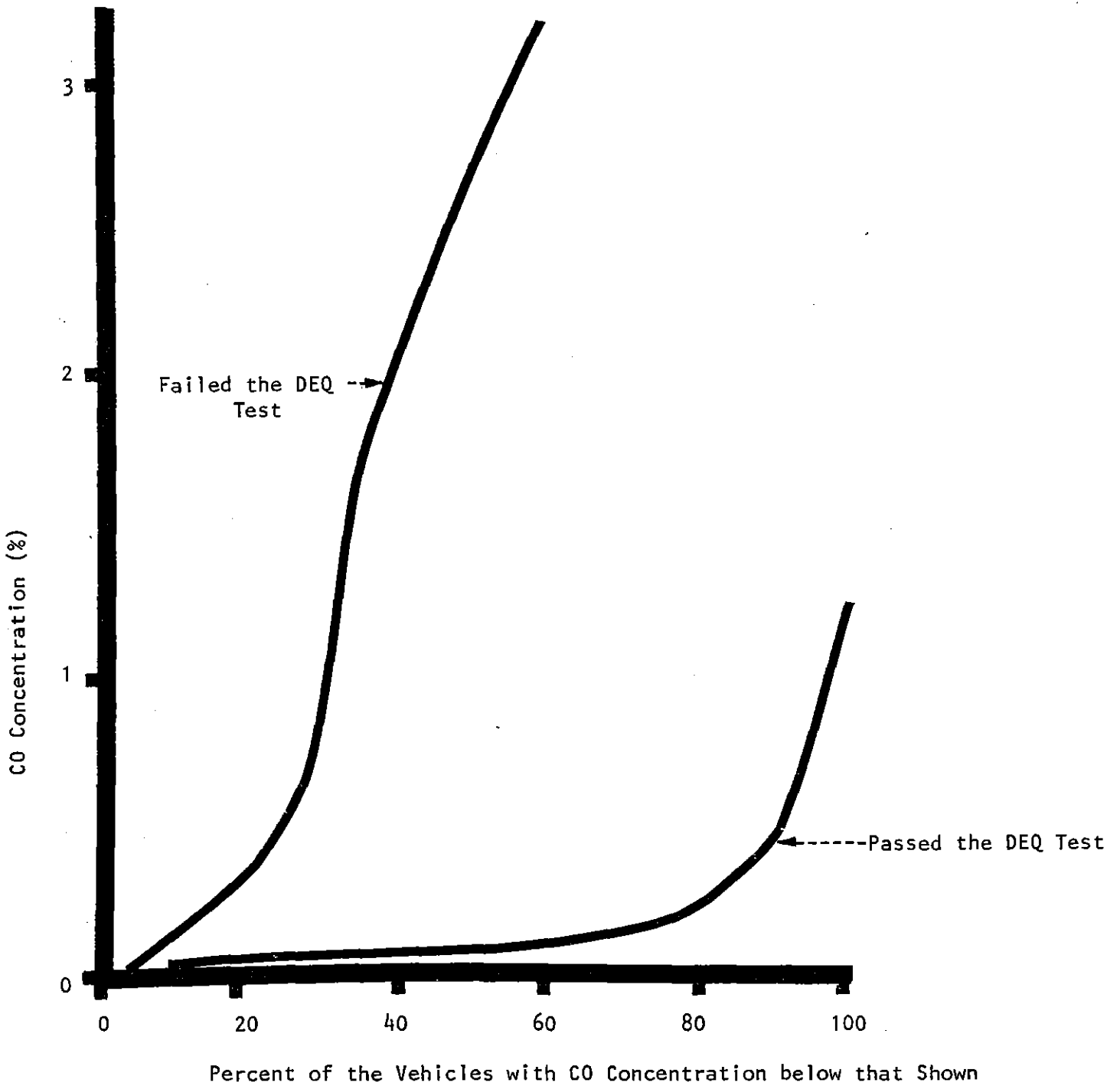


Figure 4

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Hydrocarbon Emissions

1977 Popular Vehicle Make

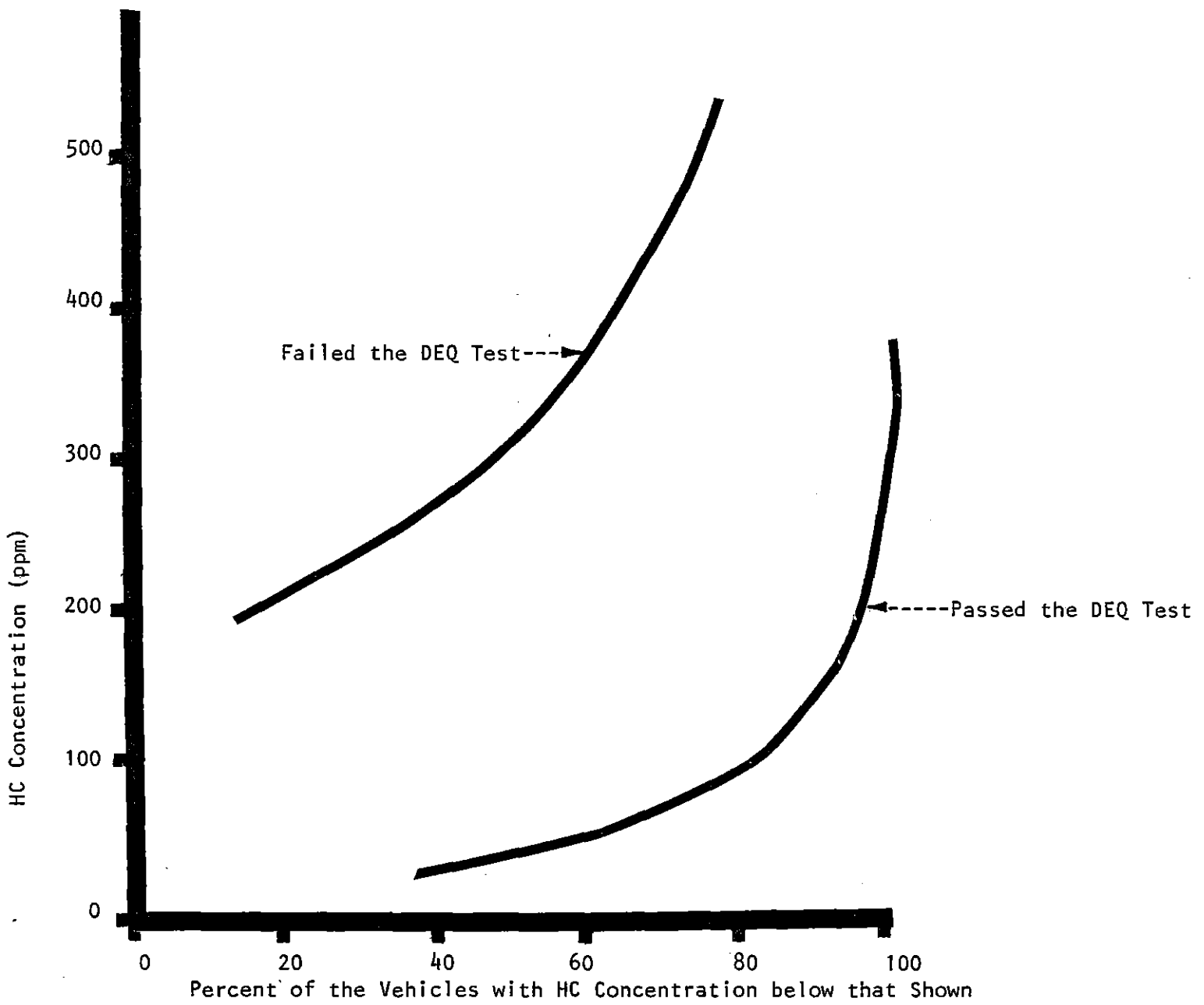


Figure 5

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Carbon Monoxide Emissions

1979 Popular Vehicle Make

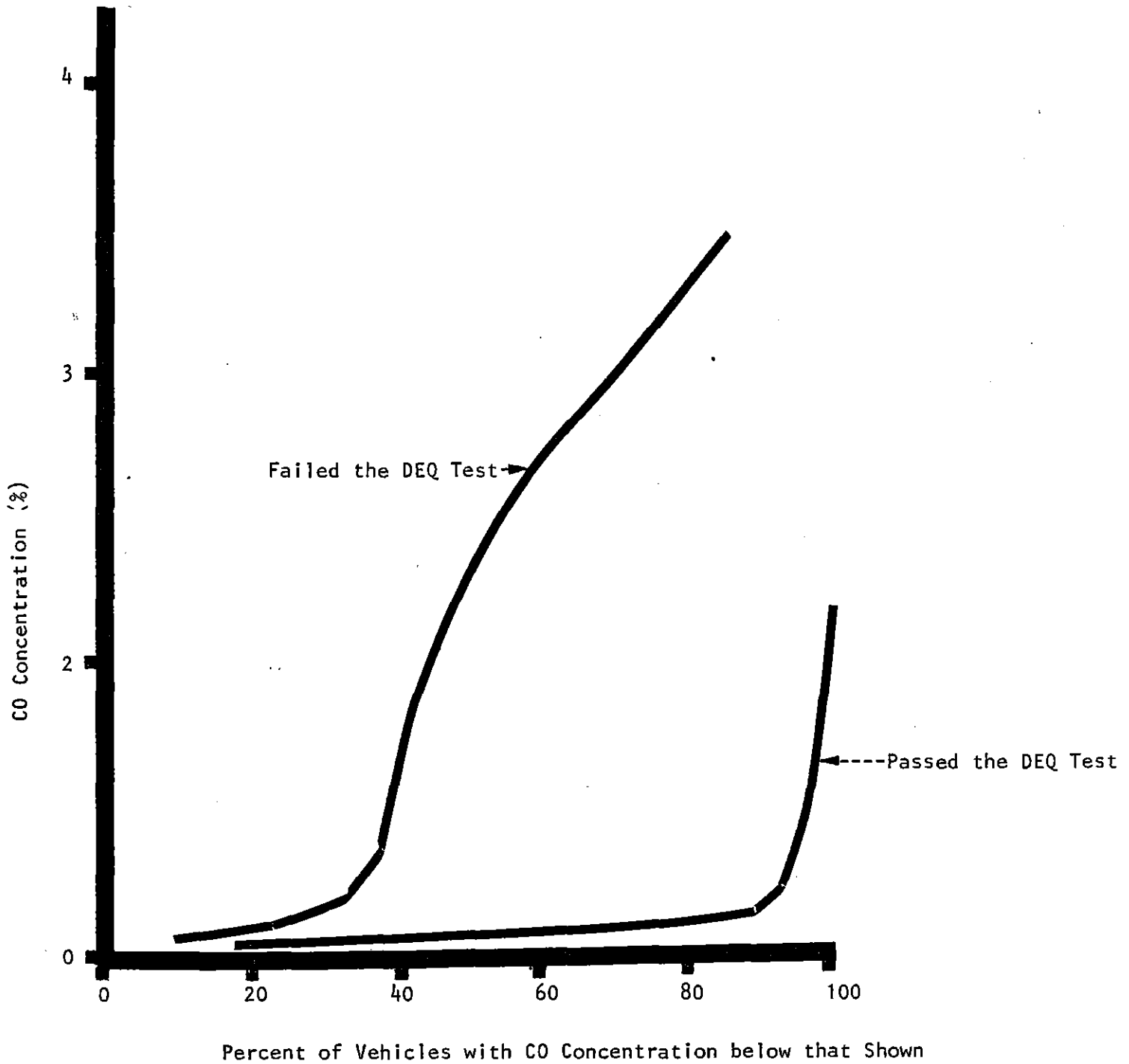


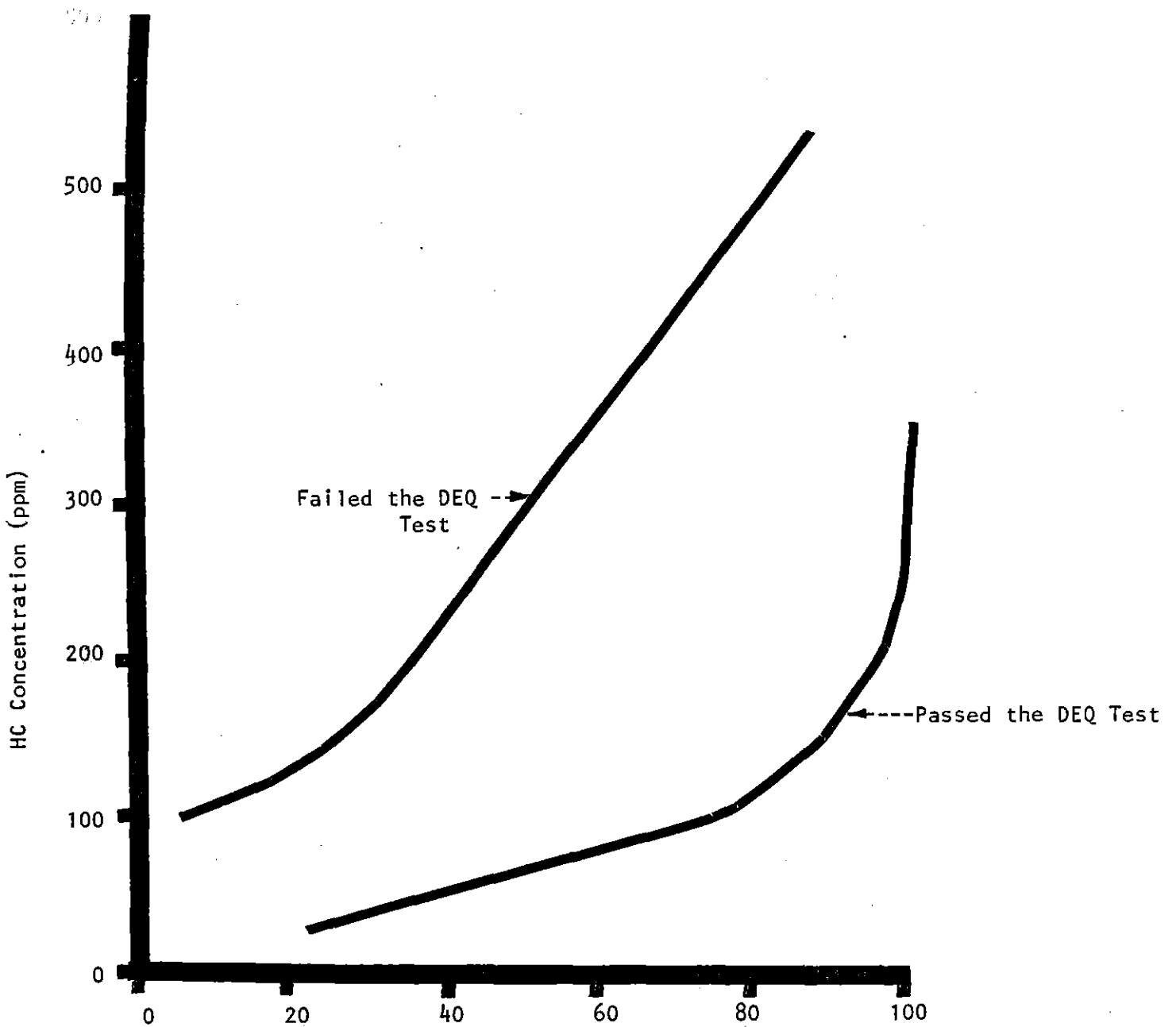
Figure 6

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Hydrocarbon Emissions

1979 Popular Vehicle Make



Percent of Vehicles with HC Concentration below that Shows

Figure 7

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Carbon Monoxide Emissions

1977 Popular Make

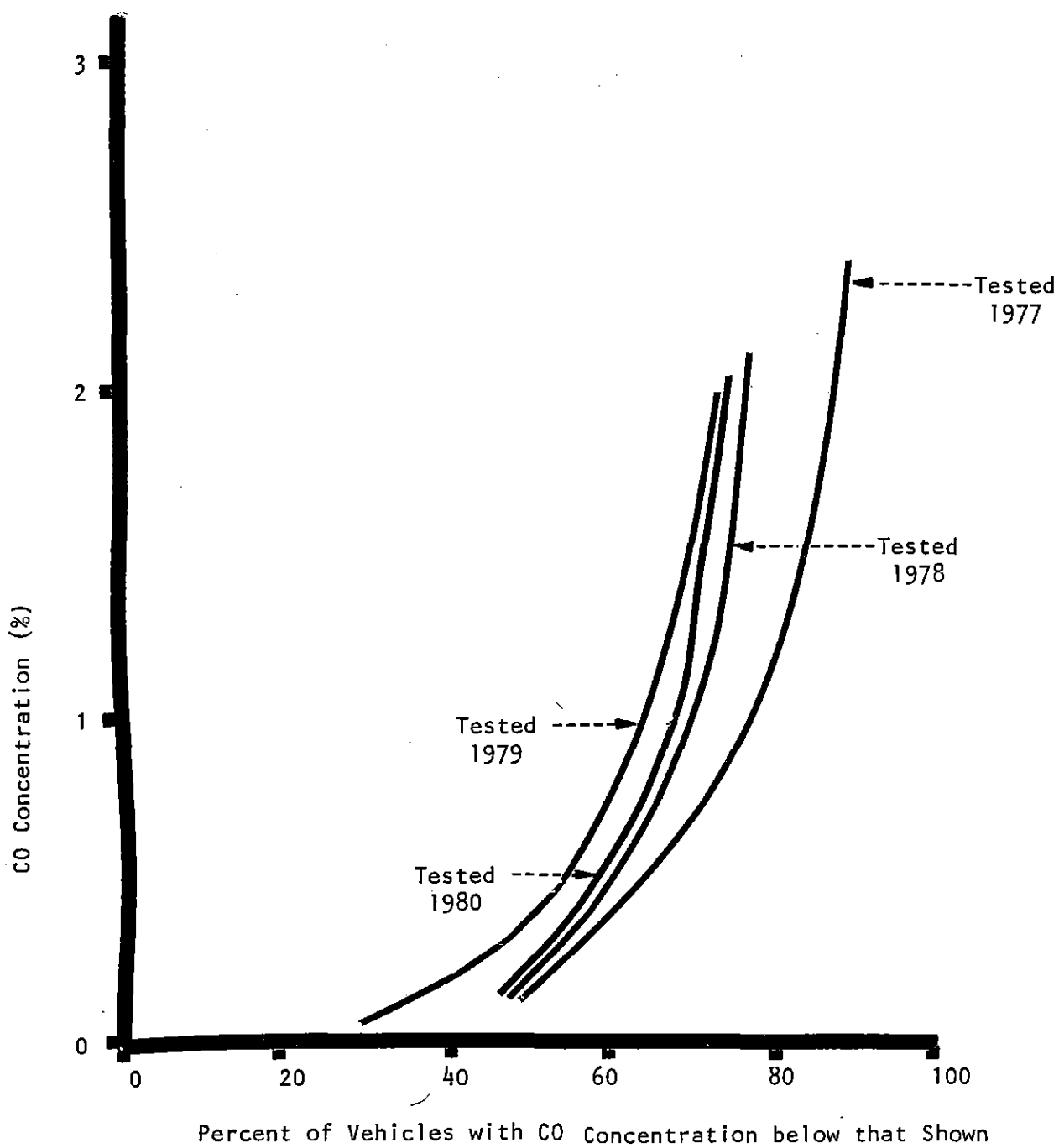


Figure 8

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Hydrocarbon Emissions

1977 Popular Make

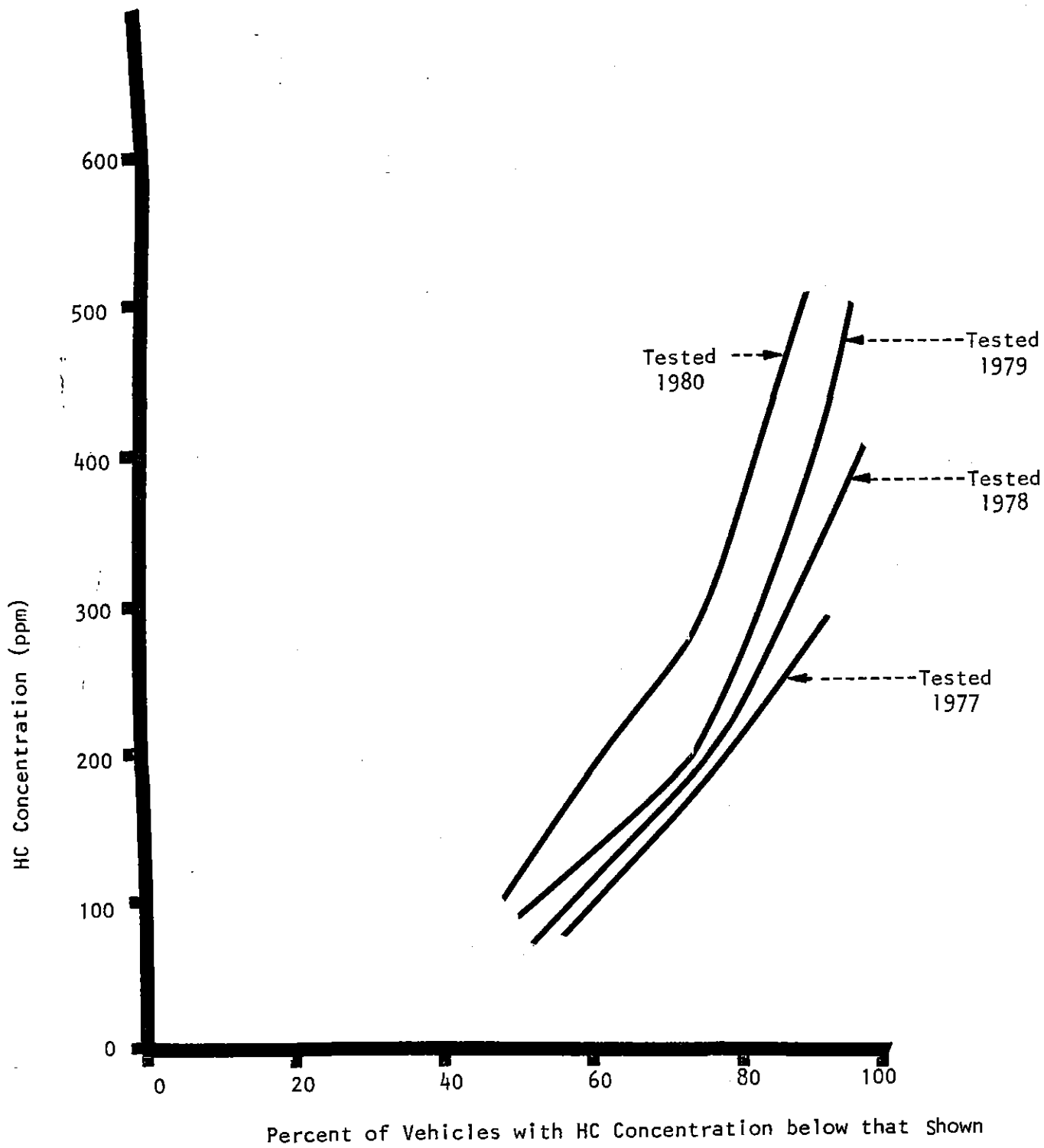


Figure 9

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Carbon Monoxide Emissions

1978 Popular Make

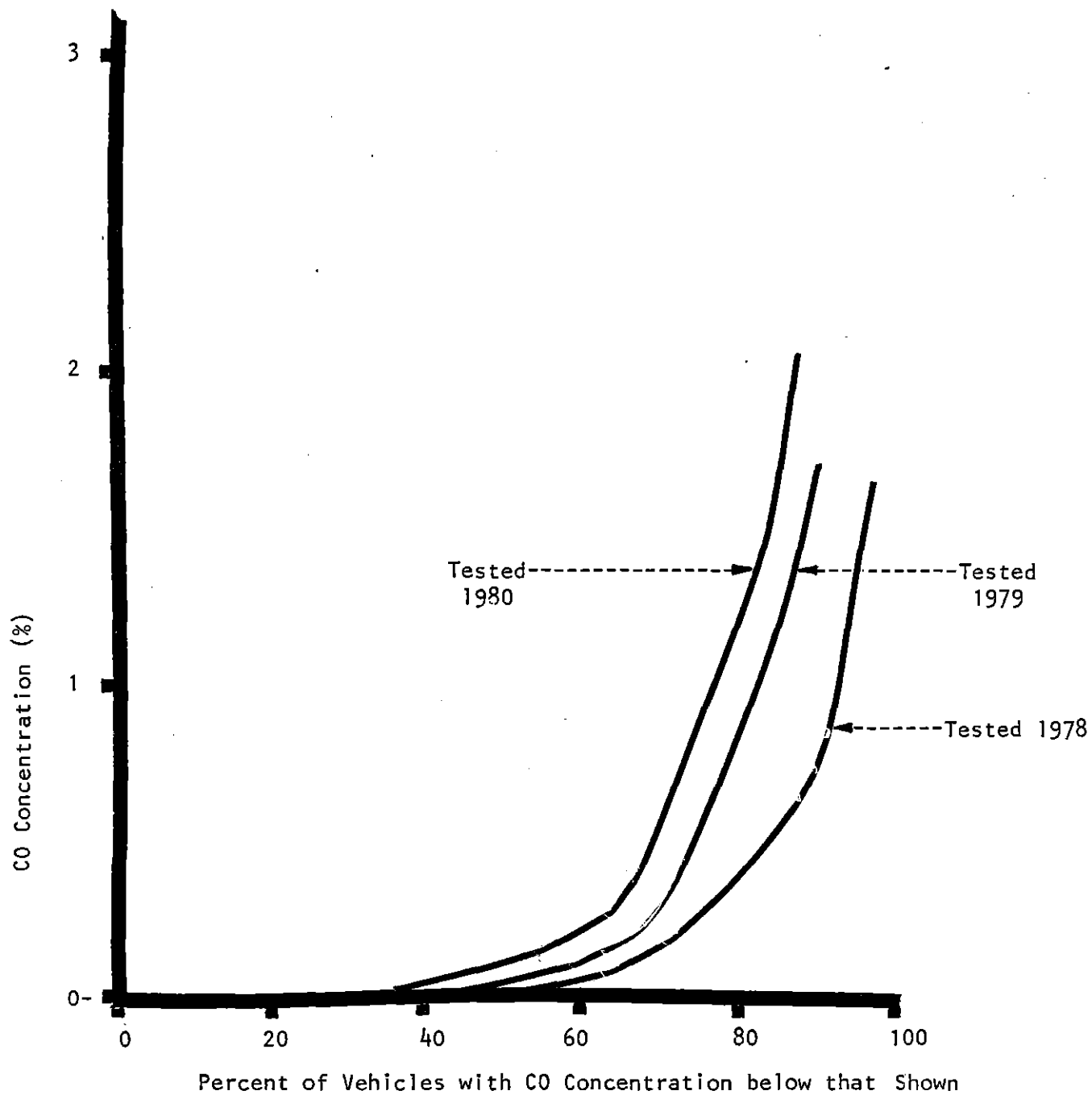


Figure 10

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Hydrocarbon Emissions

1978 Popular Make

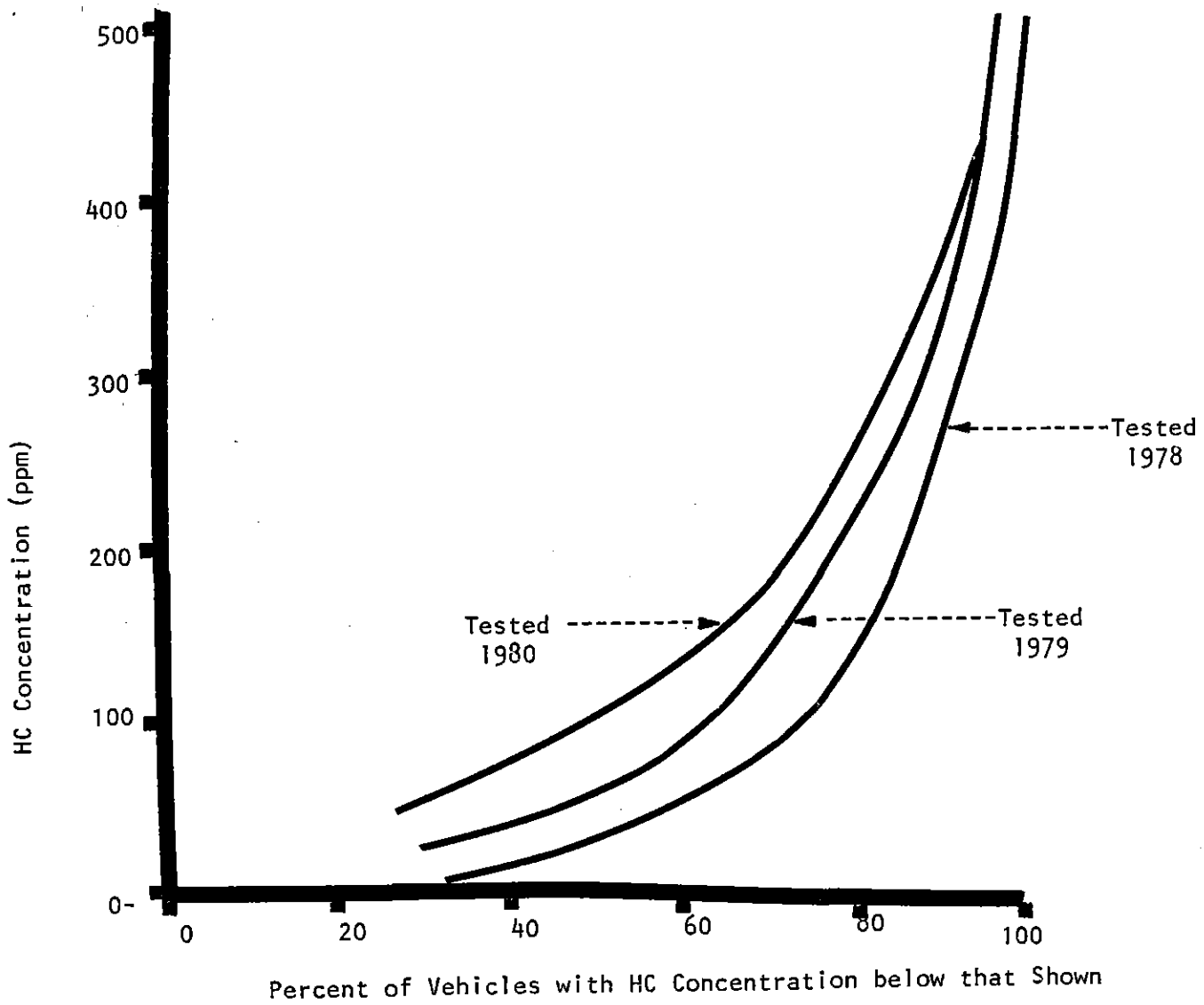


Figure 11

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Carbon Monoxide Emissions

1979 Popular Make

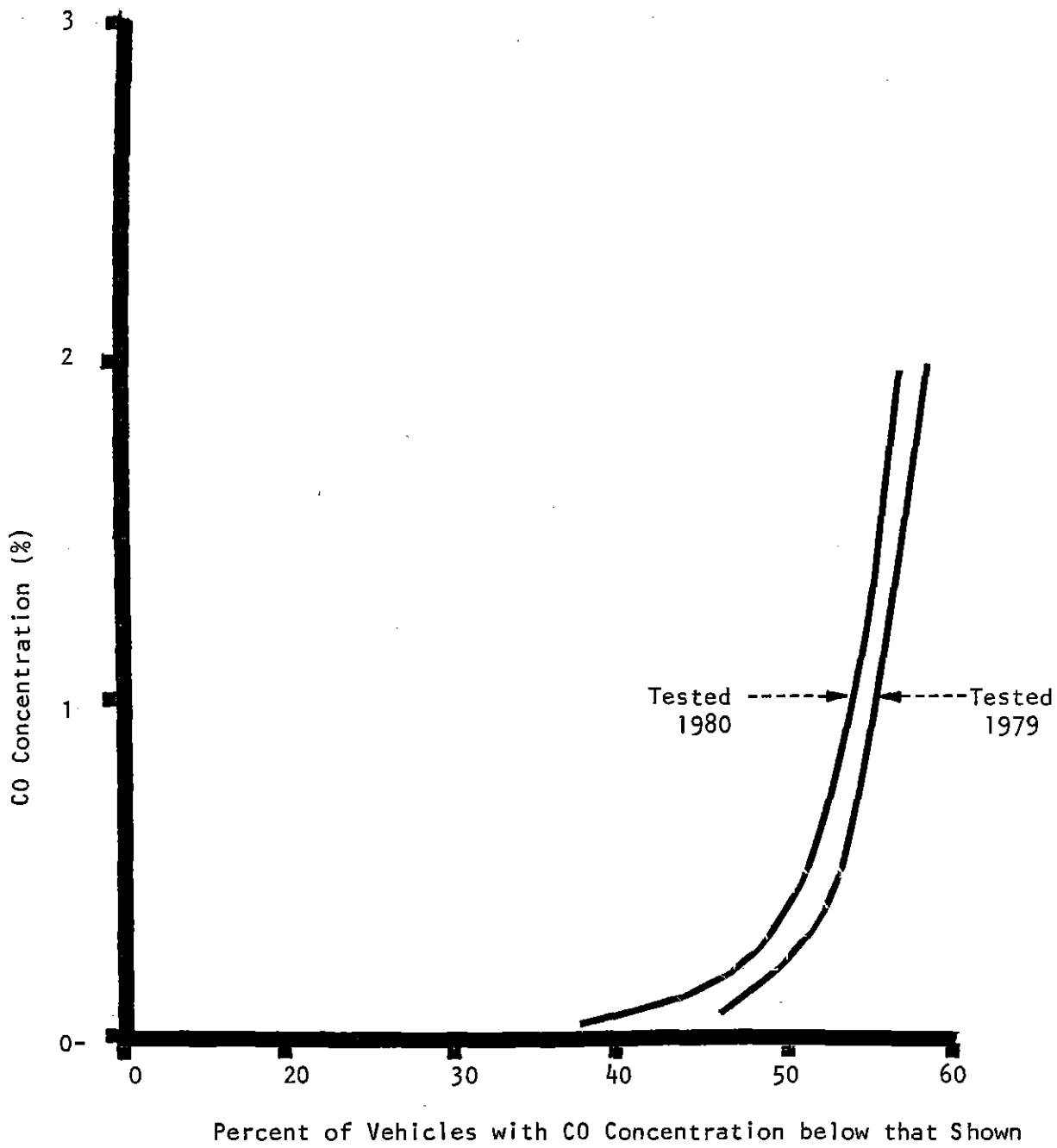


Figure 12

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Hydrocarbon Emissions

1979 Popular Make

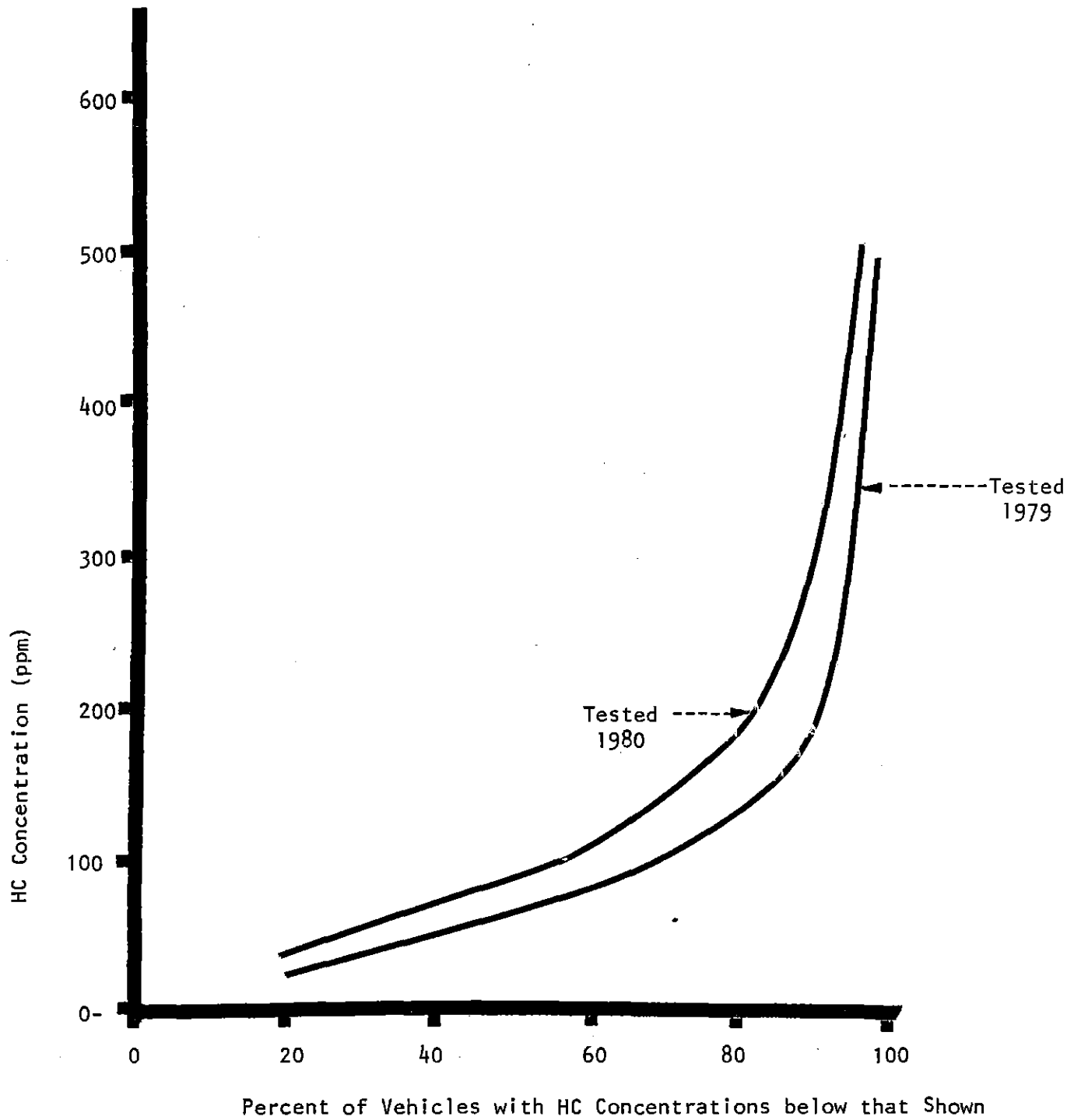


Figure 13

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Carbon Monoxide Emissions

1980 Popular Make

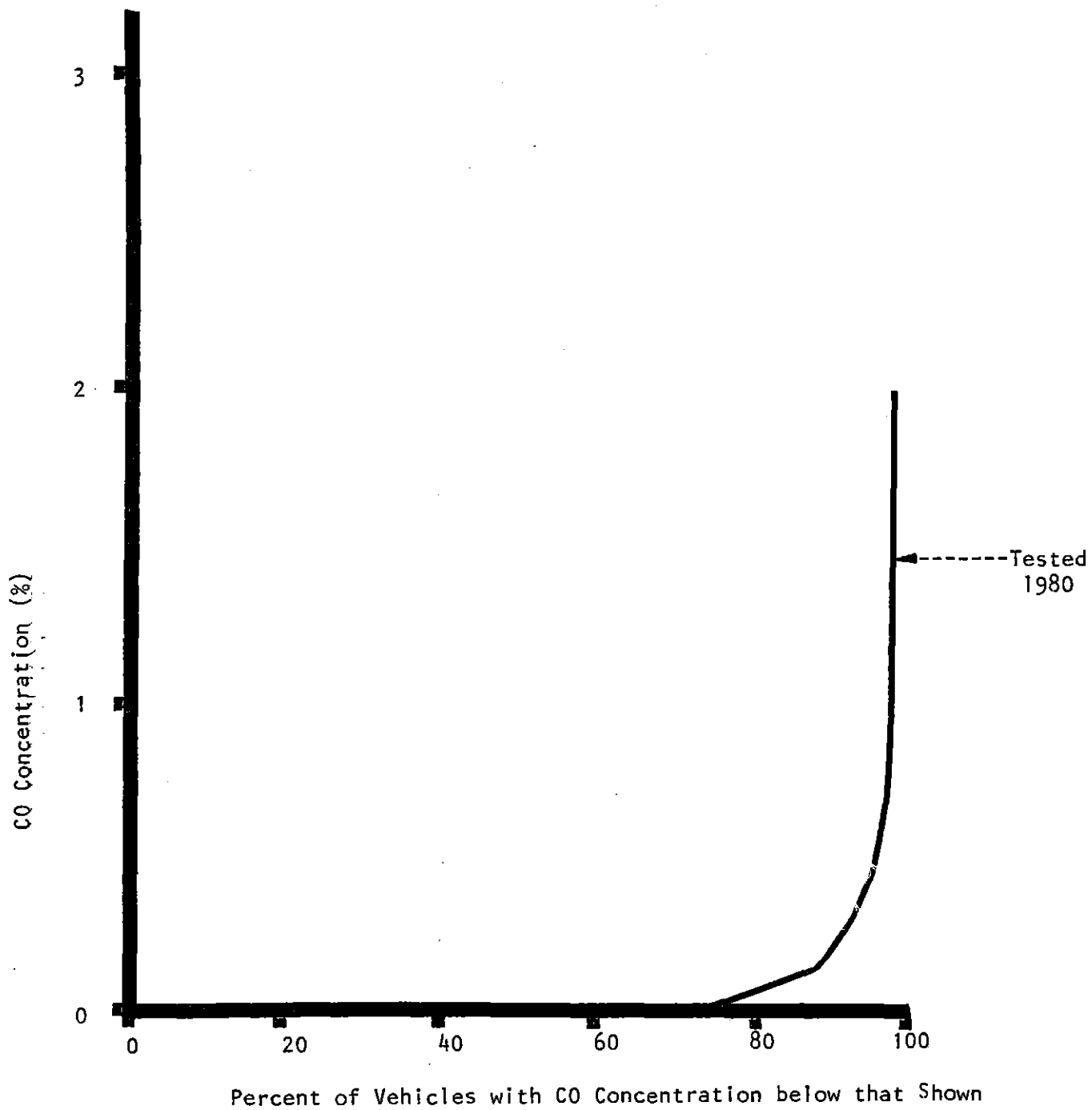


Figure 14

DEPARTMENT OF ENVIRONMENTAL QUALITY

VEHICLE INSPECTION PROGRAM

Idle Hydrocarbon Emissions

1980 Popular Make

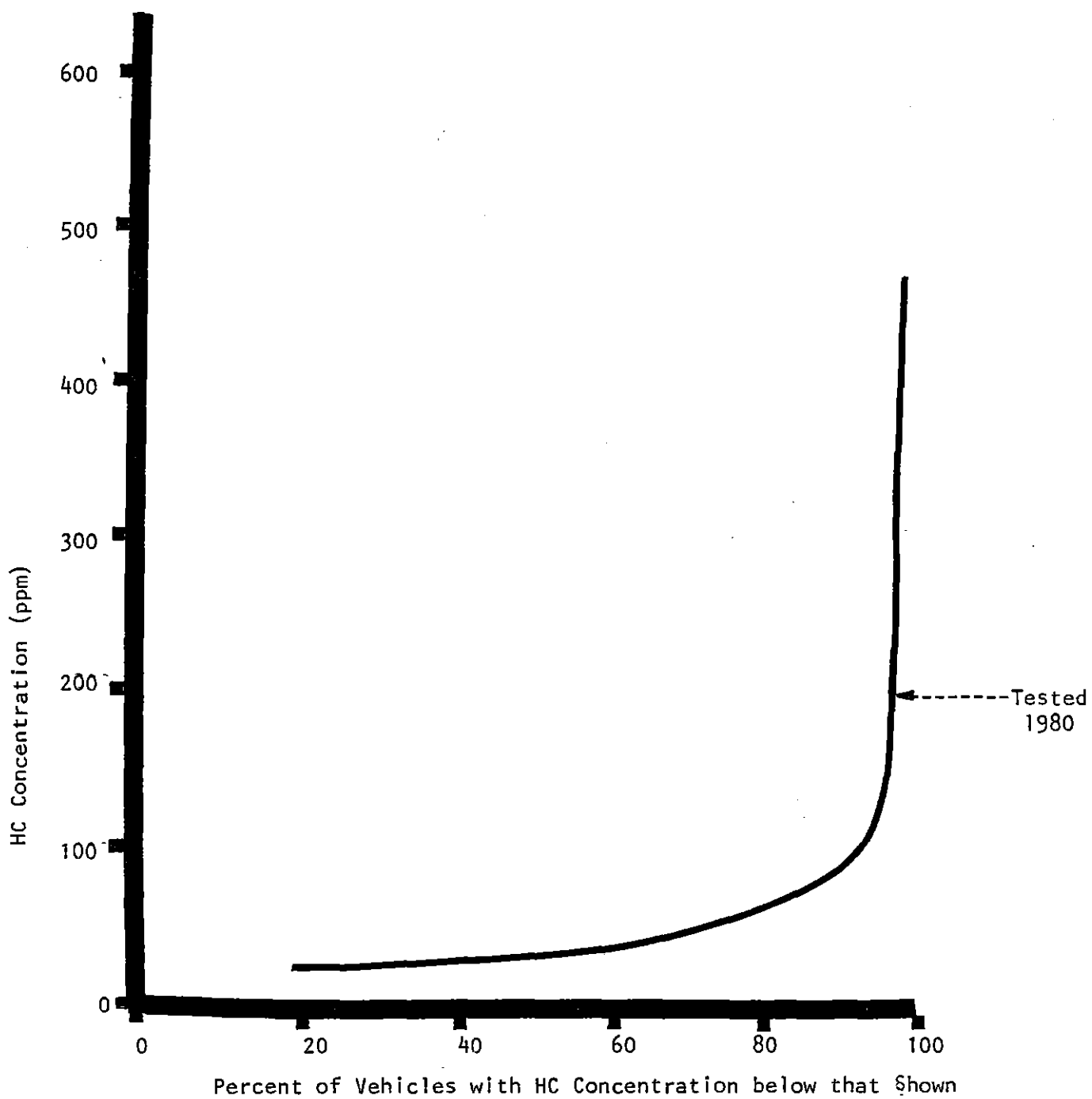


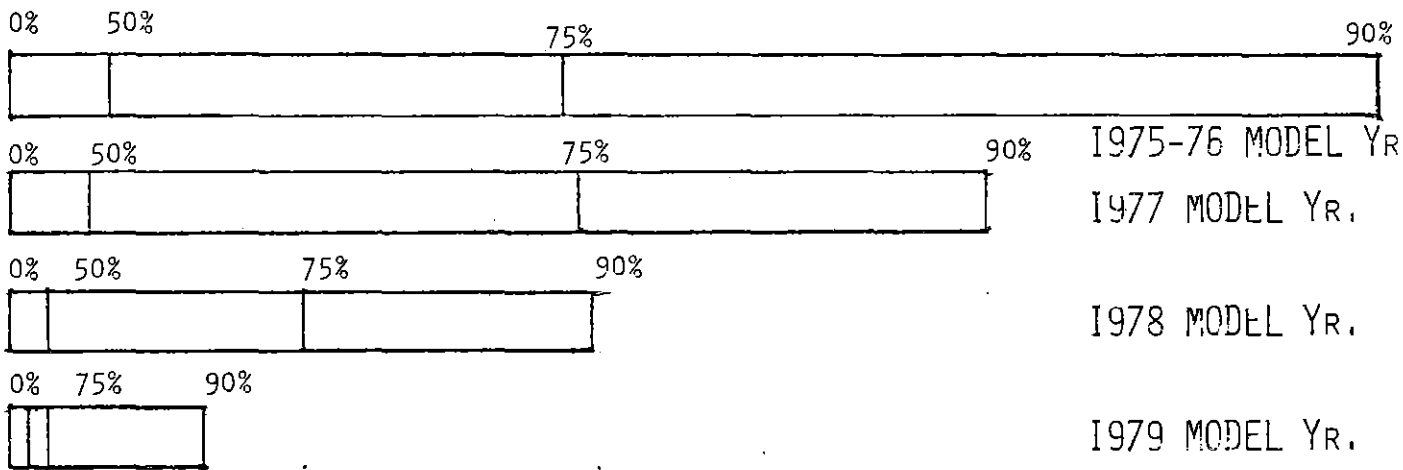
Figure 15

DEPARTMENT OF ENVIRONMENTAL QUALITY

Vehicle Inspection Program

Carbon Monoxide Idle Emission Distribution for a Popular Vehicle Make

BARS SHOW PERCENT OF POPULATION BELOW CONCENTRATION
TESTED IN 1979



TESTED IN 1980

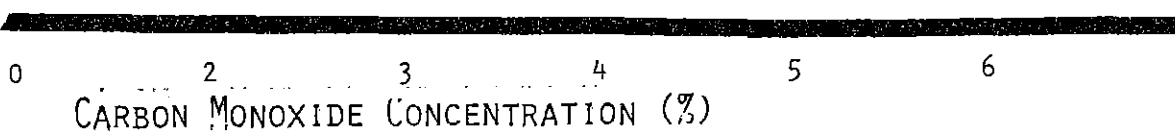
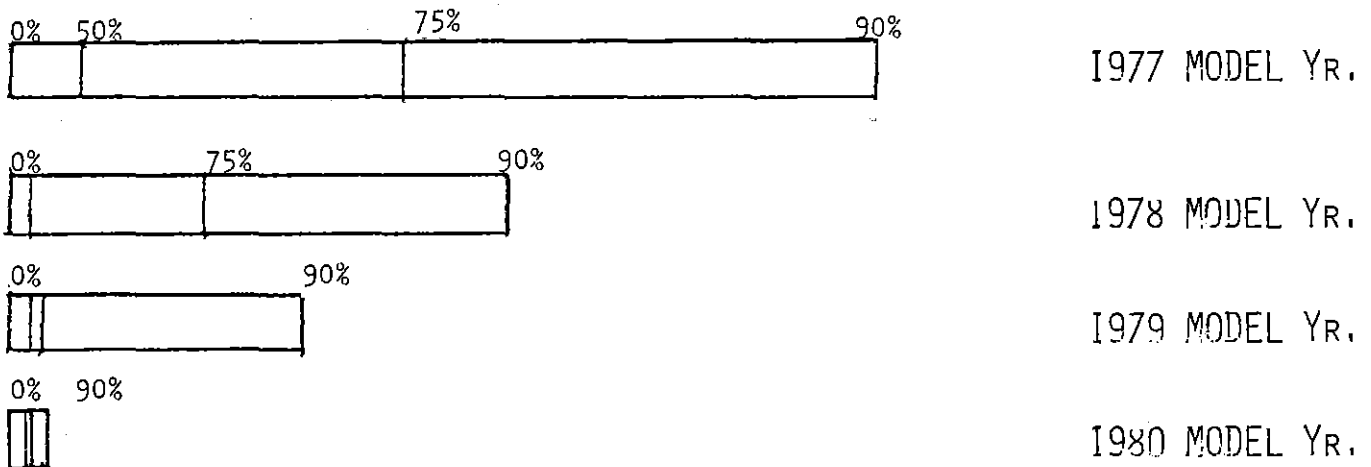


Figure 16

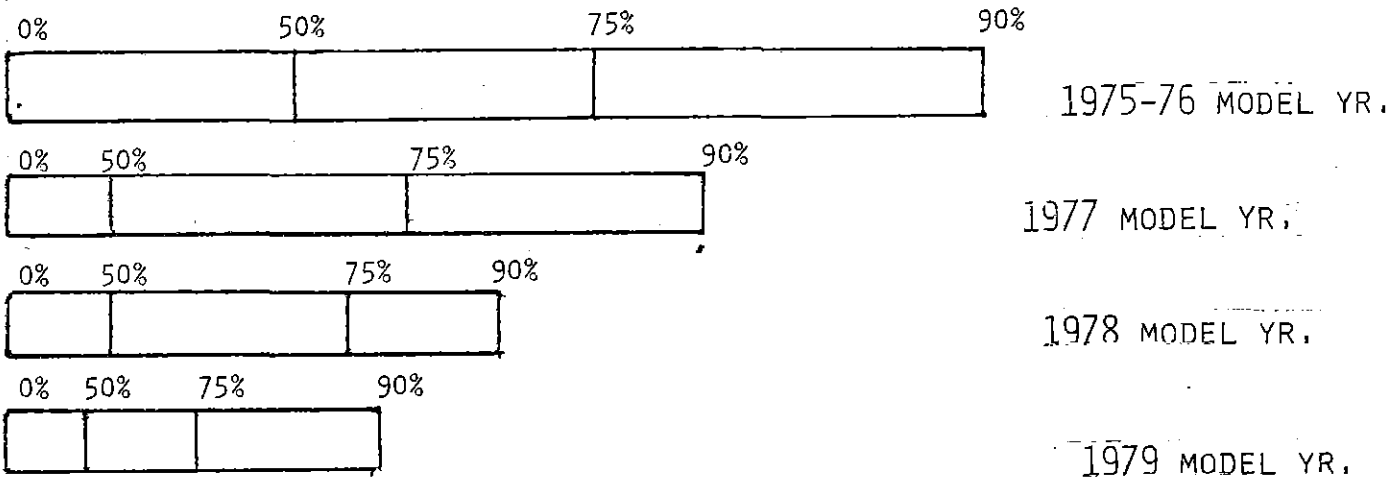
DEPARTMENT OF ENVIRONMENTAL QUALITY

Vehicle Inspection Program

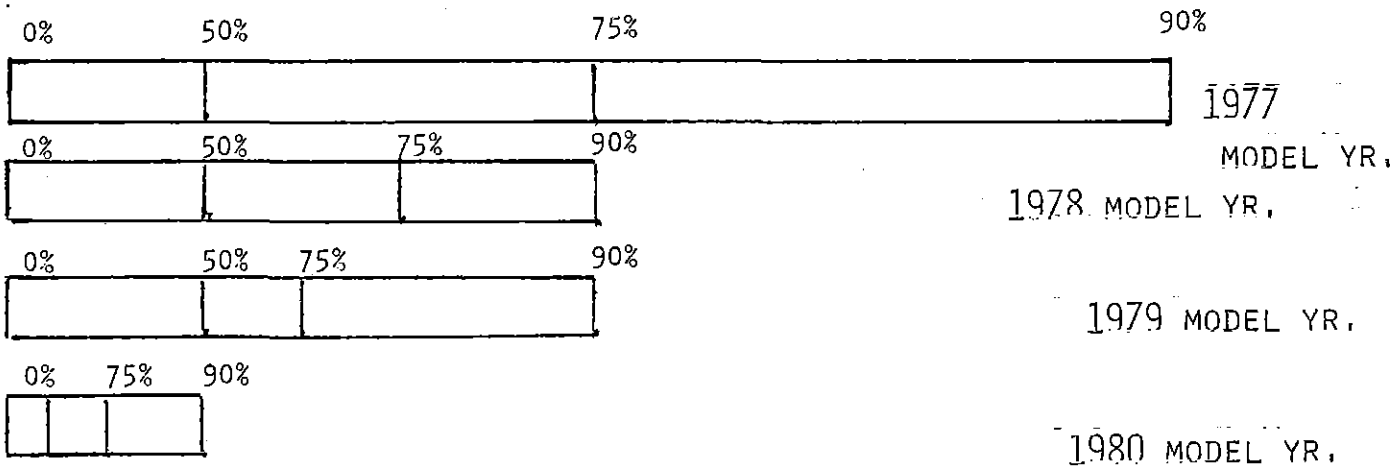
Exhaust Hydrocarbons Idle Emission Distributions for a Popular Vehicle Make

BARS SHOW PERCENT OF POPULATION BELOW CONCENTRATION

TESTED IN 1979



TESTED IN 1980



0 100 200 300 400 500

HYDROCARBON CONCENTRATION (PPM)

APPENDIX D

HEAVY DUTY VEHICLE TESTING

The Department conducts inspections on heavy duty gasoline powered trucks for the purpose of compliance with the emission standards. The heavy truck is defined as a vehicle having a combined manufacture vehicle weight and maximum load rating of more than 3,855 kilograms (8,500 lbs.). This includes everything larger than 3/4 ton pickups and vans.

Most heavy duty vehicles that need to be certified are trucks with "T" license plates. The truck inspection program certifies trucks on an annual basis. Legislatively exempt from the emission certification program are farm vehicles, the class of vehicles referred to as "fixed load" vehicles and vehicles operating under reciprocity agreements with more than one state. Currently heavy duty diesel powered vehicles are not required to be emission certified for license renewal. The majority of these diesel vehicles are registered under reciprocity agreements and thus are legislatively exempt. Also the type of test necessary to certify diesel powered vehicles has not been developed to the point where it is economically feasible.

During the past two years over thirty thousand (30,000) heavy duty vehicles have been inspected. Table I lists the pass/fail statistics for the heavy duty trucks tested from November, 1979 through December, 1980. The abbreviated listing is due to an internal reporting change. Compared to the previous two year period, the overall pass rate for heavy duty vehicles is up three percentage points to 62%.

Over two-thirds of the heavy trucks tested at the inspection lanes were built to meet some level of emission control.

Emission distribution curves for heavy duty trucks are shown in figures 1, 2, and 3. Figure 1 is the composite idle carbon monoxide emission distribution. This set of curves shows the overall improvement obtained through the design changes that have occurred. Compared to data from two years ago, the idle emission distribution for the pre-emission controlled trucks has decreased about 5%. The up-swing of the tail was slightly reduced and overall the group did not degrade. The other curves represent different federal emission control levels that have been designed to by the truck engine manufacturers. The lowest group consisted of the newest trucks. Carbon monoxide emissions for each grouping were reduced 25% for the 1970-73 group and 18% for the 1974-78 group.

Figure 2, the distribution plot of the idle carbon monoxide at 2500 rpm, shows similar characteristics. Again, the type of separations shown can be expected due to design improvements combined with the lack of carburetor deterioration. This test has value in that it provides a measure of the overall engine performance at an engine operating condition other than the regular engine idle.

Figure 3, the distribution plot of idle hydrocarbons, shows similar separation, except for the 1979 model year grouping. Emission

distributions for the pre-1970 group remained essentially the same as reported two years ago. The 1970-73 group showed a 10% decrease and the 1974-78 group showed a 16% decrease. The data set for the 1979 curve was reviewed. It contained a large percentage of Ford trucks. The Ford emission control system uses a full manifold-vacuum spark retard. It is possible, though the data is inconclusive, that this system may have been disabled on a number of trucks. This would have affected the overall composition of the "composite" vehicle. Also, the data set was small (only 175 vehicles) and as such may simply be a misrepresentative sample. Review of new data will be continued.

Overall, heavy duty gasoline truck emissions have been reduced or remain the same as the previous data. As expected, higher emissions are observed from those vehicles which are older and of older design. The emission reductions from heavy duty gasoline trucks are important, for while they are given a minor portion of the emission inventory, these vehicles operate in the congested sectors of the metropolitan area where emission reductions are of greatest benefit. Maintenance of these emission reductions means decreased loading in the air and a closer compliance with the ambient air standards.

Table 1

DEPARTMENT OF ENVIRONMENTAL QUALITY
 VEHICLE INSPECTION PROGRAM
 522 Southwest Fifth Avenue
 Portland, Oregon

Heavy-Duty Gasoline Vehicle Test Summary
 November, 1979 - December, 1980

EMISSION INSPECTION TESTS	22,164
OVERALL PERCENTAGE PASS	62%
Pre-1970 Trucks (7042)	
Pass Emission Test	61%
Tests Failed for Carbon Monoxide (CO)	10%
Tests Failed for Hydrocarbons (HC)	12%
Tests Failed for Both HC & CO	4%
Tests Failed for CO @ 2500 rpm	8%
Tests failed for Other Causes	5%
1970-1973 Trucks (5458)	
Pass Emission Test	60%
Tests Failed for carbon Monoxide (CO)	12%
Tests Failed for Hydrocarbons (HC)	11%
Tests Failed for Both HC and CO	4%
Tests Failed for CO @ 2500 rpm	6%
Tests Failed for Emission Equipment Disconnects	3%
Tests Failed for Other Causes	3%
1974-1978 Trucks (8216)	
Pass Emission Test	63%
Tests Failed for Carbon Monoxide (CO)	13%
Tests Failed for Hydrocarbons (HC)	13%
Tests Failed for Both HC and CO	4%
Tests Failed for CO @ 2500 rpm	3%
Tests failed for Emission Equipment Disconnects	2%
Tests failed for Other Causes	1%
1979 and Later Trucks (1448)	
Pass Emission Test	75%
Tests Failed for Carbon Monoxide (CO)	6%
Tests Failed for Hydrocarbons (HC)	12%
Tests Failed for Both HC and CO	2%
Tests Failed for CO @ 2500 rpm	1%
Tests failed for Emission Equipment Disconnects	3%
Tests Failed for Other Causes	2%

Figure 1

Idle Carbon Monoxide Emission Distributions
For Heavy Duty Gasoline Powered Trucks

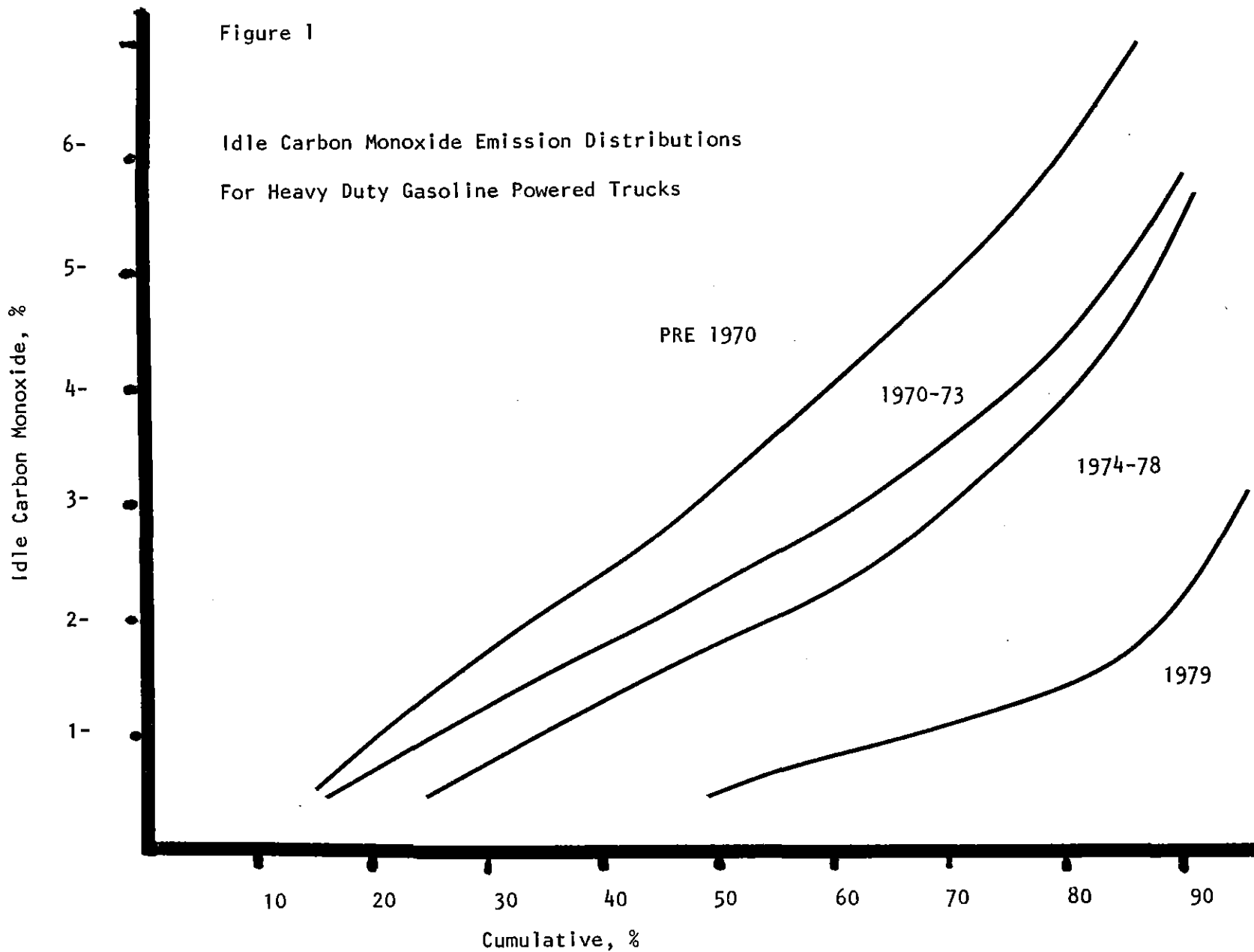


Figure 2

Carbon Monoxide Emission Distribution

At 2500 rpm for Heavy Duty Gasoline Powered Trucks

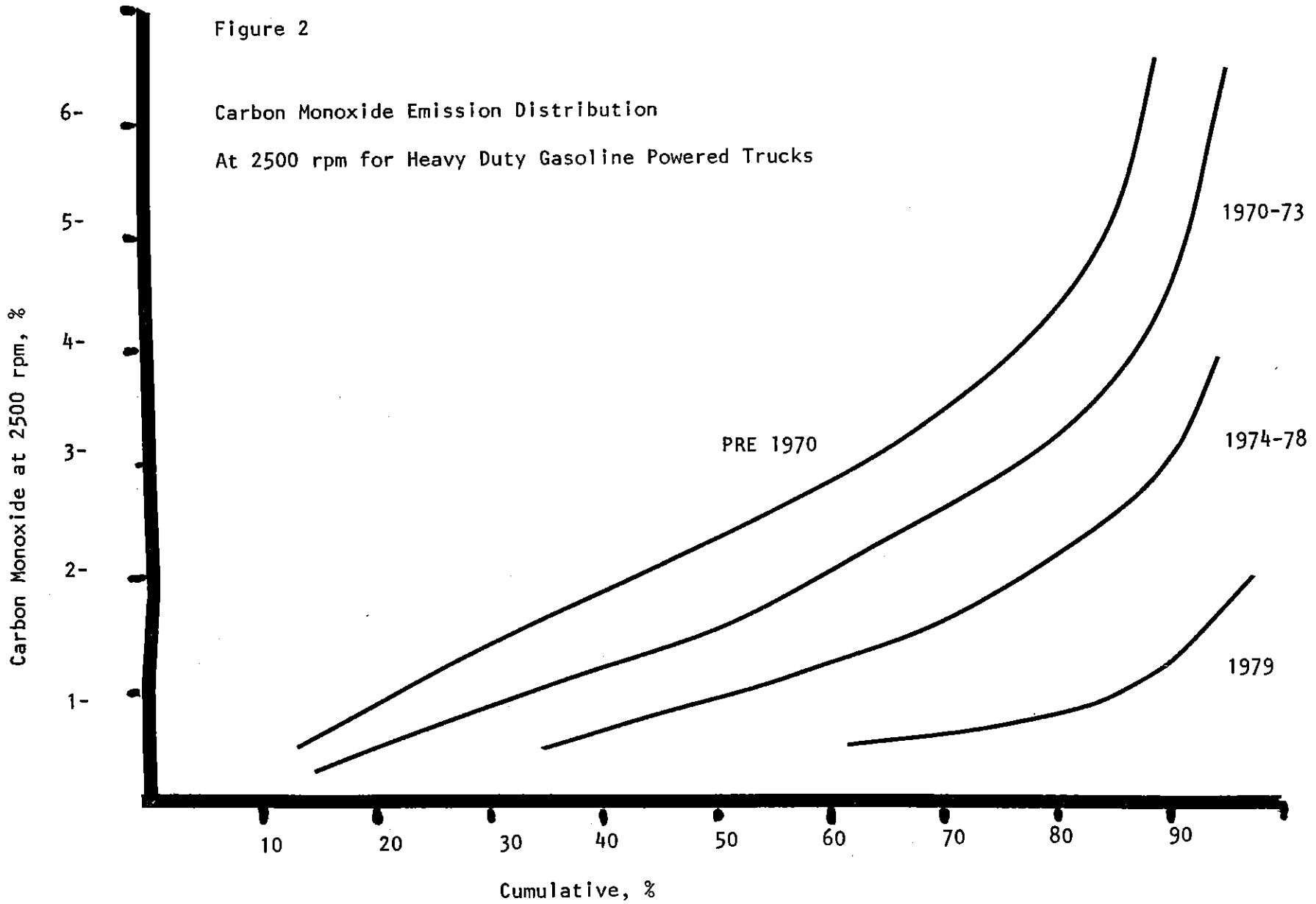
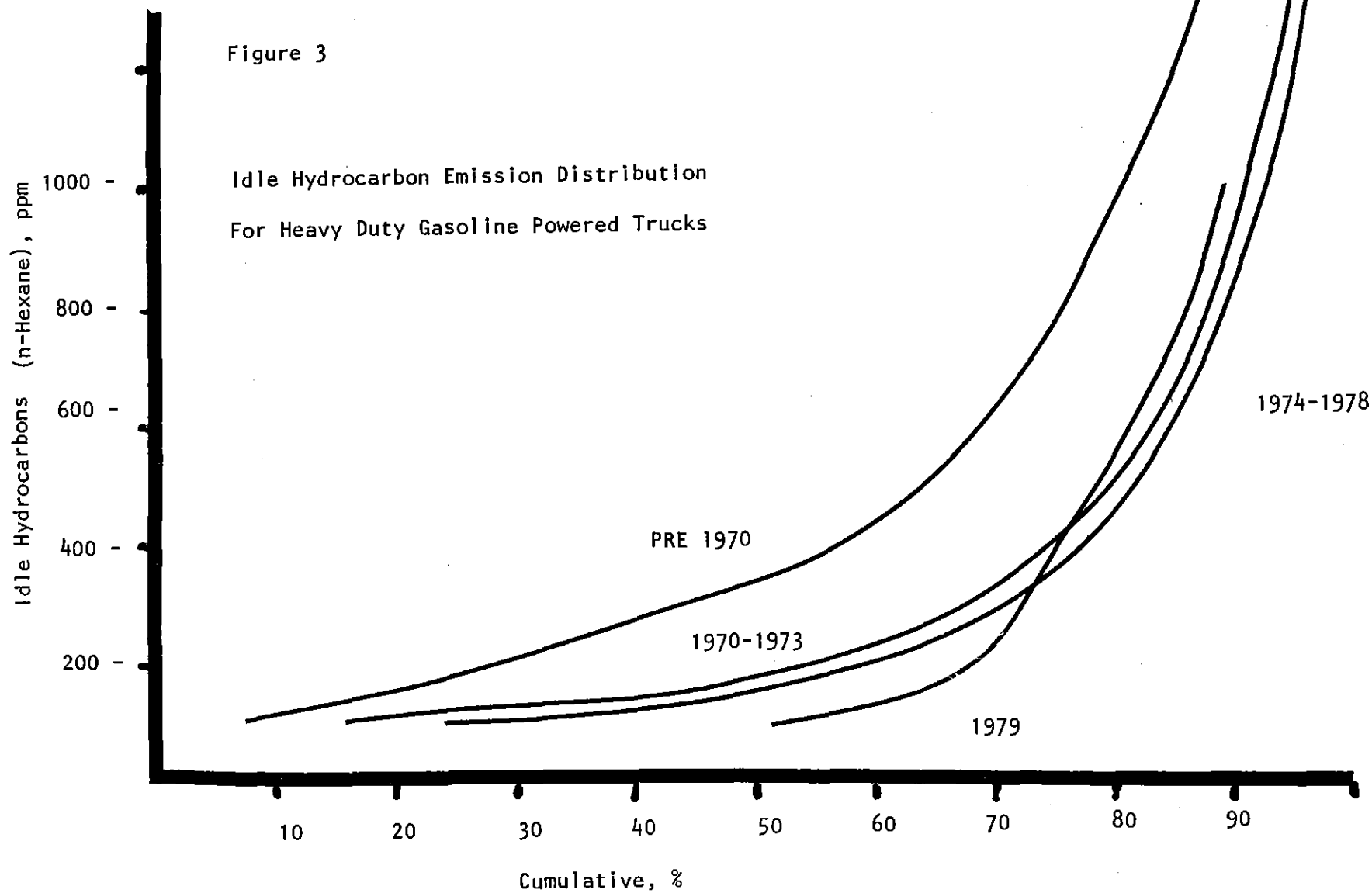


Figure 3

Idle Hydrocarbon Emission Distribution
For Heavy Duty Gasoline Powered Trucks



APPENDIX E

REPAIR COSTS ASSOCIATED WITH THE VEHICLE INSPECTION PROGRAM

A vehicle emissions inspection program is operated to protect the public health and welfare from the effects of automobile-created air pollution by inducing improved vehicle maintenance. Inspection standards and emission tests provide a means of measuring the individual motor vehicle's contribution to the total air pollution problem. Maintenance is the means of bringing the vehicle into compliance with emission standards. The retest provides a measure of effectiveness of that maintenance.

To monitor the costs associated with that maintenance, a questionnaire is sometimes incorporated into the non-compliance form that is given the motorists that fail the inspection test. When returning for the retest, many motorists provide information on the maintenance and the associated cost. It is these costs that are reported as the average repair costs.

The costs that are shared by all motorists are the inspection fee and the time necessary to have the inspection performed. The inspection fee is \$5 and currently is paid only once when a certificate is issued. The time spent by an individual will vary on the particular location and time of the month that is chosen. Travel time can vary between individuals depending upon their locations and choice of test stations. The Department goal is to have sufficient locations so that all stations are within five miles of most locations. Waiting time averages about 10 minutes. However, should the individual wait until the end the month, excessive waiting time may be experienced.

The \$5 fee charged is of concern of some citizens. This fee, however, is in keeping with fees charged by other I/M programs. See Table 1. The Oregon inspection fee can be compared to costs of other "State or Contractor Operated" programs. It should be kept in mind, however, that some of the programs in other states are subsidized. In Oregon fee income is the only source of program financing. The driving times are usually not considered significant cost items by most persons. The Department operates 7 permanent stations located throughout the MSD. Waiting times can be a different matter, since irritation increases with the increase in waiting time.

The types of work done to repair the vehicles that fail the DEQ idle emissions test, are illustrated in the first section of Table 2. The first data column shows an overview of all the survey cars. Approximately 60 percent of the work performed was related to the carburetor. As can be seen by the next three columns, no matter what caused the vehicle to fail the initial DEQ test, carburetor work was the predominant repair. Even though carburetor adjustments are most common, a variety of other work was performed.

The second section of Table 2 presents the after-maintenance retest pass rate or the pass rate after repairs were done. The overall retest pass rate, was 82.8 percent. As can be seen from the last three columns of this section, the retest pass rate did not vary much with the cause of initial test failure.

The costs of repair are itemized in the third section of the table. Most people whose vehicles failed the DEQ test, were able to either repair their vehicles themselves or have them repaired for less than \$10. Less than 4 percent of the vehicles which failed, require in excess of \$100 in repairs. The estimated average cost of repairs in Oregon was \$17. By contrast, the average cost of repairs to meet standards of the California program as reported by California Vehicle Inspection Program was \$29.

A special cost of repair survey was conducted at the Department's Hillsboro test station. This survey examined the types of work done by the three categories of maintenance facilities: self-maintenance, miscellaneous garages and mini-service garages. Mini-service garages were classified as those that did a relatively large number of tune-ups on cars that had failed the DEQ test.

The results of this survey are displayed in Table 3. Note, in the distribution of the types of work in the upper part of the table, that the self-maintenance and miscellaneous garage categories did very closely the same types of work. The other category, mini-service garages, did almost exclusively carburetor adjustment work. The limited scope of repairs performed by these mini-service garages in this sample, implies that they may not be properly diagnosing and repairing the actual vehicle problems, but instead are making inordinate carburetor adjustments solely to lower idle emissions. This type of repair could well result in a vehicle with poor driveability and potentially one with high overall emissions. The vehicle may have low emissions at idle allowing it to pass the DEQ test, but overall vehicle emissions while driving could be high if vehicle malfunctions have not been corrected. In the Hillsboro survey, approximately 20% of the retest repair work was done by these mini-service garages. It is suspected that some of their customers may return for an after-test readjustment of the carburetor to improve driveability. Interestingly, the DEQ test failure rate after repair for these garages was very low (6%) compared to the other two categories (23% and 22%). The low failure rate was probably due to the use of exhaust gas analyzers in making carburetor adjustments.

The category, miscellaneous garages, had the highest average repair cost at \$22.05. Self-maintenance was the lowest at \$7.89, and mini-service garages cost was \$15.64. Although mini-service garages on an average charge \$7 less than miscellaneous garages for initial repair, their overall direct cost may be higher if a readjustment is required. Of course, the indirect costs of reduced gas mileage and increased engine wear resulting from a malfunctioning vehicle could well outweigh the savings in initial repair costs.

The Department is concerned that a vehicle's actual malfunctions are repaired rather than quick fixes being done solely to pass the emissions test. The Department assists in coordinating and supports ongoing training programs to help mechanics to properly diagnose and repair problems with vehicle emissions control systems.

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TABLE 1

EMISSION INSPECTION FEES CHARGED OR PROPOSED BY SOME PROGRAMS

State or Contractor Operated Programs

<u>State</u>		<u>Cost</u>
Arizona*	\$5.75	(includes one free retest)
California*	\$11.00	(initial fee)
	\$7.00	(retest)
Connecticut	\$10.00	(includes one free retest)
District of Columbia*	\$5.00	(initial fee-emissions and safety)
	\$1.00	(retest)
Maryland	\$9.00	(includes one free retest)
New Jersey**	\$2.50	(emissions and safety)
Ohio*	\$5.00	(initial fee-unlimited free retests)
Oregon*	\$5.00	(charged only once after passing test)
Washington	\$10.00	(includes one free retest)

Private Garage Operated Programs

Colorado	\$10.00	(includes one free retest)
Georgia	\$6.00	(emissions and safety)
Massachusetts	\$10.00	(emissions and safety)
Michigan	\$10.00	(includes one free retest)
Nevada*	\$34 - 38/hr	(labor rate-no set test fee)
New York*	\$12.00	(initial fee-emissions and safety)
	\$6.00	(retest)
Rhode Island*	\$4.00	(emissions and safety, includes one free retest)
Virginia	\$3.50	

* Emission program currently in mandatory operation.

+ Program is known to be subsidized.

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Table 2

DEPARTMENT OF ENVIRONMENTAL QUALITY
VEHICLE INSPECTION PROGRAM
522 SW Fifth Avenue
Portland, Oregon

Cost of Repair Survey
(7832 Total Responses)

Summary for May - July 1980

<u>Repairs and Adjustments Performed for Retest</u>	<u>Total (3762 Responses)</u>	<u>Initially Failed for HC (633 Responses)</u>	<u>Initially Failed for CO and Both HC/CO (2853 Responses)</u>	<u>Initially Failed for Other Than HC and CO (276 Responses)</u>
A/F Mixture Adjustment	35.5%	26.5%	39.1%	18.8%
Idle Speed Adjustment	17.7%	15.6%	17.9%	21.4%
Air Cleaner Replacement	8.2%	6.8%	6.6%	7.6%
Choke Repair	3.4%	3.3%	3.4%	4.0%
Carburetion Repair	9.5%	9.0%	10.0%	5.4%
Dwell/Timing Adjustment	8.1%	13.1%	7.3%	4.7%
Spark Plug Replacement	6.1%	11.3%	5.2%	3.2%
Distributor Repair	2.8%	5.4%	2.3%	1.5%
Vacuum Hose Replacement	3.1%	5.2%	2.4%	4.3%
Other Adjustments or Repairs	5.5%	3.8%	3.7%	30.0%
<u>Passing Retest After Repair</u>	<u>Total (7832 Responses)</u>	<u>Initially Failed for HC (1892 Responses)</u>	<u>Initially Failed for CO and Both HC/CO (4662 Responses)</u>	<u>Initially Failed for Other Than HC and CO (1278 Responses)</u>
	82.8%	76.1%	83.8%	89.1%
<u>Reported Cost of Repair</u>	<u>Total (445 Responses)</u>	<u>Initially Failed for HC (47 Responses)</u>	<u>Initially Failed for CO and Both HC/CO (364 Responses)</u>	<u>Initially Failed for Other Than HC and CO (34 Responses)</u>
0 - \$5.00	27.4%	20.5%	28.4%	30.7%
\$5.01 - \$10.00	31.7%	27.7%	32.8%	16.3%
\$10.01 - \$20.00	24.8%	25.3%	25.4%	18.7%
\$20.01 - \$30.00	4.9%	8.7%	3.9%	9.1%
\$30.01 - \$50.00	4.2%	5.6%	3.1%	9.6%
\$50.01 - \$75.00	2.9%	4.4%	2.5%	3.0%
\$75.01 - \$100.00	1.9%	2.7%	1.4%	4.8%
Over \$100.00	3.4%	5.1%	2.5%	7.8%

Table 3

DEPARTMENT OF ENVIRONMENTAL QUALITY
VEHICLE INSPECTION PROGRAM
State of Oregon
522 SW Fifth Avenue
Portland, Oregon

Vehicle Repair Survey

Hillsboro Test Station
September-October, 1980

<u>Repairs Itemized*</u>	<u>Self Maintenance</u>	<u>Miscellaneous Garages</u>	<u>Mini-Service Garages</u>
A/F Mixture	62%	72%	88%
Idle Speed	38%	47%	64%
Air Cleaner	25%	10%	3%
Choke	6%	8%	0%
Carburetion	21%	32%	48%
Dwell/Timing	17%	22%	0%
Spark Plugs	10%	10%	0%
Plug Wires	3%	3%	0%
Distributor	6%	3%	0%
Vacuum Hoses	13%	12%	0%
Other	21%	24%	3%
<u>Costs</u>			
\$ 0 - \$ 4.99	70%	18%	2%
5 - 9.99	6%	18%	2%
10 - 24.99	18%	47%	94%
25 - 49.99	2%	1%	0%
50 - 74.99	1%	6%	0%
75 - 99.99	1%	5%	0%
\$100 +	1%	5%	2%
Failure Rate on Retest	23%	22%	6%
Number Vehicles in Sample Categories	77	59	33
Average Cost	\$7.89	\$22.05	\$15.64

* Numbers in this section represent the percent of vehicles on which a particular type of work was done. Columns do not total 100% since more than one task was performed on some vehicles.

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Appendix F

AIR QUALITY TRENDS

Background

Carbon monoxide and photochemical oxidants are two important contaminants which are related to motor vehicle emissions. Carbon monoxide is the most abundant air contaminant emitted in the Portland airshed. Motor vehicles are the predominant source of carbon monoxide emissions, contributing about 95% of the total carbon monoxide in the Portland metropolitan area.

The federal and state carbon monoxide health standard of 10 milligrams per cubic meter (8-hour average) was exceeded 88 days in 1970 at the Burnside (CAMS) monitoring station in downtown Portland. The worst day recorded that year had an average 8-hour reading of 20.8 milligrams per cubic meter. In 1980, the 8-hour average was exceeded only 21 times. Figure 1 shows the annual carbon monoxide violation days since 1970 at the CAMS Station. Also shown is the number of carbon monoxide violation days at the Sandy Boulevard Station in Portland.

In contrast to carbon monoxide, which usually shows health standard violations close to high emission areas, oxidants measured as ozone are more of a regional problem. Health standard violations are usually more wide spread and often occur away from the emission sources. In 1975 a monitoring station was placed south of Oregon City at Carus which drew attention to the extent of that problem. Between that time and 1978, hourly oxidant concentrations as high as 0.23 ppm have been measured. Since 1978, however, ozone violations have dropped drastically. There appear to be three major reasons for this decline: meteorology, monitoring method changes and reductions in precursor emissions.

Carbon Monoxide Trends

The State of Oregon Transportation Control Strategy adopted in 1973 strives to reduce carbon monoxide and ozone to compliance with ambient air standards. The transportation control strategy is in effect in the Portland metropolitan area. The major elements of these strategies include:

1. New motor vehicle program -- federal responsibility
2. Inspection/maintenance program -- state responsibility
3. Mass transit improvements -- Tri-Met responsibility
4. Traffic flow and circulation improvements -- local government responsibility

As a result of these strategies, carbon monoxide emissions, as well as the number of carbon monoxide health standard violation days, have decreased in the Portland area.

Implementation of the transportation control strategies has been discussed in previous reports on the inspection program. In summary, the goal of the federal new car program has been to reduce auto emissions by 90% from their uncontrolled levels. After the initial controls were placed upon motor vehicles, field studies indicated that these controls were not achieving the desired emission reductions. Inspection/maintenance programs were proposed as a means of reinforcing these new car controls. In the Portland metropolitan area additional transportation control strategies, as described, have been implemented.

The relationship between the ambient air concentrations and the motor vehicle sources is complicated by meteorology and traffic concentrations. Meteorology and traffic have previously been discussed, and by way of an update, the meteorological potential for carbon monoxide violations has been great during the last few winters. In the Portland area winters are the time at which there is normally high ambient carbon monoxide readings. Traffic also has an influence and has remained relatively constant.

Traffic on Burnside, where the CAMS station is located, was approximately 25,000 ADT in 1970. It peaked in 1979 at approximately 30,000 ADT and during 1980 dropped to approximately 29,000. At Sandy Blvd., near the Sandy air monitoring station, traffic counts in 1979 were approximately 24,000 ADT. In 1971 traffic counts indicated an ADT of approximately 23,000. The traffic counts are consistent with the data listed in the section on traffic and population. The data also indicates that Sandy Blvd. operates near its traffic handling capacity, while Burnside has some excess capacity available.

Carbon monoxide health standard violations are usually the result of high traffic volumes and congested traffic combined with poor meteorology. The meteorology has been conducive to high carbon monoxide concentrations for the past few years. Traffic volumes and speeds have remained relatively consistent over the past ten years at the two monitoring sites. Portland's main monitoring station, the CAMS station on S.W. Burnside has shown declining carbon dioxide concentrations as indicated in Figure 2. This is due to the effectiveness of the inspection/maintenance program, the federal new car program, and the other measures of the transportation control strategy. Carbon monoxide decreases have also been observed at the Sandy Blvd. monitoring site. At Sandy Blvd., violation days have declined from 51 in 1974 to 20 in 1980. This long term trend is shown in Figure 3. Figure 4 shows the violation days for carbon monoxide contrasted with the annual average of the monthly means for both Sandy Blvd and CAMS monitoring sites. As can be seen, these factors indicate reduced carbon monoxide emissions for the Portland metropolitan area.

In addition to these data, all of the ambient carbon monoxide data have been forwarded to the University of Wisconsin for a statistical analysis. The preliminary results from the draft report indicate that the ambient carbon monoxide improvements in air quality are directly related to the federal new car program and the inspection/maintenance program. The final report, which is scheduled to be available this year, is expected to

contrast the carbon monoxide data in Eugene with that in Portland in an attempt to better quantify how much of this reduction can be attributed to the federal new car program versus Portland's inspection/maintenance program.

The emission inventory data for the tri-county area of Clackamas, Multnomah, and Washington Counties for 1979 is shown in Table 1. As can be seen from that table, motor vehicles, both light and heavy duty, account for 95% of the carbon monoxide emissions as listed by the emission inventory. Light duty vehicles are credited with 93% of the total motor vehicle emissions.

Compliance with carbon monoxide ambient air standards unchanged since the last report, is projected to be achieved during 1985 with our existing control strategies.

Table 1
Emission Inventory for
Clackamas, Multnomah, and Washington Counties for 1979

	<u>Carbon Monoxide</u> <u>Tons per Year</u>	<u>Hydrocarbons</u> <u>Tons Per Year</u>
Light duty vehicles (cars and pick-ups)	429,474	48,616
Heavy duty vehicles (gasoline and diesel trucks and buses)	27,969	4,222
TOTAL	<u>457,443</u>	<u>52,838</u>
% of Tri-County Area Total	95%	61%

Oxidant (Ozone) Trends

In 1979, the EPA adopted a change in the ambient health standard for ozone. At that time the EPA also indicated that sampling method changes and calibration changes would have a negligible effect in ozone readings. However, two facts affect these changes. The first is that, given the same amount of ozone, the calibration methods may detect different amounts of that ozone and the second is that, since the ozone standard was largely based on data using the NBKI calibration method, the change in calibration affects the amount of ozone detected so the ozone standard may need to be adjusted.

Ozone data taken in the last two years show that ozone violations during this period have dropped dramatically. There are three probable causes for the decline in these ozone violations. The meteorology during 1979 and 1980 has not been as conducive to ozone formation as it had been in the previous years. There have been changes in the methods of calibrating

the ozone monitor which appear to be responsible for a 27% reduction in ozone concentrations. There have been overall emission reductions that could account for another 9% ozone reduction. The inspection/maintenance program for motor vehicles has been estimated to provide a 12,000 kilogram per day reduction in hydrocarbon emissions by 1987. This 12,000 kilogram per day emission reduction in hydrocarbons is in addition to a 27,000 kilogram per day reduction in hydrocarbons due to reduction in vehicle miles traveled, gasoline consumption reductions, stationary source controls, additional control measures on hydrocarbon emitting facilities and the federal new motor vehicle program.

Compliance with the federal ozone standard with planned 1979 control strategies had been projected not to occur until after 1987. However, compliance may now be projected prior to 1987 pending recalculation of reduction requirements after the 27% adjustment to 1978 and prior data is factored into the ozone computer model. In any case, needed reductions by 1987 will be considerably less than projected in 1979.

Summary

There have been continued reductions of carbon monoxide emissions which are credited to control of emissions from motor vehicles due to the new car program, the inspection/maintenance program, and the remaining transportation control strategies. Compliance with carbon monoxide standards via existing control strategies, including the inspection/maintenance program, is expected to be achieved by 1985. Some ozone reductions due to emission control improvements have been achieved in the last 5 years. The meteorological and monitoring changes that have occurred in the past two years tend to obscure slightly the benefit of this overall emission reduction, but, if meteorological conditions are factored out, it is estimated that existing control measures at a minimum will still be necessary in order to meet the federal ambient air standards for ozone between 1982 and 1987 as required by the Clean Air Act. A more precise determination of whether 1987 ozone levels will comply with federal standards should be completed in early 1981.

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FIGURE 1

NUMBER OF CARBON MONOXIDE VIOLATION
DAYS AT PORTLAND AIR MONITORING STATIONS

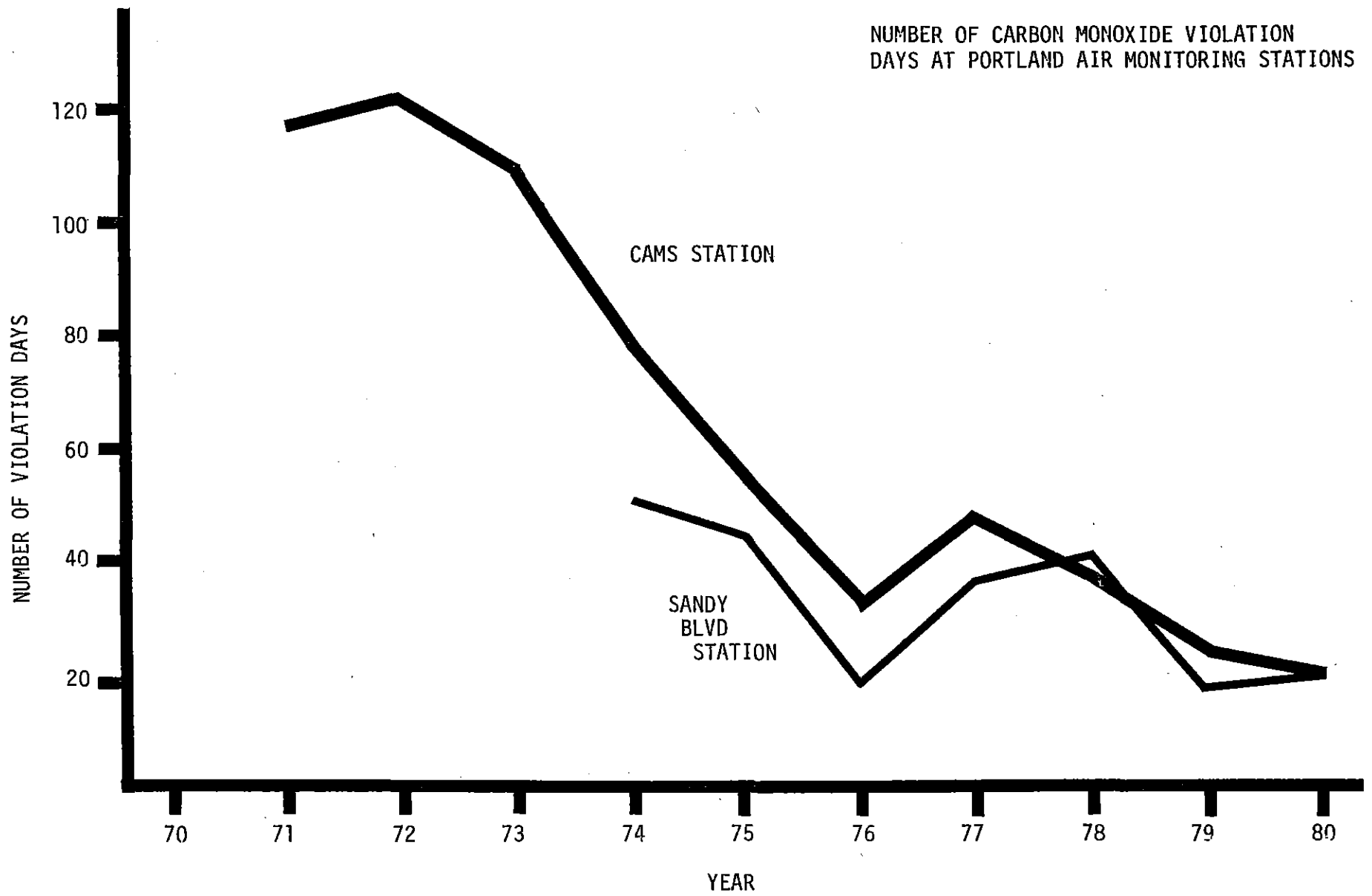


FIGURE 2

LONG TERM CO AT CAMS AIR
MONITORING STATION

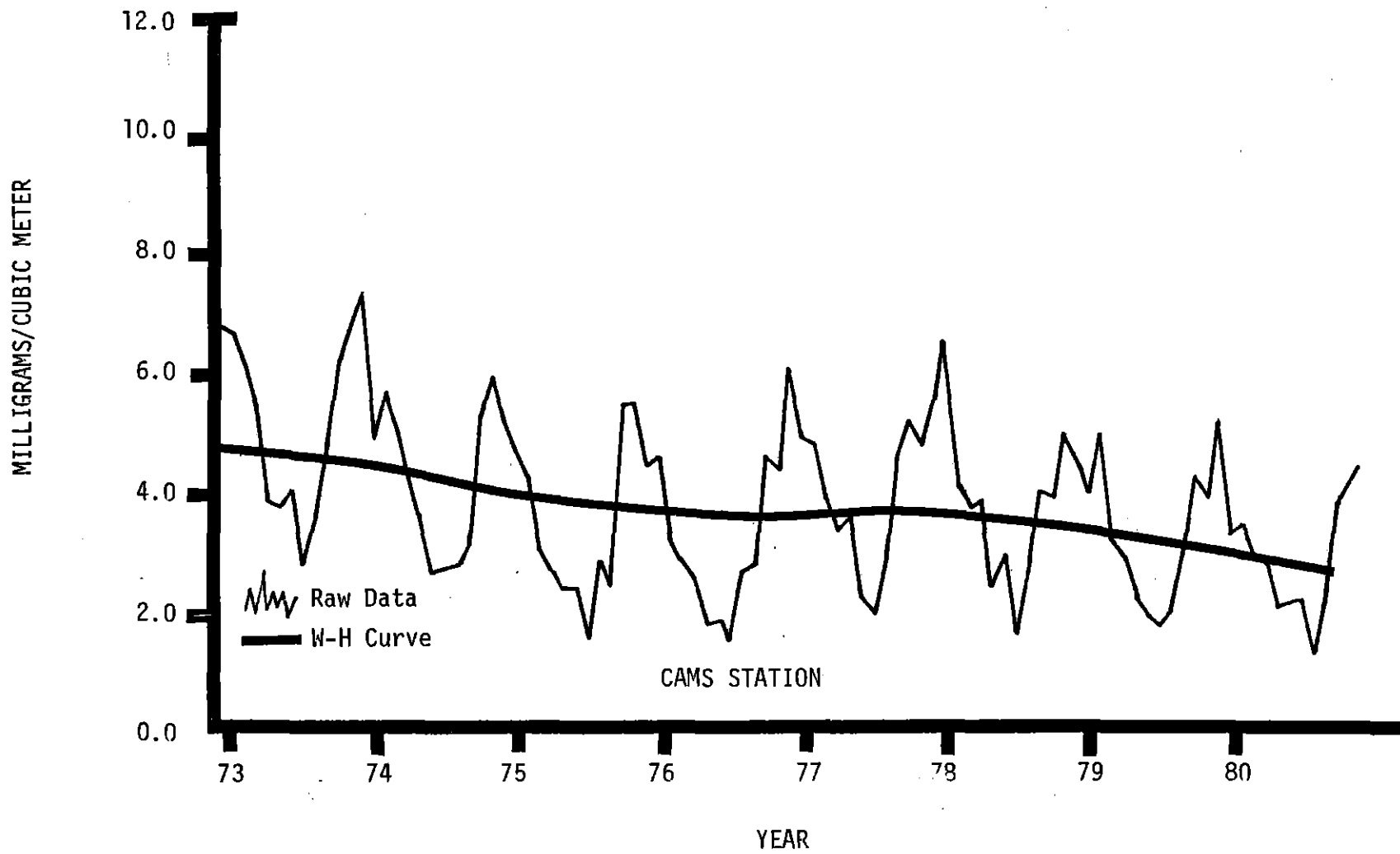


FIGURE 3

LONG TERM CO AT SANDY BLVD.
MONITORING STATION

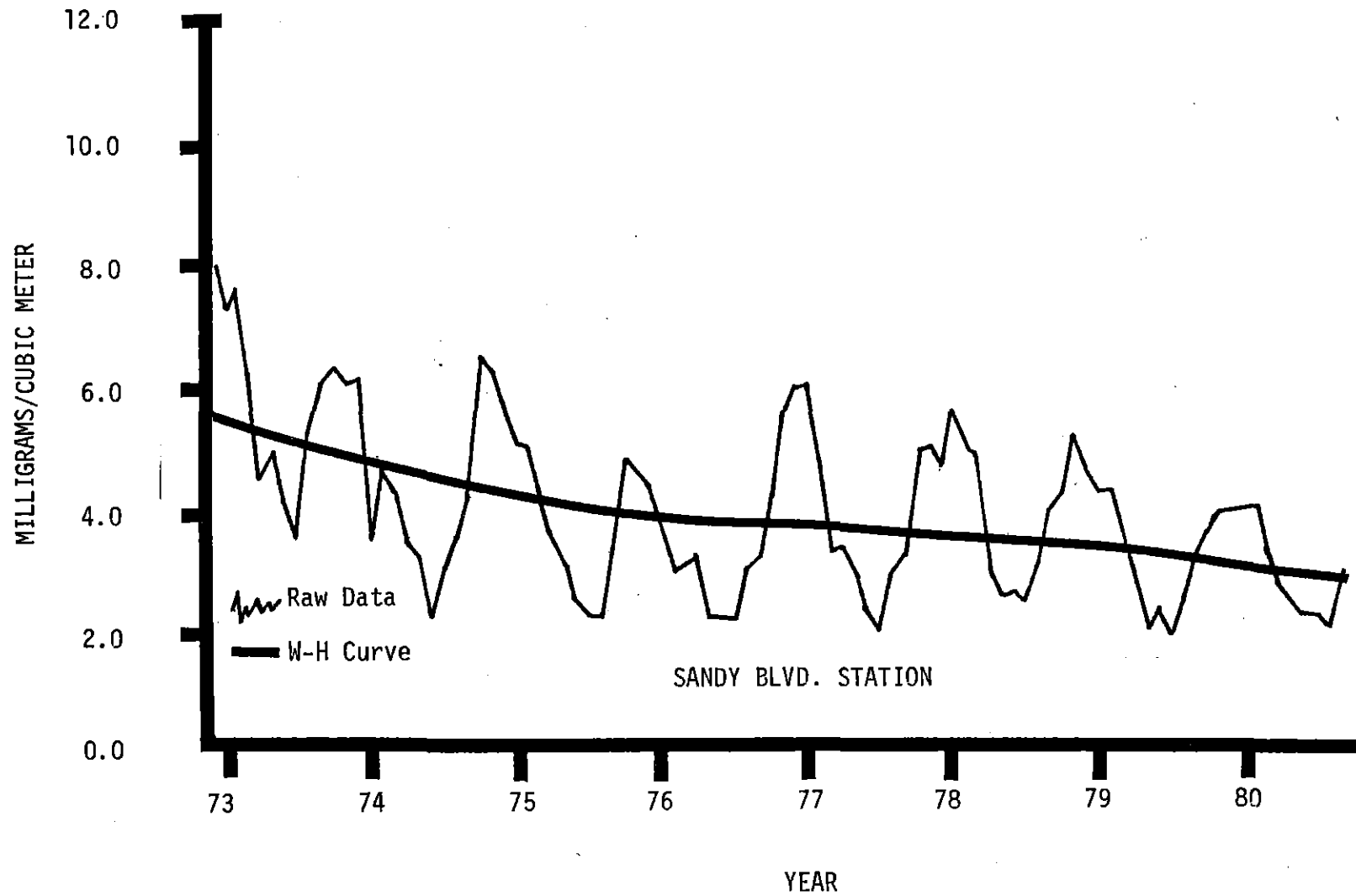
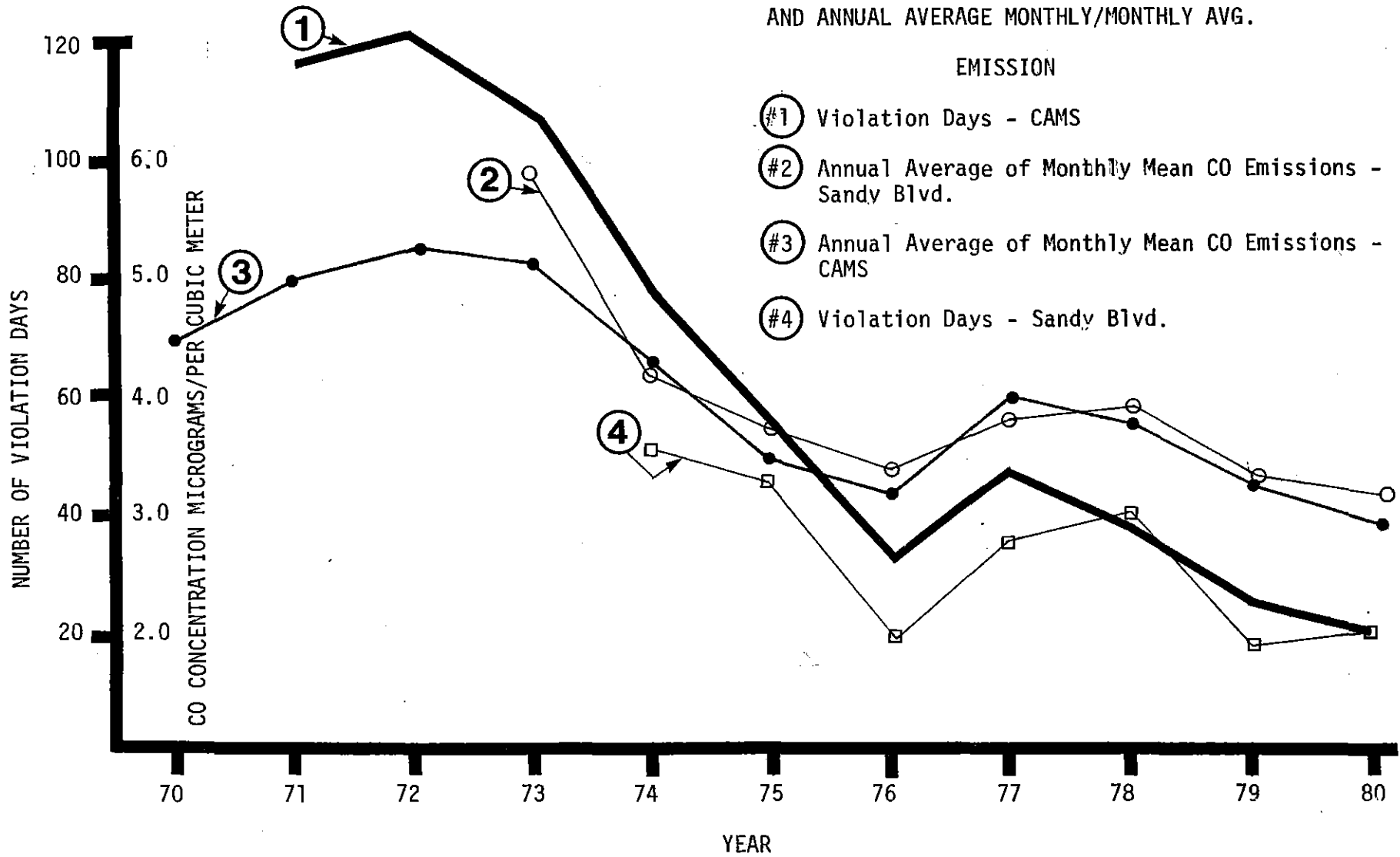


FIGURE 4

CARBON MONOXIDE VIOLATION DAYS
AND ANNUAL AVERAGE MONTHLY/MONTHLY AVG.



Appendix G

ENGINEERING ACTIVITIES

During the past two years several special engineering studies and activities have been conducted to complement the inspection program. In addition to the normal monitoring of program quality control, review of program waiting times, evaluation of data, and the like, there have been a number of specific studies conducted. Among these studies were aftermarket product evaluations made for the purposes of establishing procedures for determining and documenting the emission effects of aftermarket parts. The Department has also assisted other agencies within state government in the evaluation of aftermarket products when requested. The purpose of such evaluations is to document emission effects. The program staff obtained and coordinated several full scale federal test procedures on some aftermarket products and aftermarket vehicle designs.

Tests were made and reports written on these projects. Table I lists the engineering reports made within the past two years. Highlights of some of these studies follow.

TABLE I
TITLES OF DEQ/VIP REPORTS

<u>Report No.</u>	<u>TITLE</u>
79-01	An Emission Test of the Auto Jet Heater
79-02	An Emission Test of a 1977 Turbocharged Volvo
79-03	A Test of Alcohol Gasoline Mix Compared to Regular Unleaded Fuel.
80-01	The Emission History of the 1976 Dodge - E 125-124
80-02	Pollution Control System Tampering Survey
80-03	Cooperative Department of General Services/ Department of Environmental Quality Gasohol Program - April Status Report

One device tested was the Auto Jet Heater manufactured by the Auto Jet Heater Company of Medford, Oregon. The Jet Heater is an electrically heated carburetor adjustment needle, which is reported to improve both fuel economy and exhaust emissions. After testing the device, and after reviewing the test data, it was concluded that the Auto Jet Heater did not significantly increase or decrease emissions or mileage on the type of vehicle tested.

The program staff arranged for the test of a locally turbocharged Volvo sedan, including the full federal test and highway fuel economy test. The emission test results indicated that the vehicle exceeded its original emission standards for hydrocarbons. However, the experience gained from the testing and evaluation of this vehicle yielded a greater understanding and concern for problems in the automotive aftermarket product business. The Department staff has continued informal contacts with SEMA, an aftermarket trade association aimed at providing better mechanisms for aftermarket product evaluations and review.

The program staff tested a vehicle using gasohol fuel, and found that, compared to unleaded and regular fuel, the use of the gasohol fuel did not degrade the emission performance of the vehicle. These tests duplicated findings that had been reported in the technical literature.

The Department staff participated with the Department of General Services in recording baseline emission results for a gasohol field trial. Various short cycle tests were conducted on a fleet of vehicles which the Department of General Services was planning to use in its gasohol study. The initial evaluations of the vehicles were made prior to the start of the gasohol test program. However, to date no follow up has been made because of cost limitations.

With the eruptions of Mt. St. Helens last May and the subsequent eruption in June, there was concern that the effect of the volcanic ash might seriously affect vehicle operations in the Portland area. A review of the data both before and after the eruption dates was made and an attempt to determine if increased engine wear due to increased volcanic ash might give rise to premature engine failures. The review particularly focused on various inspection program failure modes. There was no evidence of changes in the failure modes at DEQ stations either before or after volcanic eruptions. The overall failure rate for the program remained the same during the study period as did the failure rates for the sub groups, carbon monoxide, and vehicle smoke. Based on the findings of the review of six months of data, the volcanic ash fall appears to have had no long term effect on motor vehicle operation as evidenced by increased failure rates for emission related causes that might be traced to increased engine wear.

As a part of the educational activities and to support the Medford training program, an engineering project was started in 1980 to construct a demonstration test engine. The purpose of such a demonstration unit was to show, for mechanic training sessions as well as seminars for other interested parties, the effect of proper maintenance on exhaust emissions. A 1980 Dodge pickup truck was donated to the Department by Chrysler Corporation. Department staff proceeded to modify the vehicle, instrumenting it and equipping it with necessary tools and gauges, to show the effect of proper maintenance. The project was completed in late January, 1981. Long range plans are to increase the level of sophistication of the test vehicle and to improve its usefulness as a training aid. A picture of the completed truck is shown in figure 1.

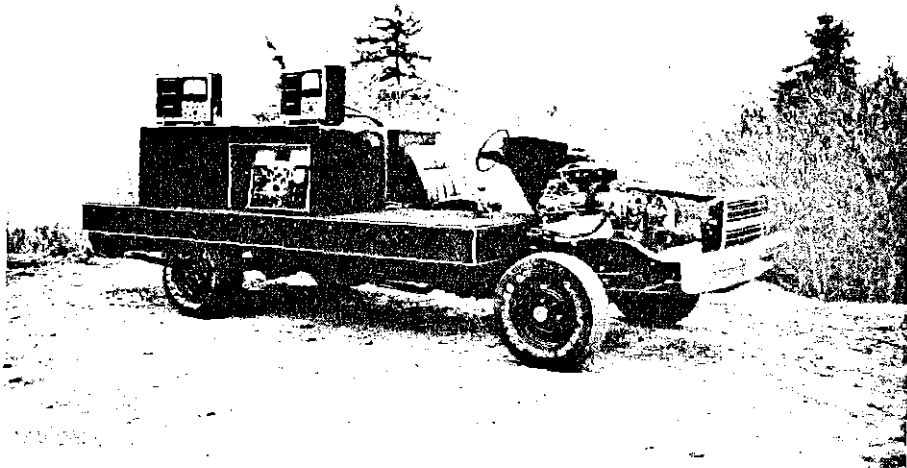


Figure 1. Emission Demonstration Project

Projects like those described above complement the inspection program operation. Long term projects that are proposed for the next two years include continued work with the automotive aftermarket product industry; complete review of the State's idle test procedure; and an analysis of the need for computerization of the program operations, especially as it relates to overall cost effectiveness.

During the past two years, the Environmental Protection Agency has continued its test program in the Portland metropolitan area. EPA originally established the Portland Study to determine correlation between short tests such as Portland's and the longer Federal test and to monitor the effectiveness of Portland's inspection program. As the EPA finished its initial tasks, additional testing was done, and new objectives were added--that is, the scope of the Portland Study was expanded.

The results of the initial study included:

1. The idle test is highly effective in identifying vehicles which are excessive hydrocarbon or carbon monoxide emitters;

2. Mechanics in the field are capable of maintaining cars to achieve significant emission reductions at reasonable costs;
3. Fleetwide emission reductions appear to be sustained for a period of about one year following maintenance;
4. If failed cars are maintained according to manufacturer's specification, both emission reductions and fuel economy improvements would increase.

The scope of the EPA work began to address new areas of concern. Among the areas that were evaluated were the following:

1. The evaluation of three-way catalyst vehicles.
2. A study of the effectiveness of EGR repairs.
3. A mechanic training evaluation program.
4. An evaluation of catalyst diagnostic tests.

The initial study of the three way catalyst tests continued to confirm the value of the idle test in identifying excessive carbon monoxide and hydrocarbon emitters. It also indicated that as the complexity of the new technology computer-controlled emission systems increases, the idle test may have to be modified to retain its effectiveness as a diagnostic tool. The early work done at the EPA laboratories in Ann Arbor and in Portland indicated that the idle test, or a simple variation on the idle test, appears to be an effective mechanism for screening out those first generation computer controlled vehicles. Further simple variations on the idle test were shown to be able to identify additional malfunctions in more advanced computer operated systems.

The study of the effectiveness of EGR repairs confirmed some serious problems that affect the automotive repair industry. The study showed how the complexity of the overall engine system and the parts distributions problems that exist in the automotive aftermarket can seriously impair a service technician's ability to properly repair a customer's motor vehicle. The results can be interpreted to indicate that there exists a need for additional training for auto repair technicians and that the training needs to be supported by an adequate parts inventory.

An initial evaluation of mechanic's training was done under the auspices of EPA's Portland Study Group. The initial class, developed by Colorado State University, was pilot tested in Portland. The shortcomings of this pilot study led to improvements in the class and to the development of a format that has now been successfully used by the Department in its Mechanic's Training Program in the Medford Jackson County area.

Programs now underway at the EPA Portland Study group include an in-depth analysis of the emission impact of light and medium duty trucks. This class of vehicles, which is included in the State's inspection requirement, has not been as thoroughly studied as the conventional passenger vehicle in terms of the quality of emission repairs. As these vehicles have made up an increasing portion of the overall vehicle population, the documentation of their emission impacts is important.

The EPA Portland study group has assisted local studies on alternative fuels development. EPA has worked with the Bonneville Power Administration in the evaluation of alcohol fueled vehicles. While all of the data is not currently available for review, several important observations have been made. Among these observations are that when modifications were made to emission control systems resulting in the disablement of the systems, and the vehicle is then operated on pure alcohol, emissions increase. This is the same result that occurs when a vehicle operates on conventional gasoline.

The EPA has worked with the Northwest Natural Gas Company and conducted a test on a liquified natural gas powered truck. While the results were obtained at an early stage of research, the findings will assist in further development of that potential source of fuel. Engineering studies, such as those discribed above, provide a better understanding of the problems and some of the solutions associated with automotive emission control.

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Appendix H

Population Growth and Traffic Pattern Trends

In 1974, the Oregon Legislature established the initial boundaries for the Vehicle Inspection Program. The legislatively set initial program boundaries were those of the Metropolitan Service District (MSD), covering portions of Multnomah, Clackamas and Washington counties. Vehicles registered within the MSD are subject to DEQ's clean air test. As of January 1, 1979, the MSD boundaries were reorganized to an area which includes a smaller area of Washington County and a larger area of Clackamas County. The legislature adopted the new MSD boundaries as the boundaries for the Vehicle Inspection Program, effective January 1, 1980. The Portland metropolitan area has grown both in population and in traffic volume. This section reviews trends in population and traffic patterns as they relate to the inspection program coverage.

Population

The MSD covers portions of Multnomah, Washington and Clackamas counties. The Metropolitan Service District estimates the MSD population in 1980 at 955,100. Since the MSD boundary was altered on January 1, 1979, a direct MSD population growth rate is not available. The MSD population growth rate, however, may be estimated from the county population data in Table 1. This estimate should be quite good since 91% of the tri-county (Multnomah, Clackamas and Washington) residents live within the MSD.

Table 1

Population Distribution* in Portland Metropolitan Area

<u>County</u>	<u>1969</u>	<u>1976</u>	<u>1978</u>	<u>1980</u>	(1969-78) Growth/yr	(1969-80) Growth/yr
Multnomah	559,600 (56%)	553,000 (50%)	549,000 (47%)	559,000 (45%)	-0.2%	0.0%
Washington	143,300 (14%)	196,000 (18%)	215,000 (19%)	247,800 (20%)	+5.5%	+6.6%
Clackamas	164,800 (16%)	205,800 (18%)	220,000 (19%)	240,900 (19%)	+3.7%	+4.2%
Clark Co, WA	129,000 (13%)	154,300 (14%)	169,900 (15%)	192,060 (16%)	+3.5%	+4.4%
Total of 3 Oregon Counties	867,700	954,800	984,000	1,047,700	1.5%	1.9%
Grand Total	996,700	1,109,100	1,153,900	1,239,760	1.7%	2.2%

* Data from Portland State University (Center for Population Research and Census)

Growth of the Tri-county population between 1969-80 has been at a rate of 1.9% per year. The most recent population growth (1978-80) was at a higher rate of 3.2% per year.

Table 1 shows that the Portland Metropolitan area's growth has been occurring primarily in three counties around Multnomah County. Further, the growth has been at about the same rate in these three counties, with Washington County leading. Multnomah County, on the other hand, has displayed no overall growth. As compared to the greater Metropolitan area, Multnomah County population has decreased from 56% to 45% of the total population. Thus the population is increasing within the area but not evenly throughout the area. The fastest growth is occurring in the suburbs.

A look at working population will give some insight into traffic trends during week-day rush hours. Probably the best indicator of working population within the Metropolitan area is information from the Oregon Department of Revenue, Income Tax Filing by County. This is summarized in Table 2. The numbers in parentheses show the fraction of total population that is working.

Table 2

<u>County</u>	<u>1969 Returns</u>	<u>1976 Returns</u>	<u>1978 Returns</u>	(1969-78)
				<u>Growth/yr</u>
Multnomah	223,257 (40%)	229,500 (41%)	247,171 (45%)	1.2%
Washington	52,511 (37%)	81,700 (42%)	95,045 (44%)	9.0%
Clackamas	55,871 (34%)	81,500 (39%)	92,570 (42%)	7.3%
Clark Co.,WA	12,804 (10%)	19,600 (13%)	23,560 (14%)	9.3%
Total of 3 Oregon Counties	331,639	392,700	434,786	3.4%
Grand Total	344,450	412,300	458,346	3.6%

* Data from Portland State University (Center for Population Research and Census).

Note that there has been a trend for a larger fraction of the population to be employed, especially in Washington, Clark and Clackamas Counties. Overall the growth in working population in the Metropolitan area has more than doubled the growth of the total population between 1969-78. Even in Multnomah County, a 1.2% per year growth in workers was seen, while the total population did not change. Note in Table 2 that the fraction of working people in Clark County, Washington is unusually low. This results from considering only Clark County residents who work in Oregon.

Vehicle Registration

Table 3 shows passenger car registration and population figures for the ten Oregon counties with the highest passenger vehicle registrations. As expected, the counties associated with the Portland metropolitan area are at the top of the list. Lane County is also high on the list. It includes the state's second largest metropolitan area.

Table 3

VEHICLE REGISTRATION AND POPULATION BY COUNTY

<u>County</u>	<u>Estimated 1979*</u> <u>Passenger Car</u> <u>Registrations</u>	<u>Growth</u> <u>Since</u> <u>1970</u>	<u>Estimated</u> <u>1980**</u> <u>Population</u>	<u>Growth</u> <u>Since</u> <u>1970</u>
1. Multnomah	383,933	16%	559,000	0.4%
2. Lane (Eugene)	210,757	64%	274,000	28.0%
3. Clackamas (Portland/Oregon City)	183,803	105%	240,900	45.0%
4. Washington (Portland/Beaverton)	173,741	97%	247,800	57.0%
5. Marion (Salem)	152,818	69%	205,800	36.0%
6. Jackson (Medford)	108,832	83%	132,700	40.0%
7. Douglas (Roseburg)	75,249	69%	93,600	30.0%
8. Linn (Albany)	71,164	64%	88,100	22.0%
9. Coos (Coos Bay)	51,200	51%	64,100	13.0%
10. Deschutes (Bend)	51,078	152%	61,968	104.0%

* Data from the Oregon Motor Vehicles Division.

** Data from Portland State University (Center for Population Research and Census).

Increases have occurred in both vehicle registrations and in population. However, vehicle registration in almost all counties has been growing at a rate of over twice that of the population. The highest growth rate (both in population and in vehicle registrations) are occurring in Deschutes, Clackamas, and Washington Counties. Multnomah County, the state's most populous, had a minimal population increase but still shows significant growth in vehicle registration. The overall Portland vehicle tri-county registration growth rate was 5% per year compared to a population increases of 1.9% per year (see Table 1) and a working population growth of 3.4% per year (see Table 2).

Morning Traffic Trends

Figure 1 gives the average morning weekday traffic into and out of Portland for June, 1980. Besides displaying total vehicle counts, it shows the growth in traffic count which has occurred since 1970 and the number of Oregon vs. out-of-state vehicles.

Morning traffic counts have substantially increased over the past ten years. The largest increase by far occurred at the Vista Ridge Tunnel (Highway 26), reflecting the population and business activity increases in Washington County. The average increase of the reporting stations was about 6% per year compared to a vehicle registration increase of 5% per year and working population growth rate of 3.4% per year. Notice that vehicle registration growth related very closely to increases in morning traffic.

Figure 1 shows that the ten year growth (%) in traffic leaving the downtown Portland area has in each of the reported cases out-distanced the growth in incoming traffic. The most dramatic example of this is at the Banfield Freeway. This appears to represent a relative growth in business activities in the areas adjacent to downtown.

Of some concern to Oregonians is the influx of vehicles from Washington, where cars are not currently required to pass an air pollution emissions test. The week-day traffic counts give a qualitative view of the number of people residing in Washington that work in Oregon. Each morning, about 8,400 out-of-state cars enter Oregon over the Interstate Bridge. By the time this I-5 southbound traffic reaches the Ainsworth Crossing (Minnesota Freeway), the count is reduced to about 3,000, and only about 400 of the original 8,400 out-of-state vehicles leave Portland on I-5 at Wilsonville (Baldock Freeway). It therefore appears that most of the out-of-state people are doing business in the north of Portland, never reaching the Portland central business district. In addition, essentially all of the southbound interstate bridge traffic stops somewhere in the Portland area.

Interstate Bridge traffic counts show approximately a 40% increase in traffic in both north and south directions over the past ten years. This growth in bridge traffic is of the same magnitude as the growth in vehicle population in the Portland tri-county area (54%). This indicates that bridge traffic has not inordinately increased in the last ten years. The actual out-of-state influx of approximately 8,400 cars a day is only 1% of the vehicle population in the Portland tri-county area. This does not represent a major impact in terms of pollution or traffic, to the Portland area. The 8,400 cars represent 5% of the registered vehicles in Clark County Washington.*

* Data from Department of Licensing, Olympia, Washington.

Existing Vehicle Inspection Boundaries

The vehicle inspection boundaries have been legislatively established as the Metropolitan Service District (MSD) boundaries, This area is shown in Figure 2. Figure 2 also shows the 1979 average daily traffic (ADT)

across those boundaries. During 1979, there was 226,800 ADT on the main roads in and out of the MSD. Assuming a worst case condition that all of the traffic is registered outside the MSD, then 14% of the passenger vehicles operating within the MSD would be from outside the vehicle inspection area.

Of these vehicles from outside the area, most travel on I-5. In the north, traffic from Clark County Washington accounts for almost half of the total cross traffic. In the south, I-5 accounts for an additional 21%.

The Department did an additional study of Oregon license plates observed in parking lots within the Portland area to gauge out-of-area impact. This study shows that about 12% of the Oregon vehicles were from outside the area.

Vehicle Usage

Pollution emitted into the Portland air shed is a function of both the average amount emitted per mile and the total vehicle miles traveled. The Vehicle Inspection Program provides an avenue for limiting pollutant emissions from vehicles. The program has no direct impact on the number of miles driven. Table 4 shows the trend of vehicle usage in the Portland area in the last five years. The numbers given are the estimated miles traveled per year on the primary and secondary streets in the tri-county area. There has been an overall 20% increase in traffic in the last five years. Note, however, that between 1978 and 1979 a slight reduction (0.4%) did occur. A look in Table 4 of the "Change in Total Miles" column, illustrates that the reduced driving is not a continuing trend but an occurrence which was initiated in 1979. Many factors, including the overall economic outlook and fuel costs could have stimulated such a reduction.

Table 4

Annual Vehicle miles Portland Metropolitan Area

<u>Year</u>	<u>Miles</u>			<u>Total</u>	<u>Change in Total Miles</u>
	<u>Multnomah</u>	<u>Clackamas</u>	<u>Washington</u>		
1975	1,518,000,000	597,000,000	686,000,000	2,801,000,000	-----
1976	1,619,000,000	659,000,000	751,000,000	3,029,000,000	+228,000,000
1977	1,682,000,000	708,000,000	796,000,000	3,186,000,000	+157,000,000
1978	1,724,000,000	782,000,000	870,000,000	3,376,000,000	+190,000,000
1979	1,713,000,000	792,000,000	855,000,000	3,362,000,000	-14,000,000

One of the factors affecting vehicle usage in the Portland Metropolitan area is bus ridership. Table 5 shows the number of boarding passengers in each of the last ten fiscal years.

Table 5

TRI-MET Bus Ridership

<u>Fiscal Year</u>	<u>Number of Trips</u>	<u>Increase in Number of Trips</u>
1970-71	19,596,000	-----
1971-72	20,564,000	968,000
1972-73	21,432,000	868,000
1973-74	24,523,000	3,091,000
1974-75	27,698,000	3,175,000
1975-76	34,615,000	6,917,000
1976-77	37,311,000	2,696,000
1977-78	39,368,000	2,057,000
1978-79	40,562,000	1,194,000
1979-80	48,499,000	7,937,000

Bus ridership has increased every year since 1970. The largest jump in passenger trips occurred in fiscal year 1979-80. This ridership information correlates well with the drop in vehicle miles travelled for 1979 shown in Table 4.

Summary

The population of the MSD is estimated at 955,100 with an annual growth rate over the last eleven years of 1.9%. In the last two years MSD population has increased at the faster rate of 3.2% per year. This growth is mainly occurring in the suburban areas. In fact, Multnomah County has shown no net population growth in the last eleven years.

Between 1979-78 working population in the metropolitan area has grown at a rate of about double that of the total population (3.4% per year). Working population growth correlates more closely to increases in vehicle registration than total population.

Vehicle registration in the metropolitan area has increased at a rate of 5% per year in the last ten years, more than double that of total population growth and somewhat faster than working population growth.

The increase in morning (6 AM-11 AM) traffic on major roads in the metropolitan area over the last 10 years was approximately 6% per year, very similar to the rise in vehicle registrations. Every week day morning approximately 8,400 out-of-state cars enter Oregon across the Interstate Bridge. Morning traffic across the bridge has increased at the relatively slow rate of 4% per year over the past ten years.

Currently it is estimated that 12%-14% of the vehicles operating within the MSD come from outside the area. This ratio has not changed significantly in the past few years. Approximately half of these out-of-area vehicles come from Washington State over the interstate bridge.

The vehicle usage (vehicle miles travelled) in the metropolitan area has increased by 4% per year in the last five years. In 1979, however, an actual drop in vehicle usage occurred (0.4%). This drop is associated with a major rise in Tri-Met bus ridership which occurred in fiscal 1979-80. It is too early to tell if this drop represents a trend toward reduced vehicle usage.

JC:r
AR838 (1)

Figure 1

FLOW OF VEHICLES ON THE PORTLAND FREEWAY SYSTEM FROM 6AM-11AM JUNE 1980

Interstate Bridge

North ▲	South ▼
2,802	5,657
4,155	8,388
9,664	19,508 (Up 38%)
(Up 43%)	

Minnesota Freeway

North ▲	South ▼
7,225	9,534
2,413	3,184
13,042	17,210 (Up 55%)
(Up 55%)	

Fremont Bridge

North ▲	South ▼
-	-
9,176	12,811

Banfield Freeway

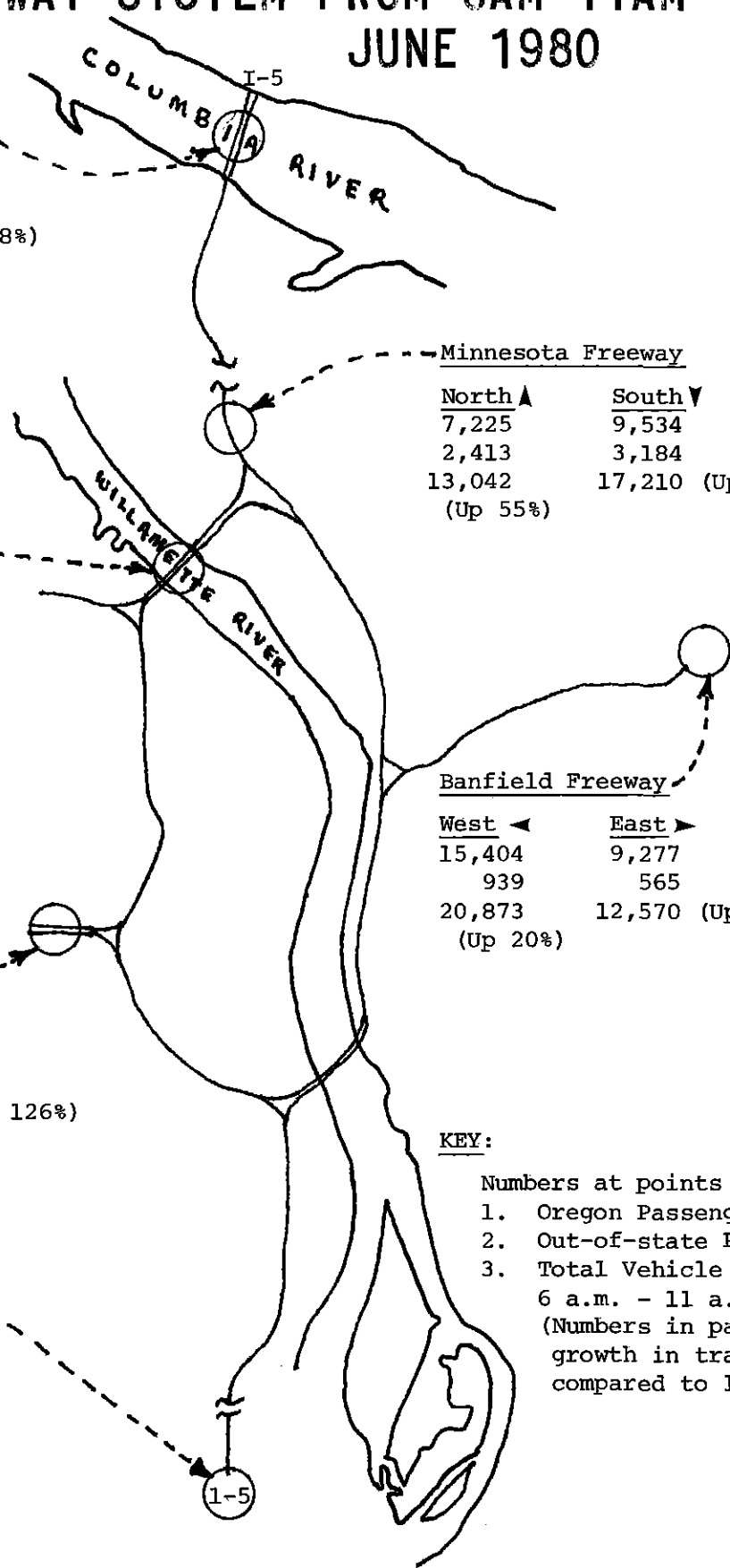
West ◀	East ▶
15,404	9,277
939	565
20,873	12,570 (Up 63%)
(Up 20%)	

Vista Ridge Tunnel

West ◀	East ▶
-	-
9,959	16,942 (Up 126%)
(Up 143%)	

Baldock Freeway

North ▲	South ▼
2,507	2,249
442	397
4,916	4,410

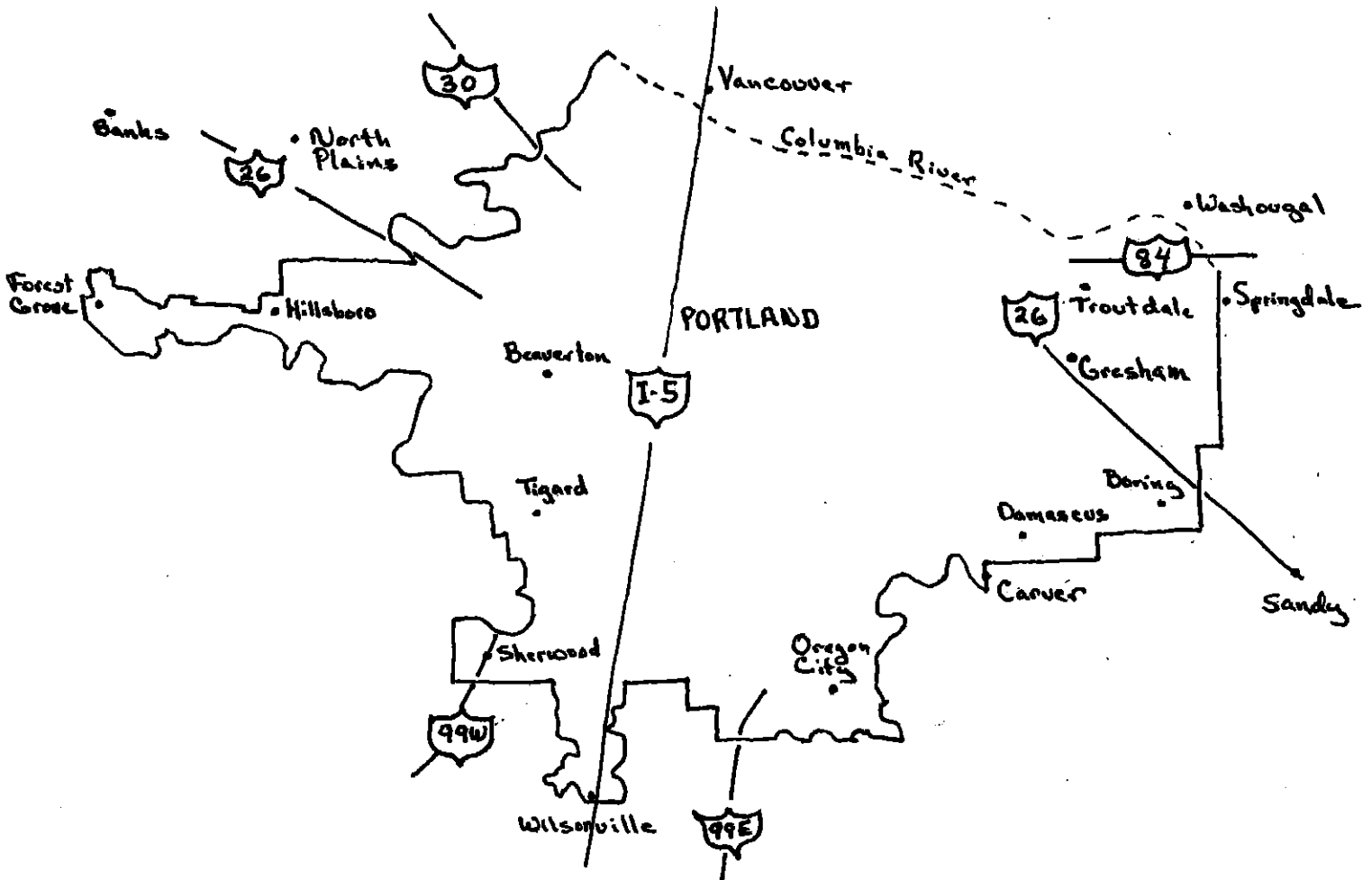


KEY:

- Numbers at points represent:
1. Oregon Passenger Cars
 2. Out-of-state Passenger Cars
 3. Total Vehicle Count
- 6 a.m. - 11 a.m.
(Numbers in parenthesis shows growth in traffic counts as compared to 1970 counts)

Figure 2

AVERAGE DAILY TRAFFIC (ADT) ACROSS CURRENT VEHICLE INSPECTION BOUNDARIES



AVERAGE DAILY TRAFFIC AT MSD BOUNDARIES

	<u>1977</u>	<u>1979</u>	<u>Difference</u>
I-5/Interstate Bridge	97,300	100,800	3,500
I-84N (East Boundary)	13,300	13,700	400
U.S. 26 (East Boundary)	12,500	13,100	600
U.S. 99E (South Boundary)	9,200	9,300	100
I-5 (South Boundary)	43,400	48,100	4,600
U.S. 99W (South Boundary)	14,200	14,700	500
U.S. 26 (West Boundary)	11,600	12,300	700
U.S. 30 (North Boundary)	<u>14,200</u>	<u>14,800</u>	<u>600</u>
SUM	215,700	226,800	11,100

Appendix I

Status of Other Inspection/Maintenance Programs

The Clean Air Act Amendments of 1977 extended the time schedule for compliance with National Ambient Air Standards to 1982. If a state implements all reasonable control measures - including a motor vehicle inspection/maintenance program - and is still unable to project compliance with the national standards, then an extension of the time schedule until as late as 1987 is possible. The following table, organized in terms of EPA regions - lists the status of the various inspection/maintenance programs in this country.

WPJ:r
AR873

INSPECTION/MAINTENANCE PROGRAM IMPLEMENTATION SUMMARY

10/29/80

Reg State Areas*	Design Values		I/M SIP Status		Implementation Chronology			Program Description					Comments		
	OX ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Test Type	Cost Mode	Model Years	Fee \$	Mech. Train Waiver		Cost String Factor	LDT lbs.
I															
CT statewide Hartford Bridgeport (Fairfield) New Haven	.145		7/2/80		Yes	MI/MM 12/82		CC/EU I	1968+	10	Yes	\$70	20%	6001	Submittal received. Presently under review all items addressed. Bid received on RFP.
MA statewide Boston Springfield Worcester Lawrence	.177	18.4	3/7/80	9/16/80 A	Yes	MI/MM 1/82		D/SE I	15 years	10	Yes	\$100 or 10% of value	20%	8000	
RI statewide Providence	.189		12/7/79		Yes	MI/VM 11/77 MI/MM 1/79		D/SE I	1967+	4	Yes	no guide- lines	20%	8000	SIP revisions submitted, presently under review.
II															
NJ statewide Northeast Philadelphia AQCR (Trenton)	.323	1.5ppm *	8/8/79	3/11/80 A	Yes	MI/MM 2/74		CS/RS I	all	2.50	Yes	none	none	6000	*Statistically derived annual average
NY NYC & metro area: Nassau Co. Rockland Co. Suffolk Co. Westchester Co.	.323	23.9	12/10/79	5/21/80 A	Yes	MI/VM 1/81 MI/MM 1/82		D/RS I	All	6.00	Yes	20%	20%	8500	Details requested in FRM on stringency factor application, types of vehicles subject to I/M, and requirements for mechanic certifi- cation. Letter submitted

Non-Attainment Key	I/M FRM key	Program Phase Key	Program Type Key	Program Type Key	Test Mode
Number = design value non-attain.	CA = Conditional approval A = approved	VI = voluntary inspec. MI = mandatory inspec.	D = decentralized C = centralized	RE = registration-enforced SE = sticker-enforced	P = parameter I = idle
Blank = in attain.	D = disapproved	VM = voluntary main. MM = mandatory main.	CC = contractor-run CS = state-run PU = program undecided	EU = enforcement undecided RS = registration and sticker enforcement	L = loaded U = undecided R = idle and RPM
? = possible non-attainment	NA = no action on I/M				

* This heading lists urbanized areas and counties within them that are required to have I/M; in some cases only part of a county may be included.

Reg State Areas*	Design Values		I/M SIP Status		Implementation Chronology			Program Description				Comments		
	OX ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Type	Test Mode	Model Years	Fee \$		Mech. Cost Train Waiver	String LDT Factor lbs.
III														
PA Philadelphia: Philadelphia Bucks Montgomery Chester Pittsburg: Allegheny Armstrong Westmoreland Scranton: Lackawanna Wilkes-Barre: Luzerne Allentown/Bethlehem/Easton: Lehigh Northampton	.220	16.3	7/24/79	5/20/80 A	Yes	MI/VM 5/81 MI/MM 11/81		D/SE I	last 25	Yes	\$150-250	25%	11,000	Started certification of garages in 8/80
VA D.C. Suburbs: Arlington Co. Fairfax Co. Prince William Co. Richmond: Chesterfield Co. Henrico Co.	.192		7/30/79	8/18/80 CA	Yes	MI/MM 1/82		D/RE I	last 8	Yes	\$75 or low emissions tune-up		6000	Implementation schedule, commitment to implement and enforce, and commitment to 25% reduction prior to FRM. Submittal received, all items adequate except details needed on schedule

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INSPECTION/MAINTENANCE PROGRAM IMPLEMENTATION SUMMARY

10/29/80

Reg State Areas*	Design Values		I/M SIP Status		Implementation Chronology			Program Description					Comments			
	OX ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Type	Test Mode	Model Years	Fee \$	Mech. Train Waiver		Cost	String LDT Factor lbs.	
III																
D.C. city-wide	.192	16.3	7/26/79		Yes	MI/VM 1/82 MI/MM 1/83		C/SE I		last 25	NA	Yes	None	20%	6000	SIP lacks: commitment to 25% emission reduction, implementation schedule, commitment to retesting failures, clear enforcement authority. Contingencies on implementation must be removed.
DE Wilmington: New Castle Co.	.22		7/25/79 3/6/80	3/6/80 CA	Yes	MI/VM 1/81 MI/MM 1/82	Install equipment, begin mech. train 12/80	CS/SE I		All		Yes				Deadline for developing cutpoints missed. New schedule has been submitted to region.
MD Baltimore: Anne Arundel Co. Carroll Co. Howard Co. Baltimore Co. Harford Co. D.C. suburbs: Montgomery Co. Prince Georges Co.	.190	14.0	8/1/79	8/12/80 A	Yes	MI/VM 1/82 MI/MM 1/83		CC/RS I		last 12	9	Yes	\$75	-	10,000	Implementation schedule missing some dates. Proposed regs are now undergoing review. RFP is now under development.

<u>Non-Attainment Key</u>	<u>I/M FRM Key</u>	<u>Program Phase Key</u>	<u>Program Type Key</u>	<u>Program Type Key</u>	<u>Test Mode</u>
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	OX ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Type	Test Mode	Model Years	Fee \$	Mech. Train Waiver		Cost String LDT Factor lbs.
IV														
GA Atlanta: Cobb Co. DeKalb Co. Fulton Co.	.165	22	5/9/79	1/24/80 A	Yes	MI/VM 4/81 MI/MM 4/82	License garages, begin mech. train. 10/80	D/SE	I	last 3 10	3	Yes	\$50	6000
KY Louisville: Jefferson Co. Cincinnati suburbs: Boone Co. Campbell Co. Kenton Co.	.198	19.9	11/15/79	1/25/80 CA	Yes	MI/MM 12/82		C/SE	I	All		Yes	\$100	All Jefferson & Boone are submitting SIP's. 176A funding limita- tions proposed for Kenton & Campbell
NC Charlotte: Mecklenburg County	.190	20.9	10/23/79	4/17/80 CA	Yes	VI/VM 3/81 MI/MM 12/81		D/SE	I	Last 12	Max 8	Yes	\$50 or EPA min.	All gas SIP submitted, under review.
TN Nashville: Davidson Co.	.175	16.8	7/24/79	2/6/80 CA	Yes	MI/MM 12/82		CS/SE				Yes		
Memphis: Shelby Co. (local programs)		15.1	10/2/79	8/13/80 CA	Yes	MI/MM 12/82		PU/SE	I			Yes		Memphis' schedule revision contains deficiencies.

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INSPECTION/MAINTENANCE PROGRAM IMPLEMENTATION SUMMARY

10/29/80

Reg State Areas*	Design Values		I/M SIP Status		Implementation Chronology			Program Description					Comments	
	OX ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Type	Test Mode	Model Years	Fee \$	Mech. Train		Cost Waiver
V IL Chicago area:	.241	23.3	7/2/79	2/21/80	Yes	VI/VM 7/82	Adopt Regs	CC/RE I	last	6.50	Yes		30%	Will submit SIP revision with new schedule, Legislation expected in November.
Cook Co.				A	MI/MM 1/83	12/31/80			13	HDT:	12.67			
Du Page Co.														
Kane Co.														
Lake Co.														
McHenry Co.														
Will Co.														
St. Louis area:	.248													
Madison Co.														
St. Clair Co.														
IN Chicago subs:	.241	11	3/27/80			MI/MM 1/82		CC/EU I	last	10	Yes	\$100	20%	Conditional approval proposed, details on enforcement mechanism due 12/80.
Lake Co.			11/14/80						13			or 2.5% value		
Porter Co.														
Louisville sub:	.198	18.3												
Clark Co.														
Floyd Co.														
MI Detroit area:	.23	15.2	8/13/79	6/2/80	Yes	MI/MM 1/83	Adopt regs	D/RE I	72+	10	Yes	\$50	20%	8500
Macomb Co.			4/14/80	A			1/81							
Oakland Co.														
Washtenaw Co.														
Wayne Co.														
OH Cleveland*:	.23	24.7	3/10/80		Yes	MI/MM 12/82		C/EU						Received I/M SIP submittal. State has clear legal authority.
Cuyahoga Co.														
Lorain Co.		Medina Co.												
Lake Co.														
Cincinnati*:	.22	18.3			Yes									
Butler Co.		Hamilton Co.												
Clemont Co.		Warren Co.												

* Specific areas will not be defined until Study Board Report is completed (7/1/81).

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V																																																		
WI Milwaukee: Kenosha Co. Milwaukee Co. Ozaukee Co. Racine Co. Washington Co. Waukesha Co.	.288	16.1	6/17/80		Yes	MI/MM 1/83	Issue RFP 12/80	CC/RE L*		last 15	Yes	\$55	20%	8000	*Using loaded mode for diagnostic purposes, pass/fail on idle mode.																																			
VI																																																		
NM Albuquerque: Bernalillo Co.	24.4	8/9/79	4/10/80	NA	Yes	MI/MM 1/82	Issue RFP 12/80	CC/EU L, post 1981 man- datory I/L		1968+ 9-10 est.	Yes	\$75 or 15% of value		8500	Regs adopted 9/80 No action taken on SIP deficiencies: commitment to implement and enforce. Study on options being conducted.																																			
TX Houston: Harris Co.																																																		
	.27	8/1/79	12/18/79	A	Yes	MI/MM 1/83	Parameter inspection study 12/1/80	PU/EU																																										
VII																																																		
MO St. Louis area: Jefferson Co. St. Charles Co. St. Louis Co.	.248	15.4	10/25/79	4/9/80 CA	Yes	VI/VM 10/79 MI/MM 1/83		D/RS I			Yes	none	30%		Need: expanded schedule (8/31/80), program type, stringency factor, resources in (12/1/80) report to legislature.																																			
<table border="0"> <tr> <td><u>Non-Attainment Key</u></td> <td><u>I/M FRM Key</u></td> <td><u>Program Phase Key</u></td> <td><u>Program Type Key</u></td> <td><u>Program Type Key</u></td> <td><u>Test Mode</u></td> </tr> <tr> <td>Number = design value non-attain.</td> <td>CA = Conditional approval</td> <td>VI = voluntary inspec.</td> <td>D = decentralized</td> <td>RE = registration-enforced</td> <td>P = parameter</td> </tr> <tr> <td>Blank = in attain.</td> <td>A = approved</td> <td>MI = mandatory inspec.</td> <td>C = centralized</td> <td>SE = sticker-enforced</td> <td>I = idle</td> </tr> <tr> <td>? = possible non-attainment</td> <td>D = disapproved</td> <td>VM = voluntary main.</td> <td>CC = contractor-run</td> <td>EU = enforcement undecided</td> <td>L = loaded</td> </tr> <tr> <td></td> <td>NA = no action on I/M</td> <td>MM = mandatory main.</td> <td>CS = state-run</td> <td>RS = registration and sticker enforcement</td> <td>U = undecided</td> </tr> <tr> <td></td> <td></td> <td></td> <td>PU = program undecided</td> <td></td> <td>R = idle and RPM</td> </tr> </table>															<u>Non-Attainment Key</u>	<u>I/M FRM Key</u>	<u>Program Phase Key</u>	<u>Program Type Key</u>	<u>Program Type Key</u>	<u>Test Mode</u>	Number = design value non-attain.	CA = Conditional approval	VI = voluntary inspec.	D = decentralized	RE = registration-enforced	P = parameter	Blank = in attain.	A = approved	MI = mandatory inspec.	C = centralized	SE = sticker-enforced	I = idle	? = possible non-attainment	D = disapproved	VM = voluntary main.	CC = contractor-run	EU = enforcement undecided	L = loaded		NA = no action on I/M	MM = mandatory main.	CS = state-run	RS = registration and sticker enforcement	U = undecided				PU = program undecided		R = idle and RPM
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10/29/80

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	OX ppm	CO mo/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Type	Test Mode	Model Years	Fee \$	Mech. Train		Cost Waiver	String LDT Factor lbs.	
VIII																
CO Denver area:	.170	26.0	5/11/79	10/5/79	Yes	MI/MM	Adopt regulations	D/SE	U	1968+	8	Yes	15/100	30/40	8500	SIP fully approved, sanctions lifted. *Parameter adjustment for pre-1981 cars and idle test mode for post-1981
Adams Co.			10/5/79	CA		1/81										
Arapaho Co.				2/5/80												
Boulder Co.				CA												
Douglas Co.				3/14/80												
Jefferson Co.				D												
Colorado Springs:		20.5		4/2/80												
El Paso Co.				7/16/80												
Fort Collins:		20		A												
Larimer Co. (< 200,000)																
Greeley:		17.8														
Weld Co. (< 200,000)																
UT Salt Lake City area:	.170	16.7														SIP lacks schedules, agency commitment to implement and enforce, a legal opinion on enforcement mechanism, 25% reduction commit.
Salt Lake Co.			5/16/79		Yes			CC/SE	I	1975+		Yes				
Davis Co.			2/19/79		Yes			PU/SE	I							
IX																
AZ Phoenix:	.150	26.1	7/5/79	8/11/80	Yes	MI/VM	1/76	CC/RE	I	last	5.75	Yes	\$75	25%	Yes	
Maricopa Co.				A		MI/MM	1/77			14						
Tucson:		19.7														
Pima Co.																
NV Las Vegas:	.130	21.7	5/7/79		Yes	MI/MM	7/74*	D/RE	R	last	12-17		\$25	30%	6000	*Change of ownership Fee includes adjustments. *Annual Inspection.
Clark Co.						MI/MM	7/81+			14			parts			
Reno		24.1				MI/MM	11/78*						\$75			
Washoe Co.						MI/MM	7/81+						parts &			
(< 200,000)											labor					

Non-Attainment Key	I/M FRM Key	Program Phase Key	Program Type Key	Program Type Key	Test Mode
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10/29/80

Reg State Areas*	Design Values		I/M SIP Status		Implementation Chronology			Program Description				Comments		
	OX ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Test Type	Fee Mode	Model Years	Mech. Cost \$		String LDT Factor	
IX														
CA South Coast					No			PU/EU U					SIP lacks legal authority and schedule 176A funding limitations have been proposed for all non-attainment areas over 200,000.	
Air Basin	.510	33.3	4/1/80											
Ventura -														
Oxnard -														
Thousand Oaks	.210													
San Francisco Bay area	.190	22.4	4/1/80											
San Diego	.220	13.8	10/4/79										Santa Barbara (< 200,000)	
			D										San Joaquin (< 200,000)	
Sacramento	.190	18.3											North Central Coast (< 200,000)	
Fresno	.190	22.9												
X														
OR Portland area:	.180	17.4	1/21/80	6/24/80	Yes	MI/MM 7/75		CS/RE R	1968+	5	No	None	8500	Conditional approval proposed based on submittal of their legal authority.
Multnomah Co.				CA										
Clackamas Co.														
Washington Co.														
WA Seattle area:	.160	18.32	11/9/79	6/5/80	Yes	MI/MM 1/82		CC/RE I	1968+	10	Yes	\$50	30%	Contractor has been selected (9/80).
King Co.				A										
Snohomish Co.														
Vancouver area:														
Clark Co.														

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Reg State Areas*	Design Values		I/M SIP Status		Implementation Chronology			Program Description				Comments		
	OX ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Test Type	Model Years	Fee \$	Mech. Cost Train Waiver		String LDT Factor lbs.	
IX														
CA South Coast Air Basin Ventura - Oxnard - Thousand Oaks San Francisco Bay area San Diego Sacramento Fresno	.510 .210 .190 .220 .190 .190	33.3 22.4 13.8 18.3 22.9	4/1/80 4/1/80 10/4/79 D.		No			PU/EU U					SIP lacks legal authority and schedule 176A funding limitations have been proposed for all non-attainment areas over 200,000.	
X														
OR Portland area: Multnomah Co. Clackamas Co. Washington Co.	.180	17.4	1/21/80	6/24/80	Yes	MI/MM	7/75	CS/RE R	1968+	5	No	None	8500	Conditional approval proposed based on submittal of their legal authority.
WA Seattle area: King Co. Snohomish Co. Vancouver area: Clark Co.	.160	18.32	11/9/79	6/5/80	Yes	MI/MM	1/82	CC/RE I	1968+	10	Yes	\$50	30%	Contractor has been selected (9/80).

Non-Attainment Key	I/M FRM Key	Program Phase Key	Program Type Key	Program Type Key	Test Mode
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Reg State Areas*	Design Values		I/M SIP Status		Implementation Chronology			Program Description					Comments		
	Ox ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Test Type	Model Years	Fee \$	Mech. Train	Cost Waiver		String LDT Factor lbs.	
V															
WI Milwaukee: Kenosha Co. Milwaukee Co. Ozaukee Co. Racine Co. Washington Co. Waukesha Co.	.288	16.1	6/17/80		Yes	MI/MM 1/83	Issue RFP 12/80	CC/RE L*	last 15		Yes	\$55	20%	8000	*Using loaded mode for diagnostic purposes, pass/fail on idle mode.
VI															
NM Albuquerque: Bernalillo Co.	24.4	15.4	8/9/79	4/10/80 NA	Yes	MI/MM 1/82	Issue RFP 12/80	CC/EU L, post 1981 man- datory I/L	1968+	9-10 est.	Yes	\$75 or 15% of value		8500	Regs adopted 9/80 No action taken on SIP deficiencies: commitment to implement and enforce. Study on options being conducted.
TX Houston: Harris Co.															
	.27		8/1/79	12/18/79 A	Yes	MI/MM 1/83	Parameter inspection study 12/1/80	PU/EU							
VII															
MO St. Louis area: Jefferson Co. St. Charles Co. St. Louis Co.	.248	15.4	10/25/79	4/9/80 CA	Yes	VI/VM 10/79 MI/MM 1/83		D/RS I			Yes	none	30%		Need: expanded schedule (8/31/80), program type, stringency factor, resources in (12/1/80) report to legislature.

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INSPECTION/MAINTENANCE PROGRAM IMPLEMENTATION SUMMARY

10/29/80

Reg State Areas*	Design Values		I/M SIP Status		Implementation Chronology			Program Description					Comments			
	OX ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Type	Test Mode	Model Years	Fee \$	Mech. Train		Cost Waiver	String Factor	LOD lbs.
IV																
GA Atlanta: Cobb Co. DeKalb Co. Fulton Co.	.165	22	5/9/79	1/24/80 A	Yes	MI/VM 4/81 MI/MM 4/82	License garages, begin mech. train. 10/80	D/SE	I	last 3 10	3	Yes	\$50		6000	
KY Louisville: Jefferson Co. Cincinnati suburbs: Boone Co. Campbell Co. Kenton Co.	.198	19.9	11/15/79	1/25/80 CA	Yes	MI/MM 12/82		C/SE	I	All		Yes	\$100		All	Jefferson & Boone are submitting SIP's. 176A funding limita- tions proposed for Kenton & Campbell
NC Charlotte: Mecklenburg County	.190	20.9	10/23/79	4/17/80 CA	Yes	VI/VM 3/81 MI/MM 12/81		D/SE	I	Last 12	Max 8	Yes	\$50 or EPA min.		All gas	SIP submitted, under review.
TN Nashville: Davidson Co.	.175	16.8	7/24/79	2/6/80 CA	Yes	MI/MM 12/82		CS/SE				Yes				
Memphis: Shelby Co. (local programs)		15.1	10/2/79	8/13/80 CA	Yes	MI/MM 12/82		PU/SE	I			Yes				Memphis' schedule revision contains deficiencies.

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Reg State Areas*	Design Values		I/M SIP Status		Implementation Chronology			Program Description				Comments		
	OX ppm	CO mg/m ³	NPRM	FRM	Leg. Auth.	Program Phase	Activities Schedule	Prog. Type	Test Mode	Model Years	Fee \$		Mech. Train Waiver	Cost String LDT Factor lbs.
III														
PA Philadelphia: .220 16.3 7/24/79 5/20/80 Yes MI/VM 5/81 D/SE I last 25 Yes \$150-250 25% 11,000 Started certification of garages in 8/80	Philadelphia Bucks			A	Yes	MI/VM 5/81		D/SE I	last 25	Yes	\$150-250	25%	11,000	Started certification of garages in 8/80
Montgomery Delaware														
Chester														
Pittsburg: .220 23.8	Allegheny Washington													
Armstrong Beaver														
Westmoreland Butler														
Scranton: .188														
Lackawanna														
Wilkes-Barre: .188														
Luzerne														
Allentown/Beth-lehem/Easton: .201														
Lehigh														
Northampton														
VA D.C. Suburbs: .192 7/30/79 8/18/80 Yes MI/MM 1/82 D/RE I last 8 3.50 Yes \$75 or low emissions tune-up 6000 Implementation schedule, commitment to implement and enforce, and commitment to 25% reduction prior to FRM. Submittal received, all items adequate except details needed on schedule	Arlington Co.			CA	Yes	MI/MM 1/82		D/RE I	last 8	Yes	\$75 or low emissions tune-up	6000		Implementation schedule, commitment to implement and enforce, and commitment to 25% reduction prior to FRM. Submittal received, all items adequate except details needed on schedule
Fairfax Co.														
Prince William Co.														
Richmond:														
Chesterfield Co.														
Henrico Co.														

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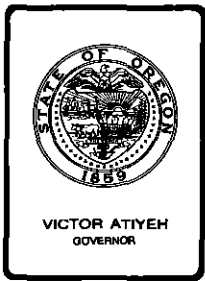
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Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207

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

• TO: Environmental Quality Commission

FROM: Director

SUBJECT: Agenda Item No. P, March 13, 1981 Environmental Quality Commission Meeting.

Status Report Regarding The EQC-Lane Board Of Commissioners Intergovernmental Agreement For The River Road/Santa Clara Area.

Background and Problem Statement

1. On April 18, 1980, the Environmental Quality Commission found that:
 - a. The River Road/Santa Clara shallow aquifer is generally contaminated with fecal coliform organisms in excess of drinking water and body contact standards.
 - b. Existing nitrate-nitrogen concentrations within the study area exceed the 5 mg/l planning target on the average. The 10 mg/l EPA maximum drinking water standard is currently exceeded in several locations. Said 10 mg/l standard contains no safety factor.
 - c. About 73% of the nitrate-nitrogen pollutants (and by analogy a similar share of the fecal coliform contamination) results from septic tank effluent. Septic tank pollutants can migrate rapidly to the groundwater from drainfields via macropore travel.
 - d. A public health hazard exists based on fecal coliform data for persons using the aquifer for domestic (drinking) or irrigation purposes. A health hazard similarly exists in several subareas based on nitrate-nitrogen levels.
2. The Commission further concluded that even if the septic tank moratorium then in effect were continued, groundwater pollution would increase before stabilizing at some worse condition. The Commission stopped short of declaring a health hazard or even continuing a full scale septic tank moratorium because:



Contains
Recycled
Materials

- a. The Lane Board of Commissioners, who had originally requested the septic tank moratorium, submitted a subsequent request to lift that moratorium on February 21, 1980, and
 - b. The Commission felt there were better ways to solve the documented area-wide pollution problems in the long term utilizing the local planning process.
3. Accordingly, on April 18, 1980, the Commission:
- a. Repealed the septic tank moratorium.
 - b. Adopted a temporary regional rule which allows some new development on septic tanks. The Commission recognized that such action would add to the pollutant load to local groundwater, but hoped such approval would support the Lane Board in their efforts to develop a long term remedy for all of River Road/Santa Clara. Thus the total groundwater problem would be solved in some reasonable time as facilitated by permitting the problem to temporarily worsen.

The EQC made the temporary regional rule permanent on October 17, 1980.
 - c. Authorized DEQ staff to approve a groundwater protection and remedial action plan for the River Road/Santa Clara area when Lane County submitted one. It was further allowed that such plan could accommodate even further temporary groundwater degradation if necessary to accomplish a long term remedy. For example, temporary high density on septic tanks might be necessary to provide the financial base for ultimate remedies.
 - d. Directed DEQ staff to secure within 120 days a voluntary stipulated agreement with the Lane Board to prepare a groundwater protection and remedial action plan for the River Road/Santa Clara area.
4. On September 17, 1980, the Lane Board of Commissioners adopted a voluntary stipulated agreement by a four to one vote (Appendix A). The EQC signed said agreement on September 19, 1980. Its important provisions include:
- a. A recognition that the River Road/Santa Clara area will eventually be served by urban sewer facilities.
 - b. Sewers are the effective overall method to reduce pollutants to groundwater.

- c. Sewers will ultimately be routed to a central sewage treatment facility, namely the MWMC plant currently under construction.
 - d. Lane County agrees to adopt or amend the existing "Eugene-Springfield Metropolitan Area Treatment Alternatives 208 Plan" of April, 1977 in a reasonably short time frame.
 - e. Lane County will maintain the current subdivision moratorium in River Road/Santa Clara at least until they adopt a long term urban master sewerage plan, and indicate how they will commit to its eventual implementation.
 - f. A commitment toward resolution of the jurisdictional question. A tri-party agreement among Lane County, Eugene and the Environmental Quality Commission is recommended to "hasten improvement in groundwater quality and thereby enable further development" in the subject area.
5. The Environmental Quality Commission, Department staff, the Lane Board of Commissioners, and Lane County staff have several specific obligations spelled out under conditions of the voluntary stipulated agreement. The River Road/Santa Clara Intergovernmental Agreement is contained in Appendix A.

The conditions most relevant to this staff report are:

- a. Condition II: Lane County agrees to adopt a long term urban master sewerage plan by December 19, 1981.
 - b. Condition VI: Lane County agrees to provide semi-annual reports to the EQC beginning January 1, 1981, to indicate progress under the agreement and status regarding jurisdictional questions.
 - c. Condition IX: Lane County, City of Eugene and the EQC should enter into a tri-party agreement by December 1, 1980. That agreement would define a process to distribute information on jurisdictional alternatives to River Road and Santa Clara area residents.
 - d. Condition XII: The EQC agrees to adopt a final groundwater quality policy on or before March, 1981.
6. On January 22, 1981, the Department received the Lane Board of Commissioners' semi-annual progress report (Appendix B), submitted pursuant to Condition VI of the agreement. This staff report is an analysis of the semi-annual progress report.

7. The Department evaluated the progress report and the Director sent that analysis to the Lane Board of Commissioners on February 18, 1981 (Appendix C).

Evaluation

1. Condition VI of the Intergovernmental Agreement requires semi-annual progress reports by Lane County.
2. The first progress report was received on January 22, 1981, which detailed the following:
 - a. The Lane County Department of Environmental Management has been assigned responsibility for implementing and monitoring the Agreement.
 - b. A work plan, with time schedule, was enclosed with the progress report. This work plan, if adhered to, will allow for completion of Conditions II, III, and IV of the Intergovernmental Agreement.
3. Condition IX of the agreement suggests that Lane County, the City of Eugene, and the Environmental Quality Commission enter into a tri-party agreement by December 1, 1980. Said agreement would define a joint process to distribute information regarding jurisdictional alternatives to area residents.
4. No tri-party agreement has been drafted or negotiated.
5. Lane County feels that the distribution of the "River Road Tabloid" by the City of Eugene has fulfilled Condition IX.
6. Department staff feels that the "Tabloid" partially fulfills Condition IX:
 - a. The "Tabloid" addresses only annexation of the River Road area to the City of Eugene.
 - b. The County, in its January 13 letter to the Director, does not provide alternatives to the jurisdictional question.
 - c. The Director's February 18 letter requests that Lane County provide information about urban services and jurisdiction to Santa Clara residents in a time frame compatible with Lane County's own work plan.

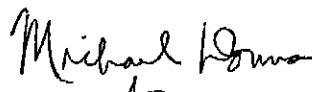
Summation

1. On April 18, 1980, the Commission directed DEQ staff to secure a voluntary agreement with the Lane Board. It was secured and signed by the Environmental Quality Commission on September 19, 1980.
2. Conditions in the agreement spell out specific obligations for the EQC, Department staff, the Lane Board of Commissioners, and Lane County staff. The semi-annual progress report required by Condition VI is among them. The first report was received on January 22, 1981.
3. The Director responded to the first report on February 18, 1981. Lane County has made substantial progress. In his letter, the Director noted that information which was to be provided by a tri-party agreement in Condition IX of the Intergovernmental Agreement has been provided only to residents of River Road. Santa Clara must also be addressed. Lane County may submit additional information before March 13. If so, it will be brought to the Commission's attention.
4. Staff will return to the Commission with appropriate status reports or requests for action as necessary. No action is required by the Commission at this time.

Director's Recommendation

Since this is an informational item and the progress report is generally sufficient, no Commission action is requested at this time.

The Lane Board of Commissioners should be commended for their continuing efforts to resolve the River Road/Santa Clara groundwater pollution and sewerage issues.


for
WILLIAM H. YOUNG

Appendix A: EQC-LBOC Intergovernmental Agreement.

Appendix B: January 13, 1981 LBOC Progress Report.

Appendix C: February 18, 1981 letter from Bill Young to Harold Rutherford.

Laurence H. Lowenkron:wr

686-7601

February 13, 1981

INTERGOVERNMENTAL AGREEMENT

WHEREAS, the Lane County Board of Commissioners and the Environmental Quality Commission recognize that public health must be protected and that a high-quality environment be maintained in the area generally known as River Road/Santa Clara, and

WHEREAS, Lane County recognizes that the River Road/Santa Clara area will eventually receive urban services including but not limited to sanitary sewers, and

WHEREAS, recent studies indicate that portions of the shallow groundwater in the area are affected with bacteria and nitrate-nitrogen, and

WHEREAS, studies indicate that significant pollutants may result from septic tank discharges from current developments, and

WHEREAS, Lane County and the Environmental Quality Commission agree that sanitary sewers are effective long-term means to reduce the level of contaminants in the River Road/Santa Clara area and,

WHEREAS, Lane County recognizes that the sewage treatment needs of the area should be provided by the Metropolitan Wastewater Management Commission's Sewage Treatment Facility, and

WHEREAS, Lane County and the City of Eugene have not jointly determined the most appropriate jurisdiction to provide sanitary sewage collection facilities to the area, and

WHEREAS, both jurisdictions recognize the planning and installation of long-term sanitary facilities in the area requires resolution of the question of jurisdictional responsibility, and

WHEREAS, Lane County and the EQC agree that concerted governmental effort to enhance the public health should be initiated prior to resolution of the jurisdictional question,

THEREFORE BE IT HEREBY RESOLVED:

- I. Lane County hereby agrees to remove its current subdivision moratorium which was originally implemented on June 9, 1971 after the following have been accomplished:
 - A. Lane County adopts a long-term urban master sewerage plan as described in Paragraph II.
 - B. Lane County develops and adopts an interim sewage collection, treatment and disposal ordinance as described in Paragraph III.
 - C. Lane County considers a plat control program as described in Paragraph IV.

Sept 19, 1980 + 15 mo = Dec. 19, 1981

- II. Lane County agrees to adopt a long-term urban master sewerage plan for the River Road/Santa Clara area no later than 15 months after approval of this agreement. Such plan shall utilize or amend the existing "Eugene-Springfield Metropolitan Area Treatment Alternatives 208 Plan" of April 1977. This master sewerage plan shall specify the method of management, collection, treatment and disposal of sewage.
- III. Lane County agrees to develop and adopt an "Interim sewage collection, treatment and disposal ordinance" for the River Road/Santa Clara area no later than six months after adoption of the master sewerage plan described in Paragraph II above. Interim facilities are defined as temporary, and are to be replaced by permanent regional facilities when available.

Interim facilities shall include, but are not limited to, standard subsurface sewage disposal systems, mechanical oxidation facilities, sewage stabilization ponds, sand filters or others as described in Oregon Administrative Rules 340-71-005 through 71-045.

The ordinance shall at a minimum specify:

- A. Minimum criteria for facilities siting and construction.
- B. Who will own and operate the facilities.
- C. Under what circumstances and time schedules the facilities shall be salvaged or abandoned.

- IV. Lane County agrees to consider a new "Plat control program" no later than July 1, 1981, to facilitate reasonable development in the area.

The purpose of a plat control program is to maintain desired ultimate development density potential in areas where development may occur at lower densities prior to provision of full urban services. Developing areas outside of cities rely upon on-site sewage disposal. The large parcel sizes necessary to accommodate on-site sewage disposal can diminish ultimate density potentials and preclude the economical provision of urban services if plat control is not implemented.

- V. Lane County agrees to continue a public education program originally implemented on February 21, 1980.
- VI. Lane County agrees to provide semi-annual progress reports to the EQC to indicate the status of these programs and the interagency jurisdiction question. The first report is due January 1, 1981, *Jan, July, Jan*
- VII. The EQC will review the semi-annual progress reports mentioned in paragraph VI., above. The EQC shall conduct a public hearing by no later than January 1, 1982 to evaluate progress. Upon review of said progress reports, at the public hearing, or at any other time the EQC may comment, assist, or take action outside the intergovernmental agreement including but not limited to that described in Oregon Revised Statutes (ORS) 222.850 through 222.915, ORS 454.235(2), and/or ORS 454.685.

- VIII. Lane County agrees to work with the public, and affected public agencies during the planning and implementation of the public education, plat control, and alternative interim sewage programs.
- IX. Lane County and the Environmental Quality Commission agree that resolution of the jurisdictional question will hasten improvement in groundwater quality and thereby enable further development of the area. A separate tri-party agreement among Lane County, the Environmental Quality Commission, and the City of Eugene is needed to define a joint process to distribute information regarding jurisdictional alternatives to area residents. In particular the City is encouraged to develop positions on, and disseminate information pertaining to a) annexation procedures, b) available city services, c) costs of identified services, and d) optional strategies to deliver services including but not limited to phased delivery of city services and phased financial mechanisms. A tri-party agreement including provisions identified above should be completed no later than December 1, 1980.
- X. Upon a delineation of the appropriate jurisdiction to provide long-term sanitary services, Lane County agrees to develop or to work closely with appropriate public agencies to develop a plan to provide sanitary facilities.
- XI. The EQC agrees to offer Lane County technical staff assistance on call as expeditiously as possible. To enhance local program capabilities, this assistance from the EQC will not be less than one-fourth FTE position.
- XII. The EQC agrees to adopt a final groundwater quality policy, as discussed on 18 April, 1980, on or before March 1981.
- XIII. Lane County and the Environmental Quality Commission agree that timely implementation of this agreement may be impacted by federal and state regulations, litigation, and financial conditions. Therefore, Lane County reserves the right to request from the EQC alterations to initially established time schedules.

Board of County Commissioners
of Lane County, Oregon

Environmental Quality Commission
of Oregon

By: *Otto t'Hooff*
Otto t'Hooff, Chairman

By: *Joe B. Richards*
Joe B. Richards, Chairman

Harold Rutherford
Harold Rutherford, Vice
Chairman

Albert H. Densmore, Vice
Chairman

Vance L. Freeman
Vance Freeman

Ronald M. Somers

Gerald Rust
Gerald Rust
No No NO NO
WHERE ARE THE CITIZENS
CONSTITUTIONAL RIGHTS?
Archie Weinstein

Fred J. Burgess
Fred J. Burgess

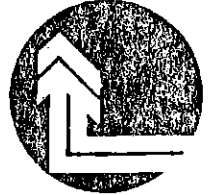
Mary V. Bishop
Mary V. Bishop

Date _____

09-19-80
Date

Terese Wilhelm 9-11-80
Approved as to Form

Approved as to Form

RECEIVED
JAN 22 1981State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
JAN 20 1981State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
JAN 13, 1981
ADM. OFFICE

BOARD OF COMMISSIONERS

Vance Freeman
Scott Licalien
Gerald Rust, Jr.
Otto l'Hoof
Harold Rutherford

OFFICE OF THE DIRECTOR

Bill Young
Director, Department of Environmental Quality
522 S.W. 5th
Portland, OR 97204

Dear Bill:

Last September, after several months of joint discussions, Lane County and the State Department of Environmental Quality approved an Intergovernmental Agreement regarding the area generally known as River Road/Santa Clara. The agreement formalized joint commitments to allocate staff resources to address several significant issues. The agreement also defined a process, including specific deadlines, to guide staff efforts. Our current attention is directed to paragraph VI of the agreement in which Lane County committed to deliver semi-annual progress reports to the EQC. This letter is intended to offer a brief summary of local progress since September.

Three activities completed during the fall deserve particular attention. First, primary responsibility for implementating and monitoring the Intergovernmental Agreement has been assigned to the Department of Environmental Management. As you know, several County departments contributed to the initial negotiations. However, to encourage greater continuity and clarity we believe that primary responsibility and accountability should be vested in one department. The General Administrator's Office will continue to monitor the overall performance of Lane County's obligations, though departmental staff will perform most functions. Secondly, during October and November a fifteen month implementation work plan was prepared by the Department of Environmental Management and submitted to the Board of County Commissioners. This plan identifies and schedules major tasks necessary to perform each County obligation. By organizing a long-term schedule at this time, we will ensure an efficient use of County resources to achieve development of a plat control program, interim facilities ordinance, and other objectives. A copy of our initial work plan is attached for your reference. Lastly, paragraph IX of the agreement suggested a separate "tri-party" agreement to insure the timely distribution of information regarding jurisdictional alternatives by the City of Eugene to residents of River Road/Santa Clara. Since September, the City has mailed several thousand tabloids to households in the area. Therefore, we believe the intent of paragraph IX has been achieved and that a separate agreement is unnecessary. A tabloid is attached for your review.

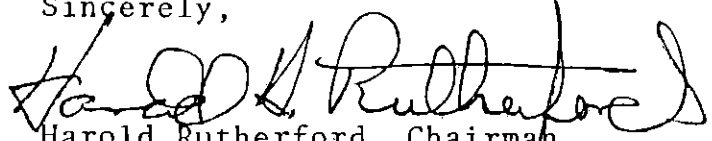
To summarize, activities completed during the past quarter have initiated a fifteen month process to accomplish obligations contained within the agreement. To date, Lane County's progress has not

BOARD OF COUNTY COMMISSIONERS

Page 2
Bill Young, Director
Department of Environmental Quality

required the assistance to D.E.Q. staff. Yet, as we approach the more difficult components of our work plan, your staff may be called upon to lend their expertise to our efforts. In the meantime we shall proceed according to the work plan and prepare our second status report during July. If you or your staff wish to discuss our progress at any time, do not hesitate to contact our office.

Sincerely,



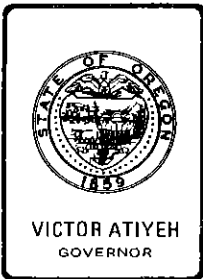
Harold Rutherford, Chairman
Lane County Board of Commissioners

Attachments

cc: Board of Commissioners
George E. Morgan, General Administrator
Rich Owings, Environmental Management

WORK PLAN

<u>Date</u>	<u>Agreement Item</u>	<u>Activity/Task</u>
Completed	II	Board confirms regional concept commitment
Dec. 19, 1980	II	Complete review 1970 River Road/Santa Clara Sewerage Collection System Study
Jan. 30, 1981*	II	Complete preliminary draft of Master Plan alternatives segments of technical, financial and management components and implementation schedule
Feb. 2-20, 1981	II	Staff and agencies review preliminary draft of Master Plan
Mar. 1, 1981	II	Preliminary draft of Master Plan to Lane County and City of Eugene for review and comment
Mar. 13, 1981*	III	Complete preliminary draft interim facilities ordinance alternatives
Mar. 16-30, 1981	III	Staff and agencies review preliminary interim ordinance draft
Apr. 3, 1981*	IV	Complete preliminary draft plat control program alternatives
Apr. 6-May 1, 1981	IV	Staff reviews preliminary plat control draft
May 4-29, 1981	II III IV	Planning commission and agency review preliminary draft of plat control and interim ordinance of Master Plan
May 22, 1981*	II	Lane County and City of Eugene action on Master Plan
June 1-Aug. 20, 1981	II III	Community organization review
June 1-30, 1981	IV	Info meeting (specific places yet to be determined)
Aug. 3-7, 1981*	II III IV	Community organizations sponsor public meetings in River Road and Santa Clara
Aug. 21, 1981	II III	Community organizations finalize input and recommendations
Aug. 26, 1981*	IV	Public hearing on proposed plat control ordinance
Sep. 4, 1981*	II	Revised draft indicating recommended alternatives to BCC, Legal and agencies
Sep. 9, 1981*	IV	Board adopts plat control program ordinance
Oct. 7, 1981*	II	Public hearing on recommended master sewerage plan alternatives
Oct. 30, 1981*	II	Final draft master sewerage plan to BCC and agencies
Nov. 4, 1981	III	Draft interim facilities ordinance based upon recommended alternatives to BCC, Legal and agencies
Dec. 9, 1981*	II	Board adopts master sewerage plan recommended alternatives
Dec. 16, 1981*	III	Public hearing on proposed interim facilities ordinance
Jan. 6, 1982	III	Board adopts interim facilities ordinance



Department of Environmental Quality

522 SOUTHWEST 5TH AVE. PORTLAND, OREGON

MAILING ADDRESS: P.O. BOX 1760, PORTLAND, OREGON 97207

February 18, 1981

- Mr. Harold Rutherford, Chairman
Lane Board of County Commissioners
Public Service Building
125 E. 8th Ave.
Eugene, OR 97401

Dear Harold:

Thank you for your letter of January 13, 1981, detailing progress on the objectives of our Intergovernmental Agreement.

The interim work plan enclosed with it is very ambitious. Your adoption of it assures that Conditions II, III, and IV of the Agreement will be completed in a timely manner. The Department of Environmental Quality looks forward to continuing our work with Lane County to implement this plan and maintain the schedule.

Condition IX of our Agreement acknowledges that the resolution of the jurisdiction of the River Road/Santa Clara area is necessary to achieve the pollution abatement objectives there. Among the mechanisms suggested is a tri-party agreement between Lane County, the City of Eugene, and Environmental Quality Commission. Such an agreement would define a process to distribute information on jurisdictional alternatives to area residents.

The distribution of the "River Road Tabloid" has partially fulfilled this objective. The Tabloid addresses only annexation of River Road. Your January 13, 1981 letter endorses this annexation by stating that this fulfills the County's obligation of Condition IX. I suggest that Lane County provide information to Santa Clara residents, similar to the "Tabloid". That information should address jurisdictional alternatives, compatible with Oregon Revised Statutes, and services available to Santa Clara residents. It might best be distributed during the period of June 1 through August 20, when community organizations will be reviewing the interim and master sewerage plans. If you concur, I will recommend this course of action to our Commission in lieu of the tri-party agreement in Condition IX. I would like to inform the EQC to that effect at its March 13 meeting in Salem.

As you know, The Environmental Quality Commission has an obligation under Conditions XI and XII of the Agreement. Condition XI offers

certain levels of technical assistance. My staff has been working with your staff throughout this process and will continue to do so.

In Condition XII the Environmental Quality Commission agrees to adopt a final groundwater policy on or before March, 1981. At its March 13, 1981 meeting, the Environmental Quality Commission will be asked to authorize a public hearing to adopt a final groundwater quality protection policy.

There has been substantial public input thus far, and the draft final policy is currently under review by the Statewide Water Quality Management Plan Policy Advisory Committee. Consequently, final adoption may be briefly delayed pending receipt of all public input.

I would appreciate hearing from you before March 13, if possible, so I will be able to advise our Commission. In the meantime, my staff is preparing a status report for the March 13 EQC meeting in accordance with the thinking in my letter. At this point, I believe said report will be informational in nature rather than a scheduled agenda item.

Thank you for your positive efforts to accomplish our mutual objectives in River Road/Santa Clara.

Sincerely,

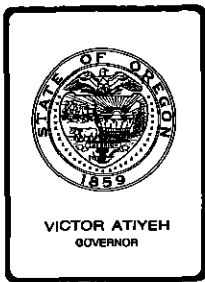


WILLIAM H. YOUNG
Director

WHY/wr

Attachment

cc: George Morgan, General Administrator, Lane County w/o att
cc: Rich Owings, Environmental Management, Lane County w/o att
cc: Willamette Valley Region, Eugene w/att
cc: Willamette Valley Region, Salem w/att
cc: Water Quality Division via Regional Operations w/att



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 No. Q, March 13, 1981, EQC Meeting

Review and Request for Concurrence With
Tax Credit Program Guidance Handbook

Background

At the September 21, 1979, EQC Meeting, the Commission agreed with the recommendation of the Director to forego rulemaking on the tax credit program in favor of review and approval of a staff codification of EQC established precedents, Attorney General opinions, and agency procedures, forms and instructions.

The purpose of this staff report is to review the work accomplished to date.

Discussion

The approach the staff is taking is to compile the information into handbooks that can be used by potential applicants as well as Department staff. Two versions of the handbook will be prepared, one for potential applicants and one for internal use. It is hoped that the handbooks will provide the best available information on the tax credit program to applicants, and provide a resource document to agency staff to improve consistency and quality of decision-making in operation of the program.

Attached to this report is the handbook for internal use containing the tax credit statutes, guidelines for Preliminary Certification, a summary of Attorney General opinions, a summary of the types of facilities previously certified, methods for determining the percent of cost allocable to pollution control, internal procedures, formats for EQC tax credit staff reports, forms and instructions for applicants, and sample form letters. The handbook for potential applicants will include the statutes, forms and instructions, and the methods for determining allocable costs.

EQC Memorandum
Agenda Item No.
February 17, 1981

Director's Recommendation

It is recommended that the Commission take note of the information contained in the attached handbook and concur in its use in the administration of the tax credit program.

Michael Douns
for
William H. Young

Attachment

C. A. Splettstaszer:in
229-6484
MW52
February 17, 1981

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

POLLUTION CONTROL FACILITIES
TAX CREDIT PROGRAM
GUIDANCE HANDBOOK

AUGUST 1981

MANAGEMENT SERVICES DIVISION
522 SOUTHWEST FIFTH AVENUE
P. O. BOX 1760
PORTLAND, OREGON 97207

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
I - INTRODUCTION	I-1
Figure 1 - Certification Process	I-2
Table 1 - Certificates Issued	I-3
Table 2 - Air Pollution Control Facilities	I-4
Table 3 - Noise Pollution Control Facilities	I-5
Table 4 - Water Pollution Control Facilities	I-6
Table 5 - Solid Waste Control Facilities	I-7
II - TAX CREDIT STATUTES AND RULES	
ORS Chapter 468, Pollution Control Facilities Tax Credit	II-1
OAR Chapter 340-26-030, Tax Credits for Approved Alternative Methods to Field Burning	II-7
ORS Chapter 307, Property Tax	II-9
ORS Chapter 314, Tax Credits to be Offset Against State Income or Excise Tax Credits	II-13
ORS Chapter 316, Personal Income Tax	II-14
ORS Chapter 317, Corporation Excise Tax	II-19
III - SUMMARY OF ATTORNEY GENERAL OPINIONS	III-1
IV - SUMMARY OF PREVIOUSLY CERTIFIED FACILITIES	IV-1
Air Quality	IV-3
Water Quality	IV-7
Solid Waste	IV-11
Noise	IV-13
V - GUIDELINES FOR PRELIMINARY CERTIFICATION	V-1
Solid Waste - Special Guidelines/Policy	V-7
Paving Projects - Special Guidelines/Policy	V-9
VI - METHOD OF DETERMINING PERCENT OF COST ALLOCABLE TO POLLUTION CONTROL	VI-1

SECTION I

INTRODUCTION

	<u>Page</u>
Introduction	I-1
Figure 1 - Certification Process	I-2
Table 1 - Certificates Issued	I-3
Table 2 - Air Pollution Control Facilities	I-4
Table 3 - Noise Pollution Control Facilities	I-5
Table 4 - Water Pollution Control Facilities	I-6
Table 5 - Solid Waste Control Facilities	I-7

INTRODUCTION

The Pollution Control Facilities Tax Credit Program was first enacted by the Oregon Legislative Assembly in 1967. At that time, facilities constructed to prevent, control, or reduce air or water pollution were made eligible for tax credit certification. In 1973 the Legislature made the use of a resource recovery process which obtains useful material or energy resources from material that would otherwise be solid waste eligible for tax credit certification.

The Legislature further amended the statutes in 1977 to add noise pollution control facilities to the list of facilities eligible for tax credit certification. Then in 1979 the recovery of useful material or energy resources from hazardous wastes or used oil was also made eligible for certification.

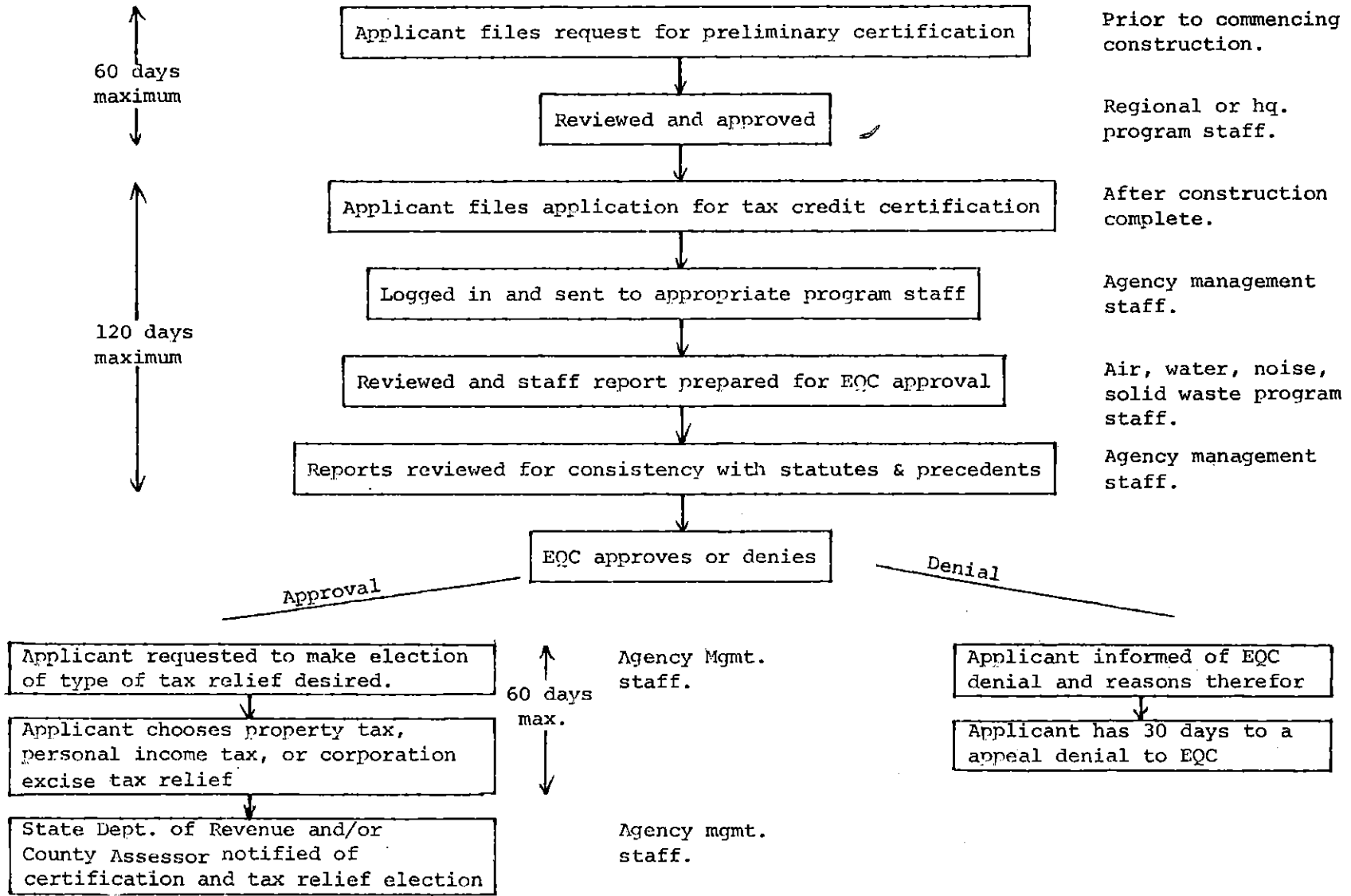
Persons interested in obtaining tax credit certification must follow a specific procedure outlined in the statutes by making application to the Department of Environmental Quality and receiving final approval from the Environmental Quality Commission. Figure 1 diagrams the application, review and approval process. More detailed information is contained in this booklet in the Statutes Section and the Forms and Instructions Section. It is very important that the procedures be followed exactly to ensure eligibility for certification is not forfeited due to procedural error.

After certification is received from the Environmental Quality Commission, the person holding the certification obtains actual tax relief from the Oregon Department of Revenue or County Assessor, where the facility is located, depending upon the tax relief elected. The choices are personal income tax, corporate excise tax, or property tax relief. Further information is contained in this booklet in the Statutes Section or may be obtained by contacting the Oregon Department of Revenue or County Assessor directly.

Since the commencement of the program, facilities costing in excess of \$350 million have been certified for tax relief. Table 1 shows the number and cost of facilities certified by year by agency program. Tables 2, 3, 4 and 5 show the types of facilities certified and their number and cost, for the air quality, noise, water quality, and solid waste management programs respectively.

The remainder of this document is devoted to providing the best information available on the details of the tax credit program for the use of potential applicants as well as Department staff and other interested parties.

POLLUTION CONTROL FACILITY TAX CREDIT CERTIFICATION PROCESS



1-2

FIGURE 1

Department of Environmental Quality
Tax Credit Certificates Issued for Pollution Control Facilities

Calendar Year	Air Pollution Control Facilities		Water Pollution Control Facilities		Solid Waste Control Facilities		Noise Pollution Control Facilities		T O T A L	
	No. Cert.	Certified Cost	No. Cert.	Certified Cost	No. Cert.	Certified Cost	No. Cert.	Certified Cost	No. Cert.	Certified Cost
1968	24	\$ 1,958,781	17	\$ 3,945,435	--	N/A	--	N/A	41	\$ 5,904,216
1969	22	1,305,789	14	3,855,141	--	N/A	--	N/A	36	5,160,930
1970	23	1,693,919	26	5,862,684	--	N/A	--	N/A	49	7,556,603
1971	38	7,345,826	26	9,946,636	--	N/A	--	N/A	64	17,292,462
1972	82	13,268,426	41	2,202,401	--	N/A	--	N/A	123	15,470,827
1973	97	12,124,500	47	13,764,649	-0-	-0-	--	N/A	144	25,889,149
1974	63	19,851,841	16	3,697,894	-0-	-0-	--	N/A	79	23,549,735
1975	56	18,674,741	34	10,590,618	6	\$ 5,703,350	--	N/A	96	34,968,709
1976	66	15,917,093	33	14,308,742	10	6,833,330	--	N/A	109	37,059,165
1977	49	11,095,785	40	2,121,713	7	7,040,082	-0-	-0-	96	20,257,580
1978	36	28,026,670	34	14,668,638	12	18,779,276	-0-	-0-	82	61,474,584
1979	39	7,952,278	34	13,460,697	11	14,402,536	1	\$ 84,176	85	35,899,687
1980	<u>97</u>	<u>25,407,199</u>	<u>35</u>	<u>12,088,442</u>	<u>25</u>	<u>33,708,372</u>	<u>4</u>	<u>85,680</u>	<u>161</u>	<u>71,289,693</u>
TOTAL	692	\$164,622,848	397	\$110,513,690	71	\$ 86,466,946	5	\$169,856	1165	\$361,733,340

TABLE 1

TABLE 2
DEPARTMENT OF ENVIRONMENTAL QUALITY
JANUARY 1981

AIR POLLUTION CONTROL FACILITIES CERTIFIED FOR TAX CREDIT
JANUARY 1, 1967 THROUGH DECEMBER 31, 1980

Type of Facility	Number Certified	Certified Cost	Percent of Total Certified Cost
Steel Mills and Foundries Emission Control Systems	32	\$ 4,305,311	2.5
Pulp and Paper Industry Emission Control Systems	117	54,700,684	33.2
Nickel and Aluminum Smelting Industry Emission Control Systems	32	42,786,922	26.0
Carbide Alloys, Silicon and Exotic Metals Manufacturing Emission Control Systems	29	5,533,861	3.4
Wood Products Industry Emission Control Systems	299	37,818,068	23.0
Cement, Asphalt, and Rock Crushing Industry Emission Control Systems	58	10,250,732	6.2
Chemical and Electronics Industry Emission Control Systems	10	2,667,411	1.6
Orchard Heating Systems	65	2,564,164	1.5
Food Processing Industry Emission Control Systems	16	2,367,804	1.4
Miscellaneous	<u>35</u>	<u>1,679,127</u>	1.0
TOTAL	692	\$164,622,848	

MN41

TABLE 3

DEPARTMENT OF ENVIRONMENTAL QUALITY

JANUARY 1981

NOISE POLLUTION CONTROL FACILITIES CERTIFIED FOR TAX CREDIT

JANUARY 1, 1977 THROUGH DECEMBER 31, 1980

Type of Facility	Number Certified	Certified Cost	Percent of Total Certified Cost
Acoustical Enclosure for Refrigeration Compressor	1	\$ 5,157	3.0
Relocation of Chip Fractionation Facility and Associated Equipment	1	67,145	39.5
Acoustical Insulation and Wrapping	2	87,026	51.2
Concrete Block Sound Wall	<u>1</u>	<u>10,528</u>	6.2
TOTAL	5	\$ 169,856	

MN41.C

TABLE 4
DEPARTMENT OF ENVIRONMENTAL QUALITY
JANUARY 1981

WATER POLLUTION CONTROL FACILITIES CERTIFIED FOR TAX CREDIT
JANUARY 1, 1967 THROUGH DECEMBER 31, 1980

Type of Facility	Number Certified	Certified Cost	Percent of Total Certified Cost
Chemical, Exotic Metals, and Metal Plating Industries, Waste Treatment Systems	53	\$ 12,608,651	11.4
Electronics Industry Waste Treatment Systems	23	888,670	< 1.0
Steel and Aluminum Manufacturing Industries Waste Treatment Systems	8	6,325,309	5.7
Pulp and Paper Industry Waste Treatment Systems	114	71,619,016	64.8
Wood Products Industry Waste Treatment Systems	52	5,018,490	4.5
Log Handling Systems	14	3,519,734	3.2
Food Processing Industry Waste Treatment Systems	45	8,099,266	7.3
Farm Animal Wastes Treatment Systems	39	414,881	< 1.0
Surface Runoff and Spill Prevention Systems	21	945,722	< 1.0
Miscellaneous	<u>21</u>	<u>1,073,951</u>	1.0
TOTAL	397	\$110,513,690	

MN41.A

TABLE 5
DEPARTMENT OF ENVIRONMENTAL QUALITY
JANUARY 1981

SOLID WASTE CONTROL FACILITIES CERTIFIED FOR TAX CREDIT
JANUARY 1, 1973 THROUGH DECEMBER 31, 1980

Type of Facility	Number Certified	Certified Cost	Percent of Total Certified Cost
Waste Wood Fuel Boilers	12	\$ 28,026,336	32.4
Turbine Generators	2	4,536,629	5.2
Industrial Wood Waste Utilization Facilities	16	5,461,615	6.3
Wood Hogs, Chippers, and Hogged Fuel Preparation Facilities	8	1,494,960	1.7
Conversion of Wood Waste to Fuel For Sale to Public	2	222,872	< 1.0
Particleboard Plant	2	17,542,818	20.2
Bark Utilization Plant	2	5,024,812	5.8
Paved Log Deck	7	1,691,182	2.0
Waste Paper Baler/Shredder	6	101,855	< 1.0
Wastepaper/Newsprint Deinking/Cleaning Facility	8	19,639,458	22.7
Straw Bailing and Storage Facility	2	257,176	< 1.0
Shredded Tire Storage and Metering Facility	1	91,083	< 1.0
Aggregate Reclaiming Facility	1	21,307	< 1.0
Glass Manufacturing Plant	1	1,952,954	2.8
Waste Glass Processing Facility	<u>1</u>	<u>401,889</u>	< 1.0
TOTAL	71	\$ 86,466,946	

MN41.B

AUG 1981

SECTION II

TAX CREDIT STATUTES AND RULES

	<u>PAGE</u>
ORS Chapter 468, Pollution Control Facilities Tax Credit	II-1
OAR Chapter 340-26-030, Tax Credits for Approved Alternative Methods to Field Burning	II-7
ORS Chapter 307, Property Tax	II-9
ORS Chapter 314, Tax Credits to be Offset Against State Income or Excise Tax Credits	II-13
ORS Chapter 316, Personal Income Tax	II-14
ORS Chapter 317, Corporation Excise Tax	II-19

OREGON REVISED STATUTES
CHAPTER 468
1979 Replacement Part

POLLUTION CONTROL

**POLLUTION CONTROL
FACILITIES TAX CREDIT**

468.150 Field sanitation and straw utilization and disposal methods as "pollution control facilities." After alternative methods for field sanitation and straw utilization and disposal are approved by the committee and the department, "pollution control facility," as defined in ORS 468.155, shall include such approved alternative methods and persons purchasing and utilizing such methods shall be eligible for the benefits allowed by ORS 468.155 to 468.190. [1975 c.559 §15]

Note: 468.150 was enacted into law by the Legislative Assembly but was not added to or made a part of ORS chapter 468 or any series therein by legislative action. See the Preface to Oregon Revised Statutes for further explanation.

468.155 Definitions for ORS 468.155 to 468.190. (1) As used in ORS 468.155 to 468.190, unless the context requires otherwise, "pollution control facility" or "facility" means any land, structure, building, installation, excavation, machinery, equipment or device, or any addition to, reconstruction of or improvement of, land or an existing structure, building, installation, excavation, machinery, equipment or device reasonably used, erected, constructed or installed by any person if a substantial purpose of such use, erection, construction or installation is the prevention, control or reduction of air, water or noise pollution or solid waste, hazardous wastes or used oil by:

(a) The disposal or elimination of or redesign to eliminate industrial waste and the use of treatment works for industrial waste as defined in ORS 468.700;

(b) The disposal or elimination of or redesign to eliminate air contaminants or air pollution or air contamination sources and the use of air cleaning devices as defined in ORS 468.275;

(c) The substantial reduction or elimination of or redesign to eliminate noise pollution or noise emission sources as defined by rule of the commission; or

(d) The use of a resource recovery process which obtains useful material or energy resources from material that would otherwise be solid waste as defined in ORS 459.005, hazardous wastes as defined in ORS 459.410, or used oil as defined in ORS 468.850. For the purposes of ORS 468.155 to 468.190, "solid waste facility" shall also include subsequent additions, made either to an already certified facility or to an operation which would have qualified as a facility but for the fact that it was erected, constructed or installed prior to January 1, 1973, which will increase the production or recovery of useful materials or energy over the amount being produced or recovered by the original facility whether or not the materials or energy produced or recovered are similar to those of the original facility.

(2) "Pollution control facility" or "facility" does not include air conditioners, septic tanks or other facilities for human waste, nor any property installed, constructed or used for the moving of sewage to the collecting facilities of a public or quasi-public sewerage system, nor any distinct portion or portions of a solid waste, hazardous wastes or used oil facility which make an insignificant contribution to the purpose of utilization of solid waste, hazardous wastes or used oil. The following specific items shall be among those portions considered for exclusion hereunder: Office buildings and furnishings, parking lots and road improvements, landscaping, external lighting, company signs, artwork and automobiles. [Formerly 449.605; 1975 c.496 §1; 1977 c.795 §1; 1979 c.802 §1]

Note: Section 8, chapter 802, Oregon Laws 1979, provides:

Sec. 8. The amendments to ORS 468.155, 468.160, 468.165, 468.170 and 468.185 by sections 1 to 4 and 7 of this Act that relate to pollution control facilities for hazardous wastes and used oil shall not apply to erection, construction or installation of such facilities begun before the effective date of this Act [October 3, 1979].

468.160 Policy. In the interest of the public peace, health and safety, it is the policy of the State of Oregon to assist in the prevention, control and reduction of air, water and noise pollution and solid waste, hazardous wastes and used oil in this state by providing tax relief with respect to Oregon facilities constructed to accomplish such prevention, control and reduction. [Formerly 449.615; 1975 c.496 §2; 1977 c.795 §2; 1979 c.802 §2]

Note: See note under 468.155.

468.165 Application for certification of pollution control facilities. (1) Any person may apply to the commission for certification under ORS 468.170 of a pollution control facility or facilities or portion thereof erected, constructed or installed by him in Oregon if:

(a) The air or water pollution control facility was erected, constructed or installed on or after January 1, 1967.

(b) The noise pollution control facility was erected, constructed or installed on or after January 1, 1977.

(c) The solid waste, hazardous wastes or used oil facility was under construction on or after January 1, 1973, and if:

(A) The substantial purpose of the facility is to utilize material that would otherwise be solid waste as defined in ORS 459.005, hazardous wastes as defined in ORS 459.410 or used oil as defined in ORS 468.850 by burning, mechanical process or chemical process or through the production, processing including presegregation or otherwise, or use of materials for their heat content or other forms of energy of or from the material, or the use of materials which have useful chemical or physical properties and which may be used for the same or other purposes, or materials which may be used in the same kind of application as its prior use without change in identity;

(B) The end product of the utilization is a usable source of power or other item of real economic value;

(C) The end product of the utilization, other than a usable source of power, is competitive with an end product produced in another state; and

(D) The Oregon law regulating solid waste imposes standards at least substantially equivalent to the federal law.

(2) The applications shall be made in writing in a form prescribed by the department and shall contain information on the actual cost of the facility or facilities, a description of the materials incorporated therein, all machinery and equipment made a part thereof, the existing or proposed operational procedure thereof, and a statement of the purpose of prevention, control or reduction of air, water or noise pollution or solid waste, hazardous wastes or used oil served or to be served by the facility or facilities and, for a facility qualifying under paragraph (a) or (b) of subsection (1) of this section, the portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution as set forth in subsection (2) of ORS 468.190.

(3) The director may require such further information as he considers necessary prior to issuance of a certificate. [Formerly 449.625; 1974 s.s. c.37 §2; 1975 c.496 §3; 1977 c.795 §3; 1979 c.802 §3]

Note: See note under 468.155.

468.170 Action on application; effect of rejection; appeal; issuance of certificate; effect of certification. (1) The commission shall act on an application for certification before the 120th day after the filing of the application under ORS 468.165. The action of the commission shall include certification of the actual cost of the facility and, for facilities qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, the portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution as set forth in subsection (2) of ORS 468.190. Each certificate shall bear a separate serial number for each such facility.

(2) If the commission rejects an application for certification, or certifies a lesser actual cost of the facility or a lesser portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution or solid waste, hazardous wastes or used oil than was claimed in the application for certification, the commission shall cause written notice of its action, and a concise statement of the findings and reasons therefor, to be sent by registered or certified mail to the applicant before the 120th day after the filing of the application. Failure of the commission to act constitutes rejection of the application.

(3) If the application is rejected for any reason, including the information furnished by the applicant as to the cost of the facility, or if the applicant is dissatisfied with the certification of actual cost or portion of the actual cost properly allocable to prevention, control or reduction of air, water or noise pollution or solid waste, hazardous wastes or used oil, the applicant may appeal from the rejection as provided in ORS 468.110. The rejection or the certification is final and conclusive on all parties unless the applicant takes an appeal therefrom as provided in ORS 468.110 before the 30th day after notice was mailed by the commission.

(4) If the commission finds that a pollution control or solid waste, hazardous wastes or used oil facility or portion thereof, for which an application has been made under ORS 468.165, 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 the facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, ORS chapters 459 and 467 and this chapter and rules thereunder, it shall certify such facility. No determination of the proportion of the actual cost of the facility to be certified shall be made until receipt of the application. Where one or more facilities constitute an operational unit, the commission may certify such facilities under one certificate. A certificate under this section is effective for purposes of tax relief in accordance with ORS 307.405, 316.097 and 317.072 if erection, construction or installation of the facility was commenced prior to December 31, 1988. The commission shall attach to the front of each certificate a copy of the notice and election requirements imposed by subsection (5) of this section.

(5) A person receiving a certificate under this section shall make an irrevocable election to take the tax credit relief under ORS 316.097 or 317.072 or the ad valorem tax relief under ORS 307.405 and shall notify the commission, within 60 days after the receipt of such certificate, of his election. This election shall apply to the facility or facilities certified and shall bind all subsequent transferees. Failure to make a timely notification shall make the certificate ineffective for any tax relief under ORS 307.405, 316.097 and 317.072.

(6) If the person receiving the certificate is an electing small business corporation as defined in section 1371 of the Internal Revenue Code, and if the corporation elects to take tax credit relief, such election shall be on behalf of the corporation's shareholders. Each shareholder shall be entitled to take tax credit relief as provided in ORS 316.097, based on that shareholder's pro rata share of the certified cost of the facility.

(7) Certification under this section of a pollution control facility qualifying under subsection (1) of ORS 468.165 shall be granted for a period of 10 consecutive years which 10-year period shall begin with the tax year of the person in which the facility is certified under this section, except that if the person elects ad valorem tax relief the provisions of ORS 307.405 shall apply.

(8) (a) A facility commenced prior to December 31, 1980, and qualifying under paragraph (c) of subsection (1) of ORS 468.165 shall be certified if it meets such requirements.

(b) For a facility commenced after December 31, 1980, and prior to December 31, 1983, the commission, in addition to, and not in lieu of, the requirements under paragraph (c) of subsection (1) of ORS 468.165, shall only certify such a facility if it meets one of the following conditions:

(A) That the facility is necessary to assist in solving a severe or unusual solid waste, hazardous wastes or used oil problem;

(B) That the facility will provide a new or different solution to a solid waste, hazardous wastes or used oil problem than has been previously used, or the facility is a significant modification and improvement of similar existing facilities; or

(C) That the department has recommended the facility as the most efficient or environmentally sound method of solid waste, hazardous wastes or used oil control.

(c) However, such a facility certified after December 31, 1983, shall be certified pursuant to the procedures, costs properly allocable and all other matters as if it were a facility subject to certification under paragraph (a) of subsection (1) of ORS 468.165.

(9) Portions of a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165 may be certified separately under this section if ownership of the portions is in more than one person. Certification of such portions of a facility shall include certification of the actual cost of the portion of the facility to the person receiving the certification. The actual cost certified for all portions of a facility separately certified under this subsection shall not exceed the total cost of the facility that would have been certified under one certificate. The provisions of subsection (10) of ORS 316.097 or 317.072, whichever is applicable, shall apply to any sale, exchange or other disposition of a certified portion of a facility.

[Formerly 449.635; 1974 s.s. c.37 §3; 1975 c.496 §4; 1977 c.795 §4; 1979 c.531 §6; 1979 c.802 §4]

Note: See note under 468.155.

468.175 Application for certification before construction; order granting or denying certification; hearing. (1) Any person proposing to apply for certification of a pollution control facility pursuant to ORS 468.165, before the commencement of erection, construction or installation of the facility, shall file a request for preliminary certification with the Department of Environmental Quality. The request shall be in a form prescribed by the department. For facilities constructed on or after October 3, 1979, the commission may waive the filing of the application if it finds the filing inappropriate because special circumstances render the filing unreasonable and if it finds such facility would otherwise qualify for tax credit certification pursuant to ORS 468.150 to 468.190.

(2) Within 30 days of the receipt of such request, the department may require, as a condition precedent to issuance of a preliminary certificate of approval, the submission of plans and specifications. After examination thereof, the department may request corrections and revisions to the plans and specificâ-

tions. The department may also require any other information necessary to determine whether the proposed construction is in accordance with the provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, this chapter and ORS chapters 459 and 467 and applicable rules and standards adopted pursuant thereto.

(3) If the department determines that the proposed erection, construction or installation is in accordance with the provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, this chapter and ORS chapters 459 and 467 and applicable rules or standards adopted pursuant thereto, it shall issue a preliminary certificate approving the erection, construction or installation. If the department determines that the erection, construction or installation does not comply with the provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, this chapter and ORS chapters 459 and 467 and applicable rules or standards adopted pursuant thereto, the commission shall issue an order denying certification.

(4) If within 60 days of the receipt of plans, specifications or any subsequently requested revisions or corrections to the plans and specifications or any other information required pursuant to this section, the department fails to issue a preliminary certificate of approval and the commission fails to issue an order denying certification, the preliminary certificate shall be considered to have been issued. The construction must comply with the plans, specifications and any corrections or revisions thereto, if any, previously submitted.

(5) Within 20 days from the date of mailing of the order, any person against whom an order is directed pursuant to subsection (3) of this section may demand a hearing. The demand shall be in writing, shall state the grounds for hearing and shall be mailed to the director of the department. The hearing shall be conducted in accordance with the applicable provisions of ORS 183.310 to 183.500.

[1973 c.831 §2; 1975 c.496 §5; 1977 c.795 §5; 1979 c.802 §5]

468.180 Conditions for issuance of certificate under ORS 468.170. (1) No certification shall be issued by the commission pursuant to ORS 468.170 unless the facility, facilities or part thereof was erected, constructed or installed in accordance with the requirements of ORS 468.175 and in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, this chapter and ORS chapters 459 and 467 and the applicable rules or standards adopted pursuant thereto.

(2) Nothing in this section or ORS 468.175 is intended to apply to erection, construction or installation of pollution control facilities begun before October 5, 1973. [1973 c.831 §3; 1975 c.496 §6; 1977 c.795 §6; 1979 c.802 §6]

468.185 Procedure to revoke certification. (1) Pursuant to the procedures for a contested case under ORS 183.310 to 183.500, the commission may order the revocation of the certification issued under ORS 468.170 of any pollution control or solid waste, hazardous wastes or used oil facility, if it finds that:

(a) The certification was obtained by fraud or misrepresentation; or

(b) The holder of the certificate has failed substantially to operate the facility for the purpose of, and to the extent necessary for, preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil as specified in such certificate.

(2) As soon as the order of revocation under this section has become final, the commission shall notify the Department of Revenue and the county assessor of the county in which the facility is located of such order.

(3) If the certification of a pollution control or solid waste, hazardous wastes or used oil facility is ordered revoked pursuant to paragraph (a) of subsection (1) of this section, all prior tax relief provided to the holder of such certificate by virtue of such certificate shall be forfeited and the Department of Revenue or the proper county officers shall proceed to collect those taxes not paid by the certificate holder as a result of the tax relief provided to the holder under any provision of ORS 307.405, 316.097 and 317.072.

(4) If the certification of a pollution control or solid waste, hazardous wastes or used oil facility is ordered revoked pursuant to paragraph (b) of subsection (1) of this section, the certificate holder shall be denied any further relief provided under ORS 307.405, 316.097 or 317.072 in connection with such facility, as the case may be, from and after the date that the order of revocation becomes final. [Formerly 449.645; 1975 c.496 §7; 1977 c.795 §7; 1979 c.802 §7]

Note: See note under 468.155.

468.190 Allocation of costs to pollution control. (1) In establishing the portion of costs properly allocable to the prevention, control or reduction of air, water or noise pollution for facilities qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, the commission shall consider the following factors:

(a) If applicable, the extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

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

(c) If applicable, the alternative methods, equipment and costs for achieving the same pollution control objective.

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

(e) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution.

(2) The portion of actual costs properly allocable shall be:

(a) Eighty percent or more.

(b) Sixty percent or more but less than 80 percent.

(c) Forty percent or more but less than 60 percent.

(d) Twenty percent or more but less than 40 percent.

(e) Less than 20 percent. [Formerly 449.655; 1974 s.s. c.37 §4; 1977 c.795 §8]

OREGON ADMINISTRATIVE RULES
CHAPTER 340, DIVISION 26-030

Tax Credits for Approved Alternative Methods, Approved Interim Alternative Methods, or Approved Alternative Facilities

340-26-030 (1) As provided in ORS 468.150, approved alternative methods or approved alternative facilities are eligible for tax credit as pollution control facilities as described in ORS 468.155 through 468.190.

(2) Approved alternative facilities eligible for pollution control facility tax credit shall include:

(a) Mobile equipment including, but not limited to:

(A) Straw gathering, densifying, and handling equipment.

(B) Tractors and other sources of motive power.

(C) Trucks, trailers, and other transportation equipment.

(D) Mobile field sanitizers and associated fire control equipment.

(E) Equipment for handling all forms of processed straw.

(F) Special straw incorporation equipment.

(b) Stationary equipment and structures including, but not limited to:

(A) Straw loading and unloading facilities.

(B) Straw storage structures.

(C) Straw processing and in-plant transport equipment.

(D) Land associated with stationary straw processing facilities.

(E) Drainage tile installations which will result in a reduction of acreage burned.

(3) Equipment and facilities included in an application for certification for tax credit under this rule will be considered at their current depreciated value and in proportion to their actual use to reduce open field burning as compared to their total farm or other use.

(4) Procedures for application and certification of approved alternative facilities for pollution control facility tax credit:

(a) Preliminary certification for pollution control facility tax credit:

(A) A written application for preliminary certification shall be made to the Department prior to installation or use of approved alternative facilities in the first harvest season for which an application for tax credit certification is to be made. Such application shall be made on a form provided by the Department and shall include, but not be limited to:

(i) Name, address, and nature of business of the applicant;

(ii) Name of person authorized to receive Department requests for additional information;

(iii) Description of alternative method to be used;

(iv) A complete listing of mobile equipment and stationary facilities to be used in carrying out the alternative methods, and for each item listed include:

(I) Date or estimated future date of purchase;

(II) Percentage of use allocated to approved alternative methods and approved interim alternative methods as compared to their total farm or other use.

(v) Such other information as the Department may require to determine compliance with state air, water, solid waste, and noise laws and regulations and to determine eligibility for tax credit.

(B) If, upon receipt of a properly completed application for preliminary certification for tax credit for approved alternative facilities the Department finds the proposed use of the approved alternative facilities are in accordance with the provisions of ORS 468.175, it shall, within 60 days, issue a preliminary certification of approval. If the proposed use of the approved alternative facilities are not in accordance with provisions of ORS 468.175, the Commission shall, within 60 days, issue an order denying certification.

(b) Certification for pollution control facility tax credit:

(A) A written application for certification shall be made to the Department on a form provided by the Department and shall include, but not be limited to, the following:

(i) Name, address, and nature of business of the applicant;

(ii) Name of person authorized to receive Department requests for additional information;

(iii) Description of the alternative method to be used;

(iv) For each piece of mobile equipment and/or for each stationary facility, a complete description including the following information as applicable:

(I) Type and general description of each piece of mobile equipment;

(II) Complete description and copy of proposed plans or drawings of stationary facilities including buildings and contents used for straw storage, handling, or processing of straw and straw products or used for storage of mobile field sanitizers and legal description of real property involved;

(III) Date of purchase or initial operation;

(IV) Cost when purchased or constructed and current value;

(V) General use as applied to approved alternative methods and approved interim alternative methods;

(VI) Percentage of use allocated to approved alternative methods and approved interim alternative methods as compared to their farm or other use.

(B) Upon receipt of a properly completed application for certification for tax credit for approved alternative facilities or any subsequently requested additions to the application, the Department shall return within 120 days the decision of the Commission and certification as necessary indicating the portion of the cost of each facility allocable to pollution control.

(5) Certification for tax credits of equipment or facilities not covered in sections (1) through (4) of this rule shall be processed pursuant to the provisions of ORS 468.165 through 468.185.

(6) Election of type of tax credit pursuant to ORS 468.170(5):

(a) As provided in ORS 468.170(5), a person receiving the certification provided for in subsection (4)(b) of this rule shall make an irrevocable election to take the tax credit relief under ORS 316.097, 317.072, or the ad volorem tax relief under ORS 307.405 and shall inform the Department of his election within 60 days of receipt of certification documents on the form supplied by the Department with the certification documents.

(b) As provided in ORS 468.170(5) failure to notify the Department of the election of the type of tax credit relief within 60 days shall render the certification ineffective for any tax relief under ORS 307.405, 316.097, and 317.072.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 114, f. & ef. 6-4-76; DEQ 138, f. 6-30-77; DEQ 6-1978, f. & ef. 4-18-78; DEQ 8-1978(Temp), f. & ef. 6-8-78 thru 10-5-78; DEQ 2-1980, f. & ef. 1-21-80; DEQ 12-1980, f. & ef. 4-21-80

OREGON REVISED STATUTES
CHAPTER 307
1979 Replacement Part

PROPERTY TAX

(Agricultural Equipment and
Facilities)

307.390 Mobile field incinerators. Mobile field incinerators owned by farmers or by groups of farmers that are exclusively used for sanitizing grass seed fields by means other than open field burning shall be exempt from taxation if they are purchased within five years after they are certified as a feasible alternative to open field burnings by the Department of Environmental Quality pursuant to ORS 468.455 to 468.480. [1971 c.678 §2; 1977 c.650 §12]

307.395 Agricultural waste storage facilities. (1) In order to minimize air pollution from field burning, an agricultural waste storage facility is exempt from ad valorem taxation so long as such facility is used exclusively for such storage and the taxpayer has not claimed an income tax credit therefor under ORS 316.092, 316.097 or 317.072.

(2) Before any exemption from taxation under this section is allowed for any year, the person claiming the exemption shall file with the county assessor, on or before April 1 each year, a statement verified by oath or affirmation of the claimant, listing the property claimed to be exempt and showing the purpose for which such property is used. Statements shall be in a form prescribed by the Department of Revenue and furnished by the assessor. If the ownership and use of the property included in the statement filed with the county assessor for a prior year remains unchanged, a new statement is not required, except that if the use changes, within 30 days after the change the owner shall notify the assessor of such change. If the owner fails to give notice, the assessor shall add a penalty of 10 percent of the taxes assessed against the property for the assessment year in which the change in use occurred. When the property for which exemption is claimed is acquired after January 1 and before July 1, the claim for that year must be filed before April 1 of that year or within 30 days from the date of acquisition, whichever is later.

(3) "Agricultural waste storage facility" or "facility" means any building or other structure used for the storage of agricultural wastes, which would otherwise be disposed of by burning, from perennial or annual grass seed crops or from other grain crops, and any equipment, machinery or fixtures erected upon, under, above or affixed to such building or structure to facilitate such storage.

(4) Subsections (1), (2) and (3) of this section apply to assessment years beginning on and after January 1, 1972, but shall not apply to assessment years beginning on and after January 1, 1982. [1971 c.141 §§ 1, 2]

(Pollution Control Facilities)

307.405 Pollution control facilities; qualifications; expiration; revocation; limitations. (1) A pollution control facility or facilities which have been constructed in accordance with the requirements of subsection (1) of ORS 468.165, and have been certified by the Environmental Quality Commission pursuant to ORS 468.170 are exempt to the extent of the highest percentage figure certified by the Environmental Quality Commission as the portion of the actual cost properly allocable to the prevention, control or reduction of pollution. The exemption shall be allowed only if the taxpayer is a corporation organized under ORS chapter 61 or 62, or any predecessor to ORS chapter 62 relating to incorporation of cooperative associations, or is a subsequent transferee of such a corporation. If the subsequent transferee is organized under other than ORS chapter 61 or 62, the exemption shall only be allowed if the transfer occurs after the expiration of five years from the date of original certification by the commission.

(2) To qualify for the ad valorem tax relief:

(a) The pollution control facility must be erected, constructed or installed in connection with the trade or business conducted by the taxpayer on Oregon property owned or leased by said taxpayer.

(b) The taxpayer must be the owner of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution or a person who, as a lessee under a written lease or pursuant to a written agreement, conducts the trade or business that operates or utilizes such property and who by the terms of such lease or agreement is obliged to pay the ad valorem taxes on such property. As used in this subsection, "owner" includes a contract purchaser.

(3) The ad valorem exemption of a facility shall expire, in any event, 20 years from the date of its first certification for any owner or lessee by the Environmental Quality Commission.

(4) Upon any sale, exchange, or other disposition of a facility, notice thereof shall be given to the Environmental Quality Commission who shall revoke the certification covering such facility as of the date of such disposition. The transferee may apply for a new certificate under ORS 468.170, but the number of years of ad valorem tax exemption that may be claimed by the transferee is the remainder of the exemption period specified in subsection (3) of this section.

(5) If the facility also functions to prevent pollution from operations conducted on other property owned or leased by the taxpayer the Environmental Quality Commission shall state in its certification of the facility the percentage of the facility used to prevent pollution from such qualifying trade or business conducted on such qualifying property. The exemption from ad valorem taxes under this section shall be limited to such percentage of the value of the facility. [1967 c.592 §13; 1969 c.340 §1; 1971 c.678 §1; 1973 c.831 §7; 1977 c.795 §9]

Note: Subsection (3), section 14 and section 15, chapter 795, Oregon Laws 1977, provide:

Sec. 14. (3) The amendments to ORS 307.405 by section 9 of this Act apply on or after January 1, 1977, to a facility under construction on or after January 1, 1975, by a corporation organized under ORS chapter 61 or 62 or under any predecessor to ORS chapter 62 relating to incorporation of cooperative associations. The amendments to ORS 307.405 do not apply to a facility commenced prior to December 31, 1980, by a person other than a corporation described in the preceding sentence if the facility is certified prior to December 31, 1982, and ORS 307.405 as it reads the day before the effective date of amendments made by section 9 of this Act shall apply thereto.

Sec. 15. Nothing in this Act relieves a person or taxpayer of any obligation with respect to a tax, fee, fine or other charge, interest, penalty, forfeiture or other liability, duty or obligation accruing under the law repealed by this Act. After the operative date of such repeal, the Department of Revenue may undertake the collection or enforcement of such tax, fee, fine, charge, interest, penalty, forfeiture or other liability, duty or obligation.

307.420 Necessity of filing claim and certificate to secure exemption; annual statements of ownership. Before any exemption from taxation is allowed under ORS 307.405, the person claiming the exemption shall file with the county assessor a written claim for such exemption prepared on a form prescribed by the Department of Revenue and furnished by the assessor, and shall file with the assessor with his first claim for exemption the certificate issued by the Environmental Quality Commission under ORS 468.170 covering the property for which exemption is sought. The claim shall be filed not later than April 1 in the first year in which the exemption is claimed; except that if the person receives his certificate either before or after April 1 and makes his election to receive ad valorem tax relief, as required by ORS 468.170, after April 1 and before July 1, he may file a claim on or before July 15 of that calendar year. The county clerk shall record the certificate in the county record of deeds, upon presentation by the assessor. Each year thereafter to continue such exemption, the taxpayer must file not later than April 1 a statement with the county assessor, on a form prescribed by the Department of Revenue and furnished by the assessor, stating that the ownership of all property included in the certificate and its use remain unchanged. [1967 c.592 §14; 1973 c.831 §10]

307.430 Correction of assessment and tax rolls; termination of exemption. (1) Upon receipt of notice of the revocation of a certification of a pollution control facility pursuant to paragraph (a) of subsection (1) of ORS 468.185, the county assessor shall proceed to correct the assessment and tax roll or rolls from which the facility was omitted from taxation, in the manner provided in ORS 311.207 to 311.213, and in all cases shall add interest in the manner provided in ORS 311.213. The five-year limitation provided for in ORS 311.205 shall not apply to such corrections.

(2) Upon receipt of notice of the revocation of a certification of a pollution control facility pursuant to paragraph (b) of subsection (1) of ORS 468.185, if the final revocation occurs before October 15 of any calendar year, the exemption otherwise allowable shall terminate and not be allowed beginning with the assessment and tax rolls prepared as of January 1 of such calendar year. [1967 c.592 §15]

**POLLUTION CONTROL
FACILITIES**

314.250 Federal grants or tax credits for pollution control facility to be offset against state income or excise tax credits. If a taxpayer obtains grants or tax credits from the Federal Government, other than investment credits granted under section 46 of the Internal Revenue Code of 1954, in connection with a pollution control facility which has been certified by the Environmental Quality Commission, the income or excise tax credits which such taxpayer would be entitled to after any such grant or credit has been made available to or received by such taxpayer, shall be offset or reduced by such federal grants or tax credits, dollar for dollar. Taxpayers applying for such grants shall notify the Department of Revenue of each such application, and of the receipt of any such grant or tax credits. Notification shall be made in the taxpayer's next Oregon income or excise tax return. [1967 c.592 §18]

314.255 Collection of taxes due after revocation of certification of pollution control facility; exceptions to tax relief allowed for pollution control facility. (1) Upon receipt of notice of the revocation of a certification of a pollution control facility pursuant to subsection (1) of ORS 468.185, the Department of Revenue immediately shall collect any taxes due by reason of such revocation, and shall have the benefit of all laws of this state pertaining to the collection of income and excise taxes. No assessment of such taxes shall be necessary and no statute of limitation shall preclude the collection of such taxes.

(2) No tax relief shall be allowed under ORS 307.405, 316.097 or 317.072 for any pollution control facility constructed or used by or for the benefit of any governmental or quasi-governmental body or public corporation or form thereof, except where such facilities are used for resource recovery. [1967 c.592 §§16, 17; 1969 c.493 §83; 1979 c.531 §5]

OREGON REVISED STATUTES
CHAPTER 316
1979 Replacement Part
PERSONAL INCOME TAX

316.097 Credit for pollution control facility. (1) A credit against taxes imposed by this chapter for taxpayers owning a pollution control facility or facilities certified under ORS 468.170 shall be allowed if the taxpayer has not claimed an exemption therefor under ORS 307.405.

(2) (a) For a facility qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, and having a useful life of 10 years or longer, the maximum credit allowed in any one tax year shall be the lesser of the tax liability of the taxpayer or the following portion of the cost of the facility:

(A) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 80 percent or more, five percent of the cost of the facility.

(B) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 60 percent or more and less than 80 percent, four percent of the cost of the facility.

(C) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 40 percent or more and less than 60 percent, three percent of the cost of the facility.

(D) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 20 percent or more and less than 40 percent, two percent of the cost of the facility.

(E) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is less than 20 percent, one percent of the cost of the facility.

(b) For a facility qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, and having a useful life of less than 10 years, the maximum credit allowed in any one taxable year shall be the lesser of the tax liability of the taxpayer or the following:

(A) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 80 percent or more, 50 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(B) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 60 percent or more and less than 80 percent, 40 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(C) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 40 percent or more and less than 60 percent, 30 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(D) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 20 percent or more and less than 40 percent, 20 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(E) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is less than 20 percent, 10 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(c) For facilities having a useful life of less than 10 years and for which some portion of the maximum total credit is allowed or allowable in tax years beginning on or after January 1, 1977, such remaining credit shall be prorated over the remaining useful life of the property under administrative rules to be prepared by the department.

(3) (a) For a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165, and having a useful life of 10 years or longer, the maximum credit allowed in any one tax year shall be five percent of the cost of the facility or facilities, but shall not exceed the tax liability of the taxpayer.

(b) For a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165, and having a useful life of less than 10 years, the maximum credit allowed in any one tax year shall be 50 percent of the cost of the facility divided by the number of years of useful life of the facility, but shall not exceed the tax liability of the taxpayer.

(4) To qualify for the credit the pollution control facility must be erected, constructed or installed in accordance with the provisions of subsection (1) of ORS 468.165.

(5) (a) The taxpayer who is allowed the credit must be the owner of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution or a person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property. As used in this paragraph, "owner" includes a contract purchaser; and

(b) The facility must be owned or leased during the tax year by the taxpayer claiming the credit and must have been in use and operation during said tax year.

(6) Regardless of when the facility is erected, constructed or installed, a credit under this section may be claimed by a taxpayer:

(a) For a facility qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, only in those tax years which begin on or after January 1, 1967.

(b) For a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165, in those tax years which begin on or after January 1, 1973.

(7) For a facility qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, the maximum total credit allowable shall not exceed:

(a) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 80 percent or more, 50 percent of the cost of such facility or facilities.

(b) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 60 percent or more and less than 80 percent, 40 percent of the cost of such facility or facilities.

(c) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 40 percent or more and less than 60 percent, 30 percent of the cost of such facility or facilities.

(d) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 20 percent or more and less than 40 percent, 20 percent of the cost of such facility or facilities.

(e) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is less than 20 percent, 10 percent of the cost of such facility or facilities.

(8) For a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165, the maximum total credit allowable shall not exceed 50 percent of the cost of such facility.

(9) The credit provided by this section is not in lieu of any depreciation or amortization deduction for the facility to which the taxpayer otherwise may be entitled under this chapter for such year.

(10) Upon any sale, exchange, or other disposition of a facility, notice thereof shall be given to the Environmental Quality Commission who shall revoke the certification covering such facility as of the date of such disposition. The transferee may apply for a new certificate under ORS 468.170, but the tax credit available to such transferee shall be limited to the amount of credit not claimed by the transferor.

(11) Any tax credit otherwise allowable under this section which is not used by the taxpayer in a particular year may be carried forward and offset against the taxpayer's tax liability for the next succeeding tax year. Any credit remaining unused in such next succeeding tax year may be carried forward and used in the second succeeding tax year, and likewise, any credit not used in that second succeeding tax year may be carried forward and used in the third succeeding tax year, but may not be carried forward for any tax year thereafter. Credits may be carried forward to and used in a tax year beyond the years specified in ORS 468.170.

(12) The taxpayer's adjusted basis for determining gain or loss shall not be further decreased by any tax credits allowed under this section.

(13) If the taxpayer is a shareholder of a Subchapter S corporation that has elected to take tax credit relief pursuant to subsection (6) of ORS 468.170, the credit shall be computed using the shareholder's pro rata share of the corporation's certified cost of the facility. In all other respects, the allowance and effect of the tax credit shall apply to the corporation as otherwise provided by law. [See 316.480; 1973 c.831 §8; 1977 c.795 §11; 1977 c.866 §10; 1979 c.691 §6]

Note: Section 8, chapter 691, Oregon Laws 1979, provides:

Sec. 8. The amendment to subsection (12) of ORS 316.097 by section 6 of this Act shall apply to tax years beginning on or after January 1, 1977, and the amendments to ORS 316.052, 316.078 and 316.087 by sections 2, 4 and 5 of this Act shall apply to tax years beginning on or after January 1, 1979.

OREGON REVISED STATUTES
1979 Replacement Part

Chapter 316.142

316.142 Government and quasi-governmental bodies not eligible for credit; ineligibility of recipients of other credits. (1) No tax credit shall be allowed under ORS 316.140 to 316.142, 317.104 and 469.185 to 469.225 for any facility constructed or used by or for the benefit of any governmental or quasi-governmental body or public corporation or form thereof.

(2) A person who applies for and receives a tax credit on a pollution control facility or an alternate energy device under ORS 316.097, 316.116 or 317.072 is not eligible to apply for and receive a tax credit on the same facility or device under the provisions of ORS 316.140 to 316.142, 317.104 and 469.185 to 469.225. [1979 c.512 §16, 17]

OREGON REVISED STATUTES
CHAPTER 317
1979 Replacement Part
CORPORATION EXCISE TAX

317.072 Credit for pollution control facility; limitations; unused credit, taxpayer's basis. (1) A credit against taxes imposed by this chapter for taxpayers owning a pollution control facility or facilities certified under ORS 468.170 shall be allowed if the taxpayer has not claimed an exemption therefor under ORS 307.405.

(2) (a) For a facility qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, and having a useful life of 10 years or longer, the maximum credit allowed in any one taxable year shall be the lesser of the tax liability of the taxpayer or the following portion of the cost of the facility:

(A) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 80 percent or more, five percent of the cost of the facility.

(B) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 60 percent or more and less than 80 percent, four percent of the cost of the facility.

(C) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 40 percent or more and less than 60 percent, three percent of the cost of the facility.

(D) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 20 percent or more and less than 40 percent, two percent of the cost of the facility.

(E) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is less than 20 percent, one percent of the cost of the facility.

(b) For a facility qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, and having a useful life of less than 10 years, the maximum credit allowed in any one taxable year shall be the lesser of the tax liability of the taxpayer or the following:

(A) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 80 percent or more, 50 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(B) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 60 percent or more and less than 80 percent, 40 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(C) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 40 percent or more and less than 60 percent, 30 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(D) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 20 percent or more and less than 40 percent, 20 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(E) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is less than 20 percent, 10 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(c) For facilities having a useful life of less than 10 years and for which some portion of the maximum total credit is allowed or allowable in tax years beginning on or after January 1, 1977, such remaining credit shall be prorated over the remaining useful life of the property under administrative rules to be prepared by the department.

(3) (a) For a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165, and having a useful life of 10 years or longer, the maximum credit allowed in any one tax year shall be five percent of the cost of the facility, but shall not exceed the tax liability of the taxpayer.

(b) For a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165, and having a useful life of less than 10 years, the maximum credit allowed in any one tax year shall be 50 percent of the cost of the facility divided by the number of years of useful life of the facility, but shall not exceed the tax liability of the taxpayer.

(4) To qualify for the credit the pollution control facility must be erected, constructed or installed in accordance with the provisions of subsection (1) of ORS 468.165.

(5) (a) The taxpayer who is allowed the credit must be the owner of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution or a person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property. As used in this paragraph, "owner" includes a contract purchaser; and

(b) The facility must be owned or leased during the tax year by the taxpayer claiming the credit and must have been in use and operation during said tax year.

(6) Regardless of when the facility is erected, constructed or installed, a credit under this section may be claimed by a taxpayer:

(a) For a facility qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, only in those tax years which begin on or after January 1, 1967.

(b) For a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165, only in those tax years which begin on or after January 1, 1973.

(7) For a facility qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, the maximum total credit allowable shall not exceed:

(a) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 80 percent or more, 50 percent of the cost of such facility or facilities.

(b) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 60 percent or more and less than 80 percent, 40 percent of the cost of such facility or facilities.

(c) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 40 percent or more and less than 60 percent, 30 percent of the cost of such facility or facilities.

(d) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 20 percent or more and less than 40 percent, 20 percent of the cost of such facility or facilities.

(e) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is less than 20 percent, 10 percent of the cost of such facility or facilities.

(8) For a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165, the maximum total credit allowable shall not exceed 50 percent of the cost of the facility.

(9) The credit provided by this section is not in lieu of any depreciation or amortization deduction for the facility to which the taxpayer otherwise may be entitled under this chapter for such year.

(10) Upon any sale, exchange, or other disposition of facility, notice thereof shall be given to the Environmental Quality Commission who shall revoke the certification covering such facility as of the date of such disposition. The transferee may apply for a new certificate under ORS 468.170, but the tax credit available to such transferee shall be limited to the amount of credit not claimed by the transferor.

(11) Any tax credit otherwise allowable under this section which is not used by the taxpayer in a particular year may be carried forward and offset against the taxpayer's tax liability for the next succeeding tax year. Any credit remaining unused in such next succeeding tax year may be carried forward and used in the second succeeding tax year, and likewise, any credit not used in that second succeeding tax year may be carried forward and used in the third succeeding tax year, but may not be carried forward for any tax year thereafter. Credits may be carried forward to and used in a tax year beyond the years specified in ORS 468.170.

(12) The taxpayer's adjusted basis for determining gain or loss shall not be further decreased by any tax credits allowed under this section. [1967 c.592 §9; 1969 c.340 §3; 1973 c.831 §9; 1977 c.795 §12; 1977 c.866 §11]

Note: Sections 14 and 15, chapter 795, Oregon Laws 1977, provide:

Sec. 14. (1) The deletion of paragraph (a) of subsection (7) of ORS 316.068 by section 10 of this Act and the amendments to ORS 316.097 and 317.072 by sections 11 and 12 of this Act apply to tax years beginning on or after January 1, 1977.

(2) The deletion of paragraph (b) of subsection (7) of ORS 316.068 by section 10 of this Act and the amendment to ORS 317.220 by section 13 of this Act are applicable as to property sold or disposed of in taxable years beginning on or after January 1, 1977.

(3) The amendments to ORS 307.405 by section 9 of this Act apply on or after January 1, 1977, to a facility under construction on or after January 1, 1975, by a corporation organized under ORS chapter 61 or 62 or under any predecessor to ORS chapter 62 relating to incorporation of cooperative associations. The amendments to ORS 307.405 do not apply to a facility commenced prior to December 31, 1980, by a person other than a corporation described in the preceding sentence if the facility is certified prior to December 31, 1982, and ORS 307.405 as it reads the day before the effective date [October 4, 1977] of amendments made by section 9 of this Act shall apply thereto.

Sec. 15. Nothing in this Act relieves a person or taxpayer of any obligation with respect to a tax, fee, fine or other charge, interest, penalty, forfeiture or other liability, duty or obligation accruing under the law repealed by this Act. After the operative date of such repeals, the Department of Revenue may undertake the collection or enforcement of such tax, fee, fine, charge, interest, penalty, forfeiture or other liability, duty or obligation.

SECTION III

SUMMARY
OF
ATTORNEY GENERAL OPINIONS

Summary of Attorney General Opinions Involving the
Pollution Control Facilities Tax Credit Statutes

<u>Date Issued & Type</u>	<u>Subject</u>	<u>Question</u>	<u>Answer</u>	<u>Explanation or Comments</u>
08/27/80 Informal	Cattle feedlot	Does a cattle feedlot fall under the exclusion in ORS 459.005(11)(b); materials used for fertilizer?	Yes	The definition of solid waste in ORS 459.005 excludes materials used for fertilizer or other productive purposes.
06/02/80 Hearing Officer's Order	Appeal of Denial of Request for Preliminary Certification for Tax Credit by Stimson Lumber Company	Department denied preliminary certification for the replacement of two boilers and installation of a larger one contending that the installation was intended to provide operational efficiency and that the applicant was already meeting standards.	Ordered that Request for Preliminary Certification be accepted.	Hearing Officer found that the new boiler installation met the substantial purpose test and found no evidence that the Legislature intended to exclude facilities already in compliance.
01/15/80 Formal	Vehicle conversion to liquified petroleum or natural gas	May a person receive tax credit for conversion of vehicles to use of liquified petroleum gas (LPG) or natural gas (NG)?	Yes, if meet substantial purpose test.	The taxpayer obtaining such tax credit must own a trade or business which would use the converted motor vehicles.
12/11/79 Informal	Reconstructed or replaced facilities	Is the complete reconstruction of an existing facility resulting in its replacement rather than repair eligible for tax credit certification, whether or not the facility has previously been certified, and received credit?	Yes	If an existing facility is in need of extensive repair and is replaced rather than repaired, the facility is eligible for tax credit but only to the extent of the excess replacement cost over the cost that would have been necessary to repair the existing facility.

<u>Date Issued & Type</u>	<u>Subject</u>	<u>Question</u>	<u>Answer</u>	<u>Explanation or Comments</u>
10/04/79 Informal	Van Pools	Is the Commission prevented from certifying for tax credit an automobile passenger van purchased by a private employer for the purpose of providing to his employees a mode of transportation to and from work in order to reduce the amount of air pollution and noise that would otherwise result from the use of individual automobiles?	Yes	Legislature only intended to cover pollution control facilities directly related to operation of the industry or enterprise seeking the tax credit.
06/04/79 Informal	Facilities required by law before 1967	Is the Commission prevented from certifying for tax credit a facility required by law before the passage of the original tax credit statutes in 1967?	No	The tax credit statutes do not state or imply that a facility is not eligible for tax credit because it is required to be constructed by virtue of any governmental law or rule in existence at any time.
11/06/78 Informal	Steam turbine generator	Is a generator, added to an already certified hog fuel boiler, eligible for tax credit if more wood waste is burned even though the original design capacity of the boiler is not exceeded?	No	The intent behind the tax credit statutes seems to be that the original productive capacity of the boiler is the base against which the determination is made as to whether the addition of the generator will increase the production of energy over the amount being produced by the boiler alone.
11/06/78 Informal	Dry kilns	Is a dry kiln installed with a hog fuel boiler to dry green lumber eligible for tax credit certification?	Yes, if meet substantial purpose test.	The statutes require that the substantial purpose of their construction be the reduction and utilization of solid waste.

III-2

Date Issued & Type	Subject	Question	Answer	Explanation or Comments
07/24/78 Informal	Leased facilities	May person leasing a pollution control facility obtain tax credit certification?	Yes	Based upon precedent established early in the program. However, to avoid tax credits being obtained by both the lessor and lessee, the lessee must provide DEQ with a copy of the complete and current lease agreement on the facility and a notarized statement from the lessor acknowledging that only one tax credit will be allowed for the facility and authorizing the lessee to take the credit.
06/14/78 Informal	Preliminary Certification	Under what circumstances may the Commission certify a facility when the applicant has never filed a request for preliminary certification on Department form number DEQ/TC-1-10/777	A verbal or written request may be accepted if made before construction commenced.	Statutes require the request be in a form prescribed by Department. Thus, the Department has flexibility in determining what constitutes a request.
		Note: Oregon Laws 1979, Chapter 802, Section 5, now allows the Commission to waive the filing of a request for preliminary certification if special circumstances render the filing unreasonable, and the facility would otherwise be eligible for tax credit.		
04/27/78 Informal	Preliminary Certification	Must a person proposing to apply for certification of a facility be <u>issued</u> a preliminary certificate of approval <u>before</u> commencing construction of the facility?	No	The statutes require the applicant to file a request for preliminary certification before commencing construction, but not that the preliminary certificate be issued prior to construction. Of course the applicant proceeds at his own risk. (Also see note under 6/14/78 opinion).

III-3

AVB

1981

<u>Date Issued & Type</u>	<u>Subject</u>	<u>Question</u>	<u>Answer</u>	<u>Explanation or Comments</u>
04/27/78 Informal	Preliminary Certification	Must the facility be designed such that it can reasonably be expected to comply with the applicable statutes and regulations of the Department in order to be issued preliminary certification?	Yes	The facility must meet the "substantial purpose" test as well as be in accordance with, and necessary to satisfy the intents and purposes of the statutes, rules and standards referenced in the tax credit statutes. It is not merely required that the facility be designed to a substantial extent for the purpose of preventing controlling or reducing pollution.
04/27/78 Informal	Preliminary Certification	Can preliminary certification be denied on the grounds that the facility proposed is not a reasonable or cost effective solution to the pollution problem involved?	No	The tests set forth in the statute do not appear to include a requirement that the facility be the most reasonable or cost effective way to deal with the problem.
04/27/78 Informal	Preliminary Certification	If it is obvious on the face of a request for preliminary certification that construction was commenced before the request was filed with the Department, can the request be rejected as incomplete (legally flawed) and not processed further?	Yes (see note under 6/14/78 opinion)	The request can be rejected by DEQ as incomplete because not in compliance with ORS 468.175(1), however the applicant should be given prompt written notice of rejection. Of course, DEQ must be careful that it has not, by actions of staff, caused the applicant to understand that his request has been received informally by DEQ prior to construction.

III-4

Aug

1981

<u>Date Issued & Type</u>	<u>Subject</u>	<u>Question</u>	<u>Answer</u>	<u>Explanation or Comments</u>
04/27/78 Informal	Preliminary Certification	Must a person applying for certification of a noise pollution control facility have filed a request for preliminary certification before commencing construction if construction began after January 1, 1977, and before October 4, 1977, (effective date of 1977 amendments)?	No	Intent was that facilities constructed after January 1, 1977 be eligible for tax credit. Preliminary certification not required until after October 3, 1977.
04/27/78 Informal	Hearings	Is the hearing allowed under ORS 468.175(5) a contested case type hearing?	Yes	Statute states that hearing shall be conducted in accordance with the applicable provisions of ORS Chapter 183.
04/01/77 Informal	Commencement of Construction	Does issuance of purchase orders for equipment to construct a facility by the applicant constitute the commencement of erection, construction or installation of the facility?	No	Such purchase orders, without more, would not constitute the commencement of erection, construction or installation of the facility.
03/22/77 Informal	Paved log deck	If the substantial purpose of paving a log deck was not for utilizing solid waste, could the EQC certify a portion of the facility proportional to the benefits received which were attributable to solid waste utilization?	No	The EQC could only certify a portion of a facility if the applicant could physically identify that portion of the facility whose substantial purpose was utilization of solid waste.

III-5

ACR

1991

<u>Date Issued & Type</u>	<u>Subject</u>	<u>Question</u>	<u>Answer</u>	<u>Explanation or Comments</u>
03/03/76 Informal	Sale or exchange of facilities	What is the statutory responsibility of the EQC and DEQ for policing sales or exchanges of pollution control facilities granted tax credit and nonuse of such facilities for pollution control purpose?	None	Policing is by the tax authorities, Department of Revenue or County Assessors. Neither the EQC or DEQ has any obligation to affirmatively inquire whether the pollution control facility has been in use or operation for the intended purpose or has been sold or exchanged. However, if it does somehow obtain knowledge thereof, the EQC must then revoke the certificate.
02/23/76	Field burning alternatives	Are a straw baler and bale accumulator used to remove grass seed straw from fields prior to open burning eligible for tax credit certification?	No, unless designated under ORS 468.150.	ORS 468.150 states that after alternative methods for field sanitation and straw utilization and disposal are approved by the Field Burning Advisory Committee and DEQ, they will be eligible for tax credit certification. At the time only mobile field sanitizers have been given approval.
01/16/76 Informal	Application review period	Does the 120-day period, within which the EQC must take action, start running on the date of receipt of the application, or on the date the Department notifies the applicant that the application is deemed to be complete for processing?	Starts when application completed for processing.	Once the application filed is complete, the 120-day period would begin the run even before the Department notification of the applicant that the application was deemed completed by the Department.
01/16/76 Informal	Notice upon application denial	If an application is rejected by failure of the Commission to act within 120 days, is notice required?	No, but recommended.	Notice is not required but recommend it be given in written form to provide a basis for the beginning of the time period applicant has to appeal the denial.

9-III-6

APR 1976

<u>Date Issued & Type</u>	<u>Subject</u>	<u>Question</u>	<u>Answer</u>	<u>Explanation or Comments</u>
01/16/76 Informal	Appeal procedure upon application denial	If an application is rejected by failure of the Commission to act, is applicant's appeal procedure still operative and within what time frame?	Yes, applicant can appeal denial within statutory time frame.	If notice is given, the 30-day time period of 468.170(3) would apply. If notice not given, a 60-day period for taking of an appeal is probably applicable.
01/16/76 Informal	Determination of eligibility	When does determination and notice to applicant of extent of eligibility for tax credit need to be made?	At time final certificate is issued to applicant.	The determination of the full extent a facility is eligible for tax credit does not need to be made at the preliminary certification stage, although it should be determined to the extent possible at that time.
01/16/76 Informal	Withdrawal and resubmission of applications	Can an application be withdrawn and resubmitted at any time by an applicant?	Yes	An application could be withdrawn at any time, or resubmitted at any time by the applicant.
01/16/76 Informal	Incomplete applications	Can Department reject an application on the basis of incomplete information?	Yes	No action may be taken by the Department on an application for preliminary certification or tax credit certification until the application is complete. The Department should notify the applicant of incomplete application and in what respects it is incomplete.
12/19/75 Informal	Certificate approval	Can a tax credit certification be approved on condition?	No	The Commission must either unconditionally issue the certificate or deny it.
08/13/74 Informal	Motor vehicle pollution control equipment	Can the installation of propane carburetion equipment on company vehicles be certified for tax credit?	Yes, if meets substantial purpose test.	It might well come within the definition of pollution control facility if company can show that a substantial purpose of its installation is for air pollution control.

III-7

11-1

<u>Date Issued & Type</u>	<u>Subject</u>	<u>Question</u>	<u>Answer</u>	<u>Explanation or Comments</u>
07/09/74 Informal	Agricultural facilities	Can facilities used for agricultural operations be certified for tax credit even though most agricultural operations are exempt from Oregon's air pollution control laws?	Yes	There is no language in the tax credit statutes which specifically excepts such facilities when used for agricultural operations from the benefits of these statutes. The disposal or elimination of air pollution by a facility in an agricultural operation may be rewarded in the form of a tax credit under one statute even though of control of such air pollution is denied by another statute.
01/03/74 Informal	Pressure backflow prevention facilities	Can reduced pressure backflow prevention devices and doublecheck valve installations used to prevent industrial wastes from entering the water supply of the city of Portland be certified for tax credit?	Yes, if meets substantial purpose test.	The water in a municipal water system qualifies as waters of the state and therefore pollution of them constitutes water pollution, within the definition of tax credit statutes. However, private waters which do not combine or effect a junction with natural surface or underground waters are not included within the definition of waters of the state as used in the definition of water pollution and therefore devices used to protect such waters from pollutants are not eligible for tax credit.

111-8

AUG

1974

<u>Date Issued & Type</u>	<u>Subject</u>	<u>Question</u>	<u>Answer</u>	<u>Explanation or Comments</u>
11/07/73 Informal	Sale or exchange of a facility	Does the merger of a wholly-owned corporate subsidiary corporation into the parent corporation under Oregon corporation law constitute a sale, exchange, or other disposition of a facility within the meaning of ORS 316.097?	No	Title to the facility is changed from the subsidiary to the parent corporation by operation of law and without any transfer document. Therefore, revocation of the tax certification and application for a new certificate is not required. However, a notation should be made on the certificate that a merger has occurred giving the names and date it occurred.
01/12/72	Sale or exchange of a facility	What is the procedure to be followed in transferring a tax credit certificate from one holder to another?	The Commission should revoke the certificate and grant a new one to the new holder for the balance of the available credit.	This procedure is set forth in ORS 307.405, 316.097, and 317.072.
09/01/70 Informal	Compliance status of facility	Must a facility claimed for tax credit be in full compliance with the applicable regulations of the EQC in order to qualify for certification?	No	A facility does not have to be "perfect" nor totally eliminate all pollutants before certification is authorized. It need only be used for the substantial purpose of pollution control and at least prevent or reduce pollution. DEQ does have discretion to determine if a facility meets the intents and purposes of its statutes and rules. Certainly if a facility does not meet established rules, it is an important factor for the Commission to consider in arriving at whether or not it should be granted certification.

III-9

405

1991

<u>Date Issued & Type</u>	<u>Subject</u>	<u>Question</u>	<u>Answer</u>	<u>Explanation or Comments</u>
Unknown Informal	Facility not in operation	Is a firm who has constructed or installed pollution control facilities eligible for tax relief certification even though the facilities are not being operated to control or prevent pollution?	Yes, if applicant gives evidence that they will be operated.	A pollution control facility not yet in operation may be certified by the Commission if it finds it will be placed in operation. The word "will" as used in the statutes does not mean capability, ability, or could. Will denotes certainty, not speculation. The Commission must find, therefore, that the facility will at least operate to prevent, control or reduce pollution.

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111-10

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SECTION IV

SUMMARY
OF
PREVIOUSLY CERTIFIED FACILITIES

	<u>Page</u>
Summary	IV-1
Air Quality	IV-3
Water Quality	IV-7
Solid Waste	IV-11
Noise	IV-13

PREVIOUSLY CERTIFIED FACILITIES

Following is a listing by program of facilities which have previously been certified for tax credit by the Environmental Quality Commission. The list is in order of most frequently certified followed by one-of-a-kind certifications. This list is meant only as a guideline for reviewers on what has been certified previously, and not as an exact list of eligible facilities.

October 1980

Air Quality

<u>Type of facility</u>	<u>No. Certificates Issued</u>
Baghouse	93
Scrubber	69
Scrubber towers	2
Dust collectors/filters	47
Conveyor systems/hoppers/bins	26
Wigwam burner modifications	25
Monitors/transmitters/recorders	23
Hoods/ductwork/exhaust fans	22
Boilers (additions/conversions/modifications)	22
Fume incineration/collection/control	20
Orchard fans	16
Orchard heating systems	6
Orchard overtree sprinkler systems	10
Cyclones	15
Black liquor oxidation system	13
Buildings/enclosures	13
Electrostatic precipitators	10
Hogged fuel handling system	10
Wood waste residue processing, handling, and storage system to eliminate wigwam burner	9
Paving	8
Multiclone	6
Recovery furnace	5
Digester pumpout system	5

Air Quality

<u>Type of facility</u>	<u>No. Certificates Issued</u>
Samplers/sampling platforms	5
Incinerator	5
Fly ash collectors/handling system	5
Balers/refuse compactors	4
Afterburner incineration	4
Mist eliminator	2
Boiler incineration	2
Gas chromatograph	2
Veneer dryer air curtains	2
Flue gas oxygen analyzer	3
Lime kiln modifications	3
Kraft mill noncondensable gas incineration	2
Hydraulic log carriage (bring boiler into compliance by reducing steam load) (T-455, T-419)	

Air Quality
One-of-a-Kind Certifications

<u>Facility</u>	<u>Application No.</u>
Carbon adsorption system on halfnium process stream	T-84
PS 300 oil burner	T-578
Incinerator roof	T-42
Sand classifier for cinder collectors on hogged fuel boilers	T-657
Evaporator vapor vacuum system	T-18
Overfire fan on hogged fuel boiler	T-148
Electric power feeder for electric motor to move air through Becker Sandair Filter	T-718
Variable speed drive for induced draft fan on hogged fuel boiler	T-678
Clay unloading system	T-653
Dust transportation system from plant site to landfill (lug loader, lug loader containers, misc. metal work)	T-633
Rader tube control device	T-593
Roof vent stack extensions	T-522
Wet centrifugal wood dust cleaning system	T-521
Super sucker industrial vacuum loader	T-824
Air Compressor and motor	T-446
Tri-Mar separators as pretreatment devices for pure chlorination scrubber	T-347
Lime mud filter system	T-1207
Elevator in kiln dust scoop building for reintroducing collected dust into kiln	T-203
Electric crane and semi-automation of impregnation tank cover mechanism	T-202
Washing machine and gas fired batch oven for grease removal from wheel hubs	T-195
Liquid propane gas standby facility	T-192

Air Quality
One-of-a-Kind Certifications

<u>Facility</u>	<u>Application No.</u>
Spray booths to remove paint overspray particles from air	T-191
Inert gas closed ovens for product drying	T-230
Introduction type steel melting furnaces	T-31
Spark suppression system	T-1189
Ore buckets used in pot room	T-1215
Transformer to supply power to recovery furnace electrostatic precipitator	T-1212
Matrix control system for rapping sequences and cycles in recovery furnace electrostatic precipitator	T-1213
Backup fan for acid plant overgas system	T-1224
Heat exchanger	T-1263
Aerator, extended aeration lagoon (certified air and water)	T-15
Atomic absorption spectrophotometer (certified air and water)	T-311
Continuous counter current belt pulp washers (certified air and water)	T-995

Water Quality

<u>Facility</u>	<u>No. Certificates Issued</u>
Pumps/sumps/motors/pipelines/associated equipment	44
Wastewater collection/treatment/recycle/disposal	31
Animal waste disposal	28
Screens/clarifiers/filters/piping/centrifuges	21
Tanks	14
Instrumentation	10
Glue wastewater recycling	8
Settling basin/pond/tank	8
Log handling	8
Chemical recovery and treatment/steam stripping	8
Lagoons	7
Wood fiber removal equipment	7
Aerators/aeration basins	7
Secondary treatment facilities	6
Structures/buildings/foundations	6
Spent liquor incineration	5
Spill containment	3
Cooling Tower (T-679, T-813)	2
Outfall lines (T-535, T-557)	2
Air aspirating units (T-168, T-173)	2
Primary treatment facilities (T-78, T-80)	2
Lime storage/slaker (T-556, T-836)	2
Holding pond (T-123, T-1179)	2
Wastewater field spray irrigation (T-335, T-617)	2
Stormwater treatment/diversion (T-1008, T-698)	2

Water Quality
One-of-a-Kind Certifications

<u>Facility</u>	<u>Application No.</u>
Extension of boiler house (for boiler required to eliminate contaminated discharges)	T-829
Boiler and ancillary piping (additional energy supply needed to eliminate 1000 pound per day ammonia)	T-832
Log deck paving	T-588
Zirconium vessel and related equipment	T-827
Waste solids storage pond	T-102
Chemical concentrator (wastewater evaporator to eliminate discharge)	T-109
Standby centrifuge screw	T-132
Waste solvent disposal	T-193
Crystalizer and dryer for production of ammonium sulfate	T-343
Enlargement of storage pond for solids removal	T-351
Grilled pit for catching dirt and petroleum waste	T-315
Load cell and scale for SO ₂ cylinders	T-279
Diversion dam for flush water	T-540
Lined pond to prevent groundwater contamination	T-552
Conversion of steam veneer block heating to hot water recycle	T-1167
Vapor compression reevaporation system	T-1190
Lining inserted in clay sewer of bleach plant effluent system	T-1214
Boiler ash handling system	T-1205
Railroad car unloading connector for control of clay spillage	T-1209

Water Quality
One-of-a-Kind Certifications

<u>Facility</u>	<u>Application No.</u>
High pressure showers for screens preceding settling basin	T-1261
Steam and brush vegetable peeling system to replace caustic peel system, resulting in greater BOD removal	T-1152
Aerator, extended aeration lagoon (certified air and water)	T-15
Atomic absorption spectrophotometer (certified air and water)	T-311
Continuous counter current belt pulp washers (certified air and water)	T-995

Solid Waste

<u>Facility</u>	<u>No. Certificates Issued</u>
Wood waste fired boilers/heat sources (e.g., for veneer dryers)	19
Log chippers/hogs	13
Waste paper balers	6
Paving of log decks	5
Newsprint deinking	3
Steam turbine electric generators	2
Particleboard manufacturing plants	2

Solid Waste
One-of-a-Kind Certifications

<u>Facility</u>	<u>Application No.</u>
Land	T-646
Bale accumulator/loader (grass straw baler)	T-646
Shredded tire storage/metering system	T-968
Grass straw mulching facility	T-1170
Sawdust bin and cyclone	T-1193
Air heater (veneer dryer heat source)	T-1222
Lime washing system	T-577
Bark conversion plant	T-623
Bark conversion plant expansion	T-1099
Aggregate reclaimer (from concrete)	T-1012
Hog fuel storage	T-1193
Classifier	
Truck/trailer	
Wastepaper cleaning/pulping	
Wood waste material dryer	

Noise

Facility

Application No.

Extension of building over bean washing area

T-1038

Acoustical enclosure for warehouse refrigeration compressors

T-1169

Relocation of chip fractionation facility,
installation of new cyclone and larger blower,
construction of a sound insulated shed

T-1201

MF150 (2)

SECTION V

GUIDELINES
FOR
PRELIMINARY CERTIFICATION

	<u>Page</u>
Guidelines for Preliminary Certification	V-1
Solid Waste - Special Guidelines/Policy	V-7
Paving Projects - Special Guidelines/Policy	V-9

GUIDELINES ON PRELIMINARY CERTIFICATION FOR TAX CREDIT

INTRODUCTION

This guideline is intended to serve as a reference document for staff involved with preliminary certifications for tax credit. The purpose of the guideline is to help assure that preliminary certifications are consistent and are in accordance with the intents of the tax credit statutes, policies and procedures.

It is the POLICY of the Department and the Commission to inform people at the earliest opportunity of the availability of tax credits for pollution control facilities. The purpose of providing this information is to ensure that no project we are aware of fails to receive tax credit because the owner was unaware of the program, or the requirement to request preliminary certification prior to commencing construction.

PURPOSE OF PRELIMINARY CERTIFICATION

The purpose for requiring preliminary certification prior to construction is twofold:

1. It allows the agency to review plans and specifications and require modifications before a facility is constructed to reasonably ensure it will meet regulations and standards.
2. It lets an applicant know before a major commitment of resources is made to construction, whether a facility will be eligible for tax credit.

GENERAL REQUIREMENTS

All requests for preliminary certification for tax credit are subject to the following considerations:

1. Applicants desiring to request preliminary certification must complete a "Notice of Intent to Construct and Request for Preliminary Certification for Tax Credit" (DEQ Form TC-1/10/79). The request must be submitted to the Department on the form provided along with plans and specifications prior to the commencement of construction or installation of the facility (ORS 468.175). Applicants should be informed in writing that if they proceed to construct prior to Department approval, they do so at their own risk that the project, or portions thereof, may be ineligible for tax credit.

For facilities constructed on or after October 3, 1979, the Environmental Quality Commission (EQC) may waive the requirement for preliminary certification if special circumstances render the filing unreasonable and the facility would otherwise be eligible for tax credit. The "special circumstances" are not defined and will be reviewed on a case-by-case basis.

The request for waiver must be formally presented to the EQC at a regularly scheduled meeting.

2. Upon receipt of a request for preliminary certification, the Division or Region shall notify the applicant of having received the request (DEQ Form TC-4-3/78).
3. In the event the request is incomplete, unsigned or needs additional information, the form shall be returned or the additional information requested within 30 days from original receipt. (ORS 468.175(2)) (DEQ Form TC-5-3/78)
4. The Department has 60 days from the date of receipt of a completed request to either grant preliminary certification or obtain a denial order from the EQC at a regularly scheduled meeting (ORS 468.175). The denial order must be obtained within the 60-day period to avoid automatic approval.

If a request is to be denied, the applicant shall be notified in writing and be given an opportunity to withdraw the request.

Requests that are not processed within the 60-day period are automatically approved (ORS 468.175(4)). Should this occur, a facility that may not reasonably be expected to comply with Commission regulations and standards could become eligible for tax credit. However, the construction must comply with the plans, specifications and any corrections or revisions thereto, if any, previously submitted (ORS 468.175(4)). Therefore, processing must be within the 60-day period allowed.

5. The preliminary certification process is the only time the Department can require that plans and specifications be modified to produce a facility that can reasonably be expected to comply with EQC regulations and standards. Should a request be submitted for a "marginal" facility, it should be returned for modification. Construction must be in strict accordance with the submitted plans and specifications (ORS 468.175(4)).
6. If it is known that a facility was under construction prior to the company making a request for preliminary certification, then the Department can refuse to accept the request. This refusal should be in writing and also inform the company that they may seek a waiver from the EQC (see 1 above). Only the EQC can deny a request so the refusal letter should be worded carefully and not include the word deny.
7. A "Land Use Compatibility Statement" (DEQ form TC-12-10/79) is required before preliminary certification can be issued for noise pollution control facilities, or solid waste, hazardous wastes or used oil utilization facilities (ORS 197.180 and DEQ/DLCD Agreements).

PRELIMINARY CERTIFICATIONS

Once a request for preliminary certification has been deemed to be complete (form completed and signed, plans and specifications, or any other requested information has been submitted and is acceptable), the formal review and preliminary certification process can begin. Staff must consider the following in determining whether or not a proposed facility will be eligible for tax credit:

1. A substantial purpose of the proposed facility must be to prevent, control or reduce air, water or noise pollution or to utilize solid wastes, hazardous wastes or used oil (ORS 468.155).

A "substantial purpose" does not imply primary or exclusive purpose. There can be several substantial purposes for construction of a facility (e.g., pollution control, economic benefits, energy savings, worker protection, reduced maintenance). The burden of proof should be on the applicant to show at the time of preliminary certification that a substantial purpose is pollution control. Technical reports and test data should be submitted. The reviewer should document the pollution problem, its significance, and the contribution (or likelihood thereof) the proposed facility will make toward a solution.

2. Facilities utilizing solid wastes must produce as an end product a usable source of power or other item of real economic value; and the end product must be competitive with an end product produced in another state. Hazardous waste and used oil facilities are also eligible and must meet the same criteria as solid waste facilities (ORS 468.165(c) (A)).
3. Subsequent additions to a resource recovery facility which will increase the production of useful materials or energy (e.g., steam, power) are also eligible. The base facility must have been previously certified for tax credit or installed prior to January 1, 1973 and would have otherwise qualified (ORS 468.155).
4. In addition to other requirements, new eligibility criteria apply to solid waste, hazardous waste and used oil facilities constructed on or after December 31, 1980. These facilities must meet one or more of the following: (ORS 468.170(8))
 - a. The facility is necessary to assist in solving a severe or unusual solid waste, hazardous waste or used oil problem.
 - b. The facility will provide a new or different solution to a solid waste, hazardous waste or used oil problem than has been previously used, or the facility is a significant modification and improvement over similar existing facilities.

- c. The Department has recommended the facility as the most efficient or environmentally sound method of solid waste, hazardous waste or used oil control.

On December 12, 1980, the EQC adopted policies pertaining to the above requirements. (Refer to memo of December 24, 1980, from Bill Dana, attached.)

5. Facilities that are not eligible for tax credits are the following (ORS 468.155 (2)):

Air conditioners (includes heating systems)

Septic tanks or other facilities for human waste, nor any property installed, constructed or used for the moving of sewage to the collecting facilities or a public or quasi-public sewerage system

Portions of any solid waste, hazardous waste or used oil facilities which make an insignificant contribution to the purpose of utilization of solid waste, hazardous wastes or used oil. The following items are specifically excluded: office furniture and buildings, parking lots and road improvements, landscaping, external lighting, company signs, art work and automobiles.

In general, equipment installed to protect workers in their workspace (e.g., OSHA, Worker's Compensation requirements) is not eligible for tax credit.

6. A facility receiving tax credit for energy conservation is not eligible for pollution control tax credit on the same equipment (ORS 316.142 (2)).
7. When the formal review is completed, the Region or Division will prepare an approval letter (DEQ Form TC-3-3/78) granting the preliminary certification. The letter must include either a listing of or adequately reference the specific equipment included in the facility to be covered by the preliminary certification. If only a portion of a project or part of a single component is eligible, the portion shall be listed.

The approval letter should also include any request for additional information, justification or other documentation to be included when the final application for tax credit is submitted.

8. Applicants will frequently request a judgment on the anticipated eligibility of a proposal even before the request for preliminary certification is received. These informal requests generally occur during plantsite visits, compliance meetings, or by phone.

At the earliest opportunity, the applicant must be advised of the preliminary certification requirements. The applicant should be informed in writing of any device or portions of a facility that do not appear eligible.

9. Final tax credit certificates are granted by the EQC with percentages of the actual cost allocable to pollution control according to ORS 468.190.
10. A tax credit certificate can be revoked by the EQC if the facilities are not being operated to reduce air, water or noise pollution or solid or hazardous wastes or to control used oil. The certificate can also be revoked if it was obtained by fraud or misrepresentation.

CS:g
MG131

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

TO: Regional Offices

DATE: December 24, 1980

FROM: Bill Dana

Management Services Div.
Dept. of Environmental Quality

SUBJECT: Solid Waste Tax Credits -- NEW POLICY

R E C E I V E D
DEC 31 1980

Background

December 31, 1980, is a significant date relative to the Department's tax credit program for solid waste management facilities. On that date legislation takes effect that apparently was intended to significantly reduce the number and types of facilities being certified for tax credit as solid waste pollution control facilities.

We believe that certain classes of facilities should be restricted more than others. Some types of waste are now commonly recycled or used for productive purposes and the availability of a tax credit does not seem to be a necessary incentive. With other materials, potential profits are less obvious and tax credits may be a major incentive. To provide guidance in implementing the new statutory requirements, policy statements were drafted for the Commission's review and approval. This memo is to advise you that the following policy was approved by the EQC on December 12, 1980, and is now in effect:

Statute Summary

ORS 468.170(8)(b) states, in part, that a facility commenced after December 31, 1980, and prior to December 31, 1983, shall only be certified for tax credit if it meets one or more of the following conditions:

1. The facility is necessary to assist in solving a severe or unusual solid waste, hazardous waste or used oil problem;
2. The facility will provide a new or different solution to a solid waste, hazardous waste or used oil problem than has been previously used, or the facility is a significant modification and improvement of similar existing facilities; or
3. The Department has recommended the facility as the most efficient or environmentally sound method of solid waste, hazardous waste or used oil control.

Policy Statements

1. In determining if a facility provides the most efficient or environmentally sound method of producing energy or a salable product

Solid Waste Tax Credit--New Policy

December 24, 1980

Page 2

from solid waste, the Department shall consider the facility's cost effectiveness and the cost to the public of diverting material from the solid waste stream. For a few waste types, the Department can identify facilities or technologies which are the most efficient or environmentally sound. Specifically, the reprocessing of used motor oil into clean fuel or lubricants and the distillation of waste solvents to recover a clean product. For most waste types, however, the Department is not prepared to name a specific technology as the most efficient or environmentally sound. In these circumstances, judgement shall be made on a case-by-case basis.

2. Wood waste, with a few exceptions, is no longer considered to be a severe solid waste problem. Accordingly, facilities associated with wood waste utilization (e.g., hog fuel boilers, heat sources, hogs, chippers, particleboard plants, log yard paving and assorted hog fuel handling equipment) will normally no longer be certified. Also, the Department will not consider any of the facilities described above to be a new or different solution to a solid waste problem.
3. Waste cardboard and newsprint no longer represent a severe disposal problem. Balers, deinking and repulping equipment are no longer a new or different solution.
4. Grass straw, plastics, and tires, especially large truck tires, continue to represent severe disposal problems.
5. Virtually any hazardous waste management facility may be considered to be a new or different solution, since none have been certified to date.
6. "Commenced" means the date construction started, rather than the date the facility was placed in operation. (Note that a facility that has already received Preliminary Certification, but where construction has not yet started, could lose its eligibility for tax credit. I will be sending out some more information regarding this in the next few days.)

The Regional Agreements state that Preliminary Certification may be granted by the Regions. I don't care who signs the letters, but in view of these new requirements and evolving policy, it is particularly important that we communicate and agree on what action to take before any letter goes out. Clearly, the time to say "No," if appropriate, is before construction begins and a company spends its money.

I recognize that the primary responsibility for getting information out is mine. I will try to keep you up to date. If you have any questions, suggestions, concerns, etc., please don't hesitate to give me a call.

SC156(1)



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 J, July 17, 1981, EQC Meeting

Policy Guidance for Certifying Air Quality Tax Credits for Yard Paving Projects

Background

During the first 10 years of the Pollution Control Facility Tax Credit Program about 8 paving projects were certified for reducing air pollution. These projects which were approved prior to installation by the Department or a Regional Authority as a way to solve a specific air quality problem, were generally heavily traveled or intense activity areas of industrial sites.

In 1979-80, the Department experienced a substantial increase in the number of requests for preliminary certification for paving projects as well as a change in the types of such projects. Inquiries and requests were received relative to paving public/private streets and commercial business parking lots.

The Department has held up processing both preliminary and final certification actions for paving projects so that a policy could be developed for Commission approval. The policy which is presented herein will provide guidance to the staff in processing applications for paving projects.

Discussion

Paving is recognized as a satisfactory/desirable means of dust suppression in many instances. However, other benefits unrelated to air pollution control almost always occur. For example, it can help reduce equipment and plant maintenance, provide better working conditions, result in greater productivity, and help keep raw materials and/or products clean. Paving provides a smooth, solid surface which facilitates vehicular and pedestrian traffic, especially during wet weather, saves on costs of periodic grading and gravelling of an unpaved surface, has esthetic benefits, can increase customers at commercial facilities and sporting events, can aid in controlling runoff, and may aid in recovery of raw materials by preventing them from sinking into the ground or preventing them from being contaminated by soil.

Since paving most likely will never be done for a single purpose or benefit, it's quite probable that all such projects will have some form of economic benefit and a high percentage will have some air quality benefit. While identification of major air quality or economic benefits usually can be done with relative ease, quantifying them can be quite difficult. Therefore, the guidelines proposed herein may need to be modified as additional experience is gained.

Guidelines for Project Eligibility

State statutes provide that a facility may be eligible for air pollution control tax credit if a substantial purpose of said facility is the prevention, control or reduction of air pollution. Thus, to be eligible for tax credit, a paving project should result in a discernable air quality improvement.

In order to comply with the statutory requirements, with due consideration of the potential multi-benefits of paving projects, tax credit eligibility will be limited to those projects which:

1. Will be located within particulate AQMA's where dust control has been included as an element in a Commission approved attainment/maintenance strategy and will significantly contribute to the attainment/maintenance of air quality standards, or
2. The Department or LRAPA has concluded will effectively resolve a specific identified public nuisance or public impact, or
3. Are specifically required or requested by the Department or Lane Regional Air Pollution Authority.

Paving projects or portions thereof which do not contribute significantly to air pollution control will be considered ineligible for tax credit benefits. Such projects will be those which:

1. Are installed for esthetic or commercial reasons, or
2. Are required by statute, ordinance, or code.

Some examples of anticipated ineligible projects are streets, low activity areas, storage areas, public or private parking lots, and driveways.

Assessments of conditions prior to a paving project shall be an integral part of the preliminary tax credit certification process regarding any project for which tax credit will be sought subsequent to adoption of these guidelines.

Guidelines for Costs Allocable to Pollution Control

The percentage of the costs of eligible projects allocable to pollution

control should be established in accordance with ORS 468.190. Tax credit certification will be given for only that portion or areas of the project to which air pollution reductions can reasonably be assigned. Specifically, alternative solutions, cost savings, or increases and other substantial benefits that may accrue from the project shall be identified by the applicant and considered by the Department using the same methods applied to other facilities having economic benefits.

Cost Allocation Alternative

Although not proposed herein by the Department, the Commission, in recognition of the highly probable multiple benefits and in consideration of the expected difficulty in quantifying such benefits of paving projects, may wish to adopt a fixed percentage allocable to pollution control for the cost of eligible projects or portions thereof.

Director's Recommendation

It is recommended that the Commission concur in the use of the guidelines set forth above for determining eligibility and costs allocable to pollution control for air quality tax credit applications involving paving projects.

Michael Rouns
for
William H. Young

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07-02-81

SECTION VI

METHOD
OF
DETERMINING PERCENT OF COST ALLOCABLE
TO
POLLUTION CONTROL

ALLOCATION OF COSTS TO POLLUTION CONTROL

Prior to determining what portion of the actual cost of a facility is allocable to pollution control, it must first be determined what part of the applied for facility cost will be the final certified cost appearing on the tax credit certificate. The cost of discrete parts of the facility that do not have pollution control as a substantial purpose for their installation, or are otherwise ineligible for tax credit, should be subtracted from the total facility cost, and the remainder entered on the tax credit certificate. Further, if the facility replaces an existing facility that could be repaired to meet pollution control requirements then the certified cost of the replacement facility should be reduced by the cost of repair.

The next step is to determine what portion of the actual facility cost, appearing on the tax credit certificate, is properly allocable to pollution control. Note that solid waste facilities are exempt from this percent allocable determination until January 1, 1984.

ORS 468.190(2) sets out five percentage ranges and all eligible facilities must be placed in one of these ranges. The ranges are:

- (a) Eighty percent or more.
- (b) Sixty percent or more but less than 80 percent.
- (c) Forty percent or more but less than 60 percent.
- (d) Twenty percent or more but less than 40 percent
- (e) Less than 20 percent.

Thus if 80 percent or more of the actual cost of a facility is allocable to pollution control, the owner is eligible for the maximum tax credit available under the corporate excise tax, personal income tax, or ad valorem tax laws of the State. If the facility is less than 20 percent allocable, it still receives tax credit but at the minimum rate available under State tax laws. Refer to ORS 307.405, 316.097, or 317.072 for specifics on tax credits available.

In establishing the portion of costs allocable to pollution control, ORS 468.190(1) sets forth five factors that must be considered in this determination. These factors are:

- (a) If applicable, the extent to which the facility is used to recover and convert waste products into a saleable or usable commodity.
- (b) The estimated annual percent return on the investment in the facility.

- (c) If applicable, the alternative methods, equipment and costs for achieving the same pollution control objective.
- (d) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.
- (e) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution.

Historically, the Department has found factor (b) to be the most useful and straightforward in making the percent allocable determination. Factor (d) is usually covered when factor (b) is considered. Factor (c) has been used occasionally.

What follows is a discussion and examples of how the factors most often considered by the Department are used to determine the portion of costs allocable to pollution control.

The estimated annual percent return on the investment in the facility--
This is the most commonly used factor and probably the most important. As used by the Department, return on investment is calculated by the Internal Rate of Return Method. The elements required for the computation are as follows:

1. Facility Cost. This is the actual certified cost of the claimed facility minus salvage value of any facilities removed from service.
2. Annual Cash Flow. This is the representative average annual pre-tax income from the claimed facility, after deduction of operating expenses, as determined in the first normal year of operation.
3. Useful Life of Facility. The number of years during which the facility is planned to operate before replacement or disposal.

Method of Computation

1. Factor of the internal rate of return = $\frac{\text{Facility Cost}}{\text{Annual Cash Flow}}$
2. Refer to Compound Interest and Annuity Tables: Present value of annuity of \$1 received annually (Table 2 attached). Scan to determine rate of return approximating the factor for the number of years representing the useful life.

NOTE: The Department's Business Office will be glad to give further guidance in the computation process if requested.

Definitions

"Pre-tax Income" - means Total Annual Income from claimed facility prior to provision for Federal and State taxes on income.

"Total Annual Income from claimed facility" - means all income derived from sale or re-use of recovered materials or energy or any other means, as determined for the first full year of normal operation.

"Operating Expenses" - means costs of operating claimed facility for the first full year of normal operation including labor, utilities, property taxes, insurance, and other cash expenses, less any savings in expenses attributable to the installation of the facility. Depreciation and interest expense are not included.

"Salvage value" means the value of a facility at the end of its useful life minus what it costs to remove it for disposal. Salvage value can never be less than zero.

Once the percent return on investment has been calculated from the equation above it must be related to the five percentage ranges for percent allocable to pollution control. The following table is used to accomplish this relationship:

Table 1

<u>Percent ROI (Pre-tax)</u>	<u>Percent of Actual Cost of Claimed Facility Allocable to Pollution Control</u>
25% or more	less than 20%
19% to 24.99%	20% or more but less than 40%
13% to 18.99%	40% or more but less than 60%
7% to 12.99%	60% or more but less than 80%
less than 7%	80% or more

Table 1 is based upon the assumption that a 25% ROI is generally an adequate return on investment before taxes over the long term for most companies to justify an investment without the added incentive of a tax credit. The Department developed the 25% ROI figure from data presented in the Quarterly Financial Report for Manufacturing, Mining and Trade Corporations, Fourth Quarter 1980, Federal Trade Commission, Table 6. Rates of Return, all Manufacturing Corporations, 1969-1980. For the five year period 1976 through 1980, the average percent return on net worth before taxes for all manufacturing corporations was 23.6%. The Department raised the figure to 25% for use in the tax credit program for two reasons:

(1) to account for the long term inflationary trend in the economy; and
(2) to account for the somewhat higher ROI expected by most companies to justify investment in new facilities.

The Financial Report is updated quarterly. At least on a biennial basis Table 1 will be updated to reflect the latest information on ROI.

An example of the use of % ROI to determine percent of cost allocable to pollution control follows:

Example 1: A pulp and paper mill installs a new sulfur dioxide absorption system on a recovery furnace. The actual cost of the facility is \$1,146,513 based upon an accountant's certification.

Sulfur dioxide is recovered by the facility and has a value of \$468,000 per year.

Operating expenses are as follows on annual basis:

Labor	\$ 9,000
Utilities	52,000
Maintenance	34,000
Property tax	20,270
Insurance	<u>1,720</u>
Total	\$116,990

The salvage value of the previous system is zero.

Net Income = \$468,000 - \$116,990 = \$351,010

Facility Cost = \$1,146,513

Factor of Internal Rate of Return = $\frac{1,146,513}{351,010} = 3.266$

Rate of Return (10 years) (from Table 2) = 28%

Based upon Table 1, the percent of the cost of this facility that is allocable to pollution control is less than 20%.

The alternative methods, equipment and costs for achieving the same pollution control objective -- This factor is fairly self explanatory and is probably best illustrated by specific examples.

Example 1:

The applicant owns and operates a veneer plant at Medford and a plywood plant at White City.

The facility described in this application consists of log vats, boiler, heat exchanger, sumps, pumps, piping and debris removal equipment, costing \$445,141.

This project is a series of log heating vats. The heating of logs by steam or hot water has several benefits to the production of plywood. The quality of all types of veneer is improved, veneer production is increased, less heat is required to dry the veneer and of special importance in this instance, allows the otherwise difficult peeling of hemlock and white fir. Log vats are in use in many plywood plants because of these benefits.

The log vats were installed in the green veneer plant at Medford. The veneer is dried and made into plywood at the plywood plant in White City. The emission reductions resulting from the steam vats in Medford would be realized at the veneer dryers in White City.

The plywood plant operates three veneer dryers in White City. Dryers #1 and #2 are controlled by scrubbers. Dryer #3 can comply with the emissions limits without a scrubber if it dries only hemlock or white fir. These species emit significantly lower amounts of hydrocarbons than the Douglas fir veneer processed in Dryers #1 and #2.

The air quality benefits from this project are the increased use of the low emitting hemlock and white fir veneer. The company estimates approximately 45% of the logs processed through the vats will be hemlock and white fir. This will enable Dryer #3 to process only hemlock and white fir and to comply with Department opacity limits.

The economic benefits to the company from the log vat installation are the ability to use the more readily available and lower cost hemlock and white fir logs, increased veneer quality and lower dryer heating costs. These benefits alone have proved adequate for other facilities to justify the cost of installation of log vats.

The scrubbers designed by plant personnel and installed on Dryers #1 and #2 have enabled these dryers to meet the opacity limits when drying Douglas fir, a high emission rate species. The scrubber installed on dryer #2 has been recommended for tax credit certification (T-1230). This scrubber has demonstrated an ability to comply with the veneer dryer opacity limit. The cost of this scrubber was approximately \$60,000. ORS 468.190(1)(c) requires the Commission to consider the alternatives to achieve the same

objective. Since the scrubber on Dryer #2 can comply with the emission limits, a scrubber on Dryer #3 is considered a viable alternative.

The \$60,000 cost is approximately 14% of the total facility cost. Therefore, a certificate for less than 20% of the total cost should be issued.

Example 2:

The facility described in this application consists of a Clark 350 unit Flow-Matic Bin.

The applicant uses wood waste boilers to supply steam for operation of the plywood plant. Some of the fuel is generated by the plant but additional fuel must be purchased to meet steam demands.

The fuel generated by the plant was stored in a bin, but the bin was not large enough to store the purchased fuel. This bin was in a state of disrepair. Instead of repairing and expanding the old bin, the company replaced it with a larger bin which is the facility in this application.

The new bin now stores all of the fuel generated by the plant and the purchased fuel. When the excess fuel was stored outside the bin the moisture content increased from the rain and snow. This caused poor combustion, increased boiler emissions and increased the amount of fuel used, and resulted in intermittent opacity violations. After installation of the new bin, the boiler has demonstrated and maintained compliance with the opacity and grain loading emission limits.

The company has requested the full amount of the bin, conveyors, classifier, foundation, and other installation costs of the new larger bin. The Department feels that since the conveyors are required to move the fuel to the boiler and the classifier is necessary to prevent bridging in the bin these items are process equipment and necessary for plant operation. The combined cost of the conveyors and classifier (\$80,511.99) is not allocable to pollution control and should be deducted from the certified cost (\$501,310.75 - \$80,511.99 = \$420,798.76).

Two methods were used to determine the portion of the new bin cost which was necessary to house the purchased fuel. The company submitted the cost of a bin equivalent to the old bin. The cost of such a bin was estimated to be 65% of the cost of the new bin. On this basis about 35% of

the cost of the new bin was necessary to house the purchased fuel. The old bin was approximately 72% of the size of the new bin. Thus, 28% of the capacity of the new bin is necessary to house the purchased fuel. Both of these methods fall in the range of 20% to 40%. Therefore, it is concluded that more than 20% but less than 40% of the revised cost of the new bin (\$420,798) is allocable to pollution control.

Example 3:

A particle board plant installs a new scrubber system to collect wood fibers in exhaust gas. The actual cost of the facility is \$113,500 based upon an accountant's certification.

The wood fibers recovered are returned to the process, but the value of recovered material is less than the operating cost of the facility. Therefore, ROI is zero.

However, the new facility replaces an existing pollution control facility that is removed from service. This facility could have been reconstructed to achieve the same pollution control requirements as the new facility at a cost of \$79,500.

Since the same pollution control objective could have been achieved by reconstruction of the existing facility, only 70% ($\$79,500 \div \$113,500$) of the cost of the new facility is allocable to pollution control. Therefore, a certificate for \$113,500 with more than 60% but less than 80% of the cost allocated to pollution control should be issued.

Any other factors which are relevant in establishing the portion of the actual cost allocable to pollution control -- This factor is, of course, used when in the judgment of the Department none of the other listed factors is adequate to determine the percent of cost allocable. Common sense must be employed to determine on a case-by-case basis what factor is most useful in establishing percent of cost allocable. An example follows:

The facility described in this application is an overtree sprinkler system used for both irrigation and frost protection of 12 1/2 acres of pear orchard.

The claimed facility serves to provide frost protection for 12 1/2 acres of trees by replacing the need for some 400 oil fired orchard heaters. In addition, the facility provides irrigation by sprinklers instead of by an existing, more than adequate, irrigation system.

The Environmental Quality Commission has previously certified overtree sprinkler systems in the Medford area for the elimination of the smoke and soot air pollution from orchard heaters.

In these previous applications, the percent of the cost allocable to pollution control was based on the percentage of total operating time that the overtree sprinkler system was used for frost protection. The systems are typically used approximately equal time for frost protection and irrigation in the Medford area.

It is concluded that the facility operates to a substantial extent for reducing atmospheric emissions and that the portion of the cost allocable to pollution control should be 40% or more but less than 60%.

MB6 (2)

Table 2

Present Value of \$1 Received Annually

Periods	1%	2%	2 1/2%	3%	4%	5%	6%	7%	8%	10%	12%	14%	15%	16%	18%	20%	22%	24%	25%	26%	28%	30%	40%	50%
1 . . .	0.990	0.980	0.976	0.971	0.962	0.952	0.943	0.935	0.926	0.909	0.893	0.877	0.870	0.862	0.847	0.833	0.820	0.806	0.800	0.794	0.781	0.769	0.714	0.667
2 . . .	1.970	1.942	1.927	1.914	1.886	1.859	1.833	1.808	1.783	1.736	1.690	1.647	1.626	1.605	1.566	1.528	1.492	1.457	1.440	1.424	1.392	1.361	1.224	1.111
3 . . .	2.941	2.884	2.856	2.829	2.775	2.723	2.673	2.624	2.577	2.487	2.402	2.322	2.283	2.246	2.174	2.106	2.042	1.981	1.952	1.923	1.816	1.816	1.589	1.407
4 . . .	3.902	3.808	3.762	3.717	3.630	3.546	3.465	3.387	3.312	3.170	3.037	2.914	2.855	2.798	2.690	2.589	2.494	2.404	2.362	2.320	2.241	2.166	1.849	1.605
5 . . .	4.853	4.713	4.646	4.580	4.452	4.330	4.212	4.100	3.993	3.791	3.605	3.433	3.352	3.274	3.127	2.991	2.864	2.745	2.689	2.635	2.532	2.436	2.035	1.737
6 . . .	5.795	5.601	5.508	5.417	5.242	5.076	4.917	4.767	4.623	4.355	4.111	3.889	3.784	3.685	3.498	3.326	3.167	3.020	2.951	2.885	2.759	2.643	2.168	1.824
7 . . .	6.728	6.472	6.349	6.230	6.002	5.786	5.582	5.389	5.206	4.868	4.564	4.288	4.160	4.039	3.812	3.605	3.416	3.242	3.161	3.083	2.937	2.802	2.263	1.883
8 . . .	7.652	7.325	7.170	7.020	6.733	6.463	6.210	5.971	5.747	5.335	4.968	4.639	4.487	4.344	4.078	3.837	3.619	3.421	3.329	3.241	3.076	2.925	2.331	1.922
9 . . .	8.566	8.162	7.971	7.786	7.435	7.108	6.802	6.515	6.247	5.759	5.328	4.946	4.772	4.607	4.303	4.031	3.786	3.566	3.463	3.366	3.184	3.019	2.379	1.948
10 . . .	9.471	8.983	8.752	8.530	8.111	7.722	7.360	7.024	6.710	6.145	5.650	5.216	5.019	4.833	4.494	4.192	3.923	3.682	3.571	3.465	3.269	3.092	2.414	1.965
11 . . .	10.368	9.787	9.514	9.253	8.760	8.306	7.887	7.499	7.139	6.495	5.938	5.453	5.234	5.029	4.656	4.327	4.035	3.776	3.656	3.544	3.335	3.147	2.438	1.977
12 . . .	11.255	10.575	10.258	9.954	9.385	8.863	8.384	7.943	7.536	6.814	6.194	5.660	5.421	5.197	4.793	4.439	4.127	3.851	3.725	3.606	3.387	3.190	2.456	1.985
13 . . .	12.134	11.348	10.983	10.635	9.986	9.394	8.853	8.358	7.904	7.103	6.424	5.842	5.583	5.342	4.910	4.533	4.203	3.912	3.780	3.656	3.427	3.223	2.468	1.990
14 . . .	13.004	12.106	11.691	11.296	10.563	9.899	9.295	8.745	8.244	7.367	6.628	6.002	5.724	5.468	5.008	4.611	4.265	3.962	3.824	3.695	3.459	3.249	2.478	1.993
15 . . .	13.865	12.849	12.381	11.938	11.118	10.380	9.712	9.108	8.559	7.606	6.811	6.142	5.847	5.576	5.092	4.676	4.315	4.001	3.859	3.726	3.483	3.268	2.484	1.995
16 . . .	14.718	13.578	13.055	12.561	11.652	10.838	10.106	9.447	8.851	7.824	6.974	6.265	5.954	5.668	5.162	4.730	4.357	4.033	3.887	3.751	3.503	3.283	2.488	1.997
17 . . .	15.562	14.292	13.712	13.166	12.166	11.274	10.477	9.763	9.122	8.022	7.120	6.373	6.047	5.749	5.222	4.775	4.391	4.059	3.910	3.771	3.518	3.295	2.492	1.998
18 . . .	16.398	14.992	14.353	13.754	12.659	11.690	10.828	10.059	9.372	8.201	7.250	6.467	6.128	5.818	5.273	4.812	4.419	4.080	3.928	3.786	3.529	3.304	2.494	1.999
19 . . .	17.226	15.678	14.979	14.324	13.134	12.085	11.158	10.336	9.604	8.365	7.366	6.550	6.198	5.878	5.316	4.844	4.442	4.097	3.942	3.799	3.539	3.311	2.496	1.999
20 . . .	18.046	16.351	15.589	14.877	13.590	12.462	11.470	10.594	9.818	8.514	7.469	6.623	6.259	5.929	5.353	4.870	4.460	4.110	3.954	3.808	3.546	3.316	2.497	1.999
21 . . .	18.857	17.011	16.185	15.415	14.029	12.821	11.764	10.836	10.017	8.649	7.562	6.687	6.312	5.973	5.384	4.891	4.476	4.121	3.963	3.816	3.551	3.320	2.498	2.000
22 . . .	19.660	17.658	16.765	15.937	14.451	13.163	12.042	11.061	10.201	8.772	7.645	6.743	6.359	6.011	5.410	4.909	4.488	4.130	3.970	3.822	3.556	3.323	2.498	2.000
23 . . .	20.456	18.292	17.332	16.444	14.857	13.489	12.303	11.272	10.371	8.883	7.718	6.792	6.399	6.044	5.432	4.924	4.499	4.137	3.976	3.827	3.559	3.325	2.499	2.000
24 . . .	21.243	18.914	17.885	16.936	15.247	13.799	12.550	11.469	10.529	8.985	7.784	6.835	6.434	6.073	5.451	4.937	4.507	4.143	3.981	3.831	3.562	3.327	2.499	2.000
25 . . .	22.023	19.523	18.424	17.413	15.622	14.094	12.783	11.654	10.675	9.077	7.843	6.873	6.464	6.097	5.467	4.948	4.514	4.147	3.985	3.834	3.564	3.329	2.499	2.000
26 . . .	22.795	20.121	18.951	17.877	15.983	14.375	13.003	11.826	10.810	9.161	7.896	6.906	6.491	6.118	5.480	4.956	4.520	4.151	3.988	3.837	3.566	3.330	2.500	2.000
27 . . .	23.560	20.707	19.464	18.327	16.330	14.643	13.211	11.987	10.935	9.237	7.943	6.935	6.514	6.136	5.492	4.964	4.524	4.154	3.990	3.839	3.567	3.331	2.500	2.000
28 . . .	24.316	21.281	19.965	18.764	16.663	14.898	13.406	12.137	11.051	9.307	7.984	6.961	6.534	6.152	5.502	4.970	4.528	4.157	3.992	3.840	3.568	3.331	2.500	2.000
29 . . .	25.066	21.844	20.454	19.188	16.984	15.141	13.591	12.278	11.158	9.370	8.022	6.983	6.551	6.166	5.510	4.975	4.531	4.159	3.994	3.841	3.569	3.332	2.500	2.000
30 . . .	25.808	22.396	20.930	19.600	17.292	15.372	13.765	12.409	11.258	9.427	8.055	7.003	6.566	6.177	5.517	4.979	4.534	4.160	3.995	3.842	3.569	3.332	2.500	2.000

VI-9

PLANS OF 1981

- Notes: 1. Left hand column labeled Periods - Represents the useful life of the facility in years.
- 2. Top row of percentages - Represents percent return on investment in facility.
- 3. Body of table (Present value of \$1 received annually) - Represents factor of the internal rate of return.

SECTION VII

FORMS AND INSTRUCTIONS FOR APPLICANTS

	<u>Page</u>
TC-8, Pollution Control Facility Tax Relief in Oregon	VII-1
1979 Amendments to Pollution Control Facilities Tax Credit Law	VII-9
TC-1a, Instructions for Completing Notice of Intent to Construct and Request for Preliminary Certification for Tax Credit	VII-11
TC-1, Notice of Intent to Construct and Request for Preliminary Certification for Tax Credit	VII-13
TC-12, Statement of Compatibility with Local Comprehensive Land Use Plans	VII-15
TC-7, Instructions for Completing Application for Certification of Pollution Control Facility for Tax Relief in Oregon	VII-17
TC-2, Application for Certification of Pollution Control Facility for Tax Relief Purposes	VII-25

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY
POLLUTION CONTROL FACILITY TAX RELIEF IN OREGON

SECTION I

Introduction

The state of Oregon, through legislation originally adopted in 1967, seeks to encourage the construction, installation and use of facilities to prevent, control or reduce air, noise or water pollution and to utilize solid waste, hazardous wastes and used oil by providing tax relief for persons who do so. In order to actually obtain the allowed tax relief, the following steps must be taken:

- A. Prior to construction, a "Preliminary Certification for a Pollution Control Facility" must be requested from the Department of Environmental Quality (see Section IV, subsection A for facilities exempt from this requirement).
- B. Upon completion of the approved construction, a "Pollution Control Facility Certificate" must be obtained from the Department of Environmental Quality.
- C. An irrevocable election must be made to take the allowed credit, either: (a) as a credit against income or excise taxes; or (b) as an exemption from ad valorem taxes on the certified facility.
- D. The "Pollution Control Facility Certificate" must be filed with the appropriate taxing agency (based on the above mentioned election) in accordance with their requirements.

The information which follows is intended to explain the various aspects of the available tax relief, identify the qualifications which must be met, and prescribe the procedures for obtaining the necessary certificate from the Department of Environmental Quality.

SECTION II

Certification Requirements

A. Air, Noise and Water Pollution Control Facilities

The tax relief law permits the Department of Environmental Quality to certify a facility which operates to a substantial extent for the purpose of preventing, controlling or reducing air, noise or water pollution. For each certificate issued, the Department is required to certify the actual cost of the facility and a percentage of the actual cost which can be properly allocated to the prevention, control or reduction of pollution. Specifically, the Department must certify whether the percentage of the actual cost so allocated is 80 percent or more, 60 percent or more and less than 80 percent, 40 percent or more and less than 60 percent, 20 percent or more and less than 40 percent, or less than 20 percent.

B. Waste Utilization Facilities

The tax relief laws as amended in 1973 and 1975, permit the Department of Environmental Quality to certify a solid waste facility, the substantial purpose of which is to utilize solid waste (as defined in ORS 459.005). The 1979, amendments allow certification of hazardous wastes and used oil facilities, which meet the same requirements as solid waste facilities.

Such facilities, to be certified, must produce as an end product a usable source of power or other item of real economic value; and the end product must be competitive with an end product produced in another state. The 1977, amendments expand the definition of a solid waste facility to include additions to facilities which will increase the production or recovery of useful materials or energy over the amount being produced or recovered by the original facility.

For each certificate issued, the Department is only required to certify the actual cost of the facility which utilizes such solid waste, hazardous wastes, or used oil.

C. Field Sanitation and Straw Utilization and Disposal Facilities

After alternative methods for field sanitation and straw utilization and disposal are approved by the Advisory Committee on Field Burning and the Department, these methods will become eligible for tax relief.

SECTION III

Types of Tax Relief Available

The law allows tax relief to be taken either (a) as a credit against income or excise taxes or (b) as an exemption from ad valorem taxation on the pollution control facility. The certificate holder is required to make an irrevocable election within 60 days after receipt of the certificate relative to his choice for tax relief. The law also provides that no tax relief shall be allowed for any pollution control facility constructed or used by, or for the benefit of, any governmental or quasi-governmental body or public corporation or form thereof, except where such facilities are used for resource recovery.

The alternate forms of tax relief are described in more detail as follows:

A. Credit Against Income or Excise Taxes

NOTE: Any questions regarding this alternative should be directed to the Income Division Administrator, Oregon State Department of Revenue, Salem, Oregon.

1. The maximum credit allowed in any one tax year on air, noise or water pollution control facilities, having a useful life of ten years or longer shall be the lesser of the liability of the taxpayer or the following portion of the cost of the facility:

- a. Five percent of the cost of the facility if the portion of the cost allocated to pollution control by the certificate is 80 percent or more.
 - b. Four percent of the cost of the facility if the portion of the cost allocated to pollution control by the certificate is 60 percent or more and less than 80 percent.
 - c. Three percent of the cost of the facility if the portion of the cost allocated to pollution control by the certificate is 40 percent or more and less than 60 percent.
 - d. Two percent of the cost of the facility if the portion of the cost allocated to pollution control by the certificate is 20 percent or more and less than 40 percent.
 - e. One percent of the cost of the facility if the portion of the cost allocated to pollution control by the certificate is less than 20 percent.
2. The maximum credit allowed in any one tax year for solid waste, hazardous wastes or used oil facilities shall be five percent of the cost of the facility, but shall not exceed the tax liability of the taxpayer.
 3. Air, noise or water pollution control facilities, or solid waste, hazardous wastes or used oil facilities, with a useful life of less than ten years are entitled to receive a tax credit prorated over the useful life of the facility. For example, a facility with 80 percent or more of the cost allocated to pollution control and a useful life of eight years would be eligible for a tax credit equal to 6.25 percent of the cost of the facility annually for eight years.
 4. A taxpayer who is allowed credit must be the owner, contract purchaser or lessee who conducts the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution. The facility must be owned or leased during the tax year by the taxpayer claiming the credit and must have been in use and operation during the tax year.
 5. Tax credit may be claimed by a taxpayer for:
 - a. Air and water quality facilities erected, constructed or installed on or after January 1, 1967.
 - b. Solid waste facilities under construction on or after January 1, 1973.
 - c. Noise pollution control facilities erected, constructed or installed on or after January 1, 1977.
 - d. Hazardous wastes and used oil facilities under construction on or after October 3, 1979.

The maximum total credit allowable shall not exceed that obtained by taking the allowed credit for ten consecutive years, or for the useful life of the facility if less than ten years.

6. Depreciation or amortization deductions may be taken in addition to tax credit for tax years beginning after January 1, 1977, but not in any prior tax years.
7. Upon any sale, exchange or other disposition of the facility, a taxpayer shall notify the Department of Environmental Quality, who shall revoke the certification covering such facility as of the date of disposition. The new owner may apply for the remaining portion of the tax credit not taken by the previous owner.
8. Any credit allowable, but not used in any particular year, may be carried forward and used only in the next three (3) years.
9. The taxpayer's adjusted basis for determining gain or loss shall not be further decreased by any tax credits received in tax years beginning after January 1, 1977.
10. If the person electing tax credit relief is a small business corporation as defined in section 1371 of the Internal Revenue Code, such election shall be on behalf of the corporation's shareholders. Each shareholder shall be entitled to take tax credit relief as provided in ORS 316.097, based on that shareholders pro rata share of the certified cost of the facility.
11. Tax credit allowed will be reduced dollar for dollar by any federal grant or tax credits other than investment credits.

B. Exemption from Ad Valorem Taxation

NOTE: Any questions regarding this alternative should be directed to the County Assessor in the county where the facilities are located.

1. The pollution control facility must be erected, constructed or installed in connection with the trade or business conducted by the taxpayer on Oregon property owned or leased by the taxpayer. The taxpayer must be the owner or contract purchaser of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution, or a person who, as a lessee under a written lease or pursuant to a written agreement, conducts the trade or business that operates or utilizes such property and who by the terms of such lease or agreement is obliged to pay the ad valorem taxes on such property.

2. A certified facility is exempt from ad valorem taxation to the extent of the highest percentage figure certified by the Department of Environmental Quality as the portion of the actual cost properly allocable to the prevention, control or reduction of air, noise or water pollution. Solid waste, hazardous wastes or used oil facilities are exempt to the extent of the certified cost of the facility.
3. If the facility was constructed on or before December 31, 1971, the ad valorem exemption of a facility shall expire, in any event, twenty years from the date of it's first certification by the Environmental Quality Commission. If the facility is completed in any year subsequent to 1973, the twenty-year exemption period shall be reduced by the number of years determined by subtracting 1973 from the year in which the facility is completed and multiplying the difference by two. In other words a facility completed in 1974 would be exempt for 18 years; a facility completed in 1975 would be exempt for 16 years; and a facility completed in 1978 would be exempt for 10 years.
4. A taxpayer is not eligible to receive an exemption from ad valorem taxation on a pollution control facility installed or first used after December 31, 1973, unless the taxpayer owned or leased the Oregon property it was installed upon and conducted the trade or business requiring pollution control as of January 1, 1967.
5. The ad valorem relief option for profit-making corporations or individuals remains in effect for facilities under construction by December 31, 1980, and certified prior to December 31, 1982. This option is repealed thereafter. For cooperatives and nonprofit corporations the ad valorem option remains in effect through 1988. Further, they are eligible for the full twenty years of relief and are not required to have constructed the facility for prevention of pollution from a trade or business activity conducted on January 1, 1967, on Oregon property owned or leased by them on January 1, 1967.
6. Upon sale, exchange or other disposition of the facility the taxpayer shall notify the Department of Environmental Quality, who shall revoke the certification covering such facility as of the date of disposition.
7. Federal grants or tax credits do not affect the ad valorem exemption.

SECTION IV Eligibility of Claim Facilities for Certification

In general, a claimed facility is eligible for certification as a pollution control facility if:

- A. It was constructed after requesting preliminary certification from the Department (required if construction commenced on or after September 13, 1975); or it was constructed after requesting approval to construct from the Department (required if construction commenced on or after October 5, 1973); and
- B. It is an air or water pollution control facility that was erected, constructed or installed on or after January 1, 1967; or

It is a noise pollution control facility that was erected, constructed or installed on or after January 1, 1977; or

It is a solid waste facility that was under construction on or after January 1, 1973; or

It is a hazardous wastes or used oil facility that was under construction on or after October 3, 1979; and
- C. It is necessary to satisfy the intents and purposes of ORS 468 and regulations adopted thereunder (air and water facilities), ORS 467 and regulations adopted thereunder (noise facilities), or ORS 459 and regulations adopted thereunder (solid waste, hazardous wastes and used oil facilities); and
- D. It is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, noise or water pollution or solid waste, hazardous wastes or used oil; and
- E. It is not: (1) an air conditioner (or other device which is installed or used in heating, cooling, filtering or otherwise treating or conditioning the air inside of buildings); (2) a septic tank or other facilities for human waste; (3) any property installed, constructed or used for the moving of sewage to the collecting facilities of a public or quasi-public sewerage system; (4) any district portion or portions of a solid waste, hazardous wastes or used oil facility which makes an insignificant contribution to the purpose of utilization of solid waste, hazardous wastes or used oil (the following specific items shall be among those portions considered for exclusion: office buildings and furnishings, parking lots and road improvements, landscaping, external lighting, company signs, art work, and automobiles).

If a tax credit has been received on an energy conservation facility, you are not eligible to apply for or receive a tax credit on the same facility as a pollution control facility under ORS 316.097 or 317.072.

SECTION V Application for Tax Credit Certification

Application for preliminary certification for tax credit pursuant to ORS 468.175 and 468.180 shall be made prior to construction of the proposed facility on DEQ tax credit form DEQ/TC-1-10/79.

Application for tax credit certification pursuant to ORS 468.165 shall be made after completion of construction of the facility on DEQ Tax Credit form DEQ/TC-2-10/79. Application forms can be obtained from:

State of Oregon
Department of Environmental Quality
Management Services Division
Box 1760
Portland, OR 97207

SECTION VI

References

The following references identify the applicable sections of Oregon Law.
Original Law:

Chapter 592, Oregon Laws 1967

Amendments to Original Law:

Chapter 340, Oregon Laws 1969
Chapter 493, Section 19, Oregon Laws 1969
Chapter 678, Oregon Laws 1971
Chapter 402, Section 31, Oregon Laws 1973
Chapter 831, Oregon Laws 1973
Chapter 835, Oregon Laws 1973
Chapter 496, Oregon Laws 1975
Chapter 650, Oregon Laws 1975
Chapter 795, Oregon Laws 1977
Chapter 866, Section 10 and 11, Oregon Laws 1977
Chapter 802, Oregon Laws 1979
Chapter 531, Sections 5 and 6, Oregon Laws 1979
Chapter 512, Section 17, Oregon Laws 1979

Statutory Reference

Brief Summary

ORS 468.155 Et seq.	Provisions of the above-referenced laws which relate to the certification of facilities by the Department of Environmental Quality.
ORS 307.405 ORS 307.420 ORS 307.430	Provisions of the above-referenced laws which relate to the ad valorem tax exemption alternative.
ORS 316.068 ORS 316.097	Provisions of the above-referenced laws which relate to the personal income tax alternative.
ORS 317.072 ORS 317.220	Provisions of the above-referenced laws which relate to the corporate excise tax credit alternative.
ORS 314.255	

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY
1979 AMENDMENTS TO POLLUTION CONTROL FACILITIES TAX CREDIT LAW

1. Pollution control facilities for hazardous wastes and used oil, constructed on or after October 3, 1979, are eligible for tax credit certification. Senate Bill 139 amending ORS 468.155, 160, 165, 170, 175, and 185.
2. Distinct portions of solid waste, hazardous wastes, or used oil facilities, which make an insignificant contribution to the purpose of utilization of solid waste, hazardous waste, or used oil, are not eligible for tax credit certification effective October 3, 1979. The following specific items shall be among those portions considered for exclusion: office buildings and furnishings, parking lots and road improvements, landscaping, external lighting, company signs, artwork, and automobiles. Senate Bill 139 amending ORS 468.155(2).
3. The Oregon law regulating solid waste must impose standards at least substantially equivalent to the federal law in order for solid waste, hazardous wastes, and used oil facilities to be eligible for tax credit. Senate Bill 139 amending ORS 468.165(1)(c)(D).
4. For facilities constructed on or after October 3, 1979, the Commission may waive the filing of the application for preliminary certification if it finds the filing inappropriate because special circumstances render the filing unreasonable and if it finds such facility would otherwise qualify for tax credit certification. Senate Bill 139 amending ORS 468.175(1), 468.170(4), and 468.180(1).
5. All references to ORS 448.305 have been deleted from the tax credit statutes. Senate Bill 139 amending ORS 468.170, 175, and 180.
6. Effective October 3, 1979, facilities used for resource recovery that are constructed or used by or for the benefit of any government or quasi-governmental body or public corporation or form thereof shall be eligible for tax credit certification under ORS 307.405, 316.097, or 317.072. House Bill 2846 amending ORS 314.255(2).
7. Effective October 3, 1979, portions of a solid waste, hazardous waste, or used oil facility may be certified separately if ownership of a portion is in more than one person. Certification of such portions of a facility shall include certification of the actual cost of the portion of the facility to the person receiving the certification.

The actual cost certified for all portions of a facility separately certified, shall not exceed the total cost of the facility that would have been certified under one certificate. The provisions of subsection (10) of ORS 316.097 or 317.072, whichever is applicable, shall apply to any sale, exchange, or other disposition of a certified portion of a facility. House Bill 2846 amending ORS 468.170.
8. Any person who applies for and receives a tax credit on an energy conservation facility is not eligible to apply for and receive a tax credit on the same facility as a pollution control facility under ORS 316.097 or 317.072. House Bill 2843 effective October 3, 1979.

This document does not attempt to provide all the details contained in the 1979 amendments to the tax credit statutes. Please refer to the bills for specifics.

MO2057

State of Oregon
Department of Environmental Quality

INSTRUCTIONS FOR COMPLETING NOTICE OF INTENT TO CONSTRUCT
AND
REQUEST FOR PRELIMINARY CERTIFICATION FOR TAX CREDIT FORM

Form number DEQ/TC-1-10/79 may be used to notify the Department of intent to construct a new source of air contaminant emissions or a confined animal feeding or holding operation, and to request construction approval. It may also be used to request preliminary certification for tax credit for a pollution control or waste utilization facility. Or, it may be used for both purposes. Where it is used to both request construction approval and preliminary certification, it must be clearly indicated in the application which portion of the facility is being forwarded for preliminary certification.

Oregon statutes and Department administrative rules require the submission of this form and Department approval before commencing construction, installation or establishment of a new, modified or expanded source of air contaminant emissions, including air pollution control equipment, or a confined animal feeding or holding operation.

Oregon tax credit statutes require the submission of this form requesting preliminary certification before commencing erection, construction or installation of a pollution control or waste utilization facility in order to be eligible for consideration for tax credit certification upon completion of the facility. It further requires Department approval of preliminary certification, and that the facility be constructed in accordance with the plans and specifications submitted with the form and approved by the Department.

If the facility has been certified as an energy conservation facility, pursuant to Oregon Laws 1979, Chapter 512, by the Oregon Department of Energy, it may not be certified for tax credit as a pollution control or waste utilization facility under ORS 316.097 (personal income tax) or ORS 317.072 (corporate excise tax).

Oregon land use statutes require the Department to receive evidence from the responsible local planning authorities that any new or expanded facility will be compatible with local comprehensive land use plan provisions before it issues final approval of such facilities. Applicants using this form to request construction approval of new or expanded air contaminant sources or confined animal feeding or holding operations, or to request preliminary certification for noise pollution control facilities or solid waste, hazardous wastes or used oil utilization facilities must obtain a local compatibility statement in order for the Department to give final approval to the proposed project. Applicants should use Department form number DEQ/TC-12-10/79 to obtain the local compatibility statement.

Submit copy of application and exhibits to:

DEPARTMENT OF ENVIRONMENTAL QUALITY
MANAGEMENT SERVICES DIVISION
POST OFFICE BOX 1760
PORTLAND, OREGON 97207

FOR DEQ USE ONLY	
Date Rec'd	_____
Request No.	_____
File No.	_____

NOTICE OF INTENT TO CONSTRUCT
AND
REQUEST FOR PRELIMINARY CERTIFICATION FOR TAX CREDIT

ALL APPLICANTS COMPLETE	(1) If Notice of Intent to Construct and Request for Construction Approval, indicate type of facility by placing check (✓) in appropriate box. <input type="checkbox"/> Air Contaminant Source <input type="checkbox"/> Confined Animal Feeding or Holding Operation	
	(2) If request for Preliminary Certification, indicate type of pollution control or waste utilization facility proposed by placing check (✓) in appropriate box. <input type="checkbox"/> Air <input type="checkbox"/> Noise <input type="checkbox"/> Water <input type="checkbox"/> Solid Waste <input type="checkbox"/> Hazardous Wastes <input type="checkbox"/> Used Oil	
	(3) Official Name of Applicant _____ Official Name	
	Mailing Address, City, State, Zip Code _____	
	(4) Location of Facility _____ Business Name or Division _____ Street Address _____ City _____ County _____	(5) Person to Contact for Additional Details _____ Name _____ Title _____ Address _____ City _____ Zip Code _____ Phone No. _____
	(6) Briefly describe nature of business where facility will be located and whether business is new or new at this location. _____ _____	
	(7) Provide a brief technical description of the proposed facility and its function. Attach process flow diagram and plot plan as appropriate. _____ _____	
	(8) Briefly describe pollution control or waste utilization equipment to be incorporated and/or utilized in facility. _____ _____	

NOTE: Tax credit law (ORS 468.175) requires that a request for preliminary certification be on file with the Department before commencing on a project in order to be eligible for consideration for tax credit certification upon completion of the project.

ALL APPLICANTS COMPLETE	(9) List types and amounts of pollutants discharged or produced and/or wastes utilized <u>before</u> installation of facility. Also indicate how wastes are disposed.
	(10) List types and amounts of pollutants discharged, produced or reduced and/or wastes utilized <u>after</u> installation of facility. Also indicate how wastes are disposed.
	(11) Estimated total cost of facility: \$ _____ Estimated cost of pollution control or waste utilization equipment: \$ _____
	(12) Date construction estimated to begin ___/___/___. Date construction estimated to end ___/___/___.
	(13) Has a statement of compatibility with local comprehensive land use plans been obtained from appropriate local jurisdictions? (see instructions) Yes _____, please attach. No _____, please attach explanation.
COMPLETE ONLY IF REQUESTING PRELIMINARY CERTIFICATION	(14) If facility is solid waste, hazardous wastes, or used oil facility, describe what usable source of power or other item of real economic value is produced and its value.
	(15) Has facility, or any portion of it, previously been certified for tax credit, or is a tax credit application pending? Yes _____, please attach explanation. No _____.
	(16) Has facility or any portion of it, previously been certified as an energy conservation facility by the Oregon Department of Energy, or is an application pending? Yes _____, please attach explanation. No _____.
APPLICANT SIGNATURE	I hereby certify that I have completed this application to the best of my ability and that the information provided herein and in the attached exhibits is true and correct to the best of my knowledge.
	Signature _____ Title _____ Date ___/___/___

STATEMENT OF COMPATIBILITY
WITH
LOCAL COMPREHENSIVE LAND USE PLANS

Oregon land use laws and DEQ's Land Use Coordination Program, as approved by the Oregon Land Conservation and Development Commission, require that DEQ approval of proposed construction of new or expanded air contaminant sources or confined animal feeding or holding operations, and that DEQ approval of preliminary certification for tax credit for noise pollution control facilities or solid waste, hazardous wastes or used oil utilization facilities, not become effective until a Statement of Compatibility with applicable local land use plans and Statewide Planning Goals is provided to DEQ from the responsible local planning authorities. This form may be used to obtain such a Statement of Compatibility.

APPLICANT COMPLETE	<p>APPLICANT'S DESCRIPTION OF THE NATURE AND LOCATION OF PROPOSED NEW OR EXPANDED FACILITY. (Include appropriate legal description, planning reference information. <input type="checkbox"/> Check if the site is inside an Urban Growth Boundary but outside city limits. Attach evidence of city concurrence with the county Statement if concurrence not given below.)</p> <hr style="border-top: 1px dashed black;"/>
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COMPLETE ONLY ONE OF THE FOLLOWING:

PLANNING AUTHORITY STATEMENT	<p>STATEMENT OF COMPATIBILITY FROM APPROPRIATE LAND USE AUTHORITY. (An equivalent Statement may be provided in lieu of this form.)</p> <hr style="border-top: 1px dashed black;"/> <p>_____ has reviewed the above-referenced proposal for compatibility with (cross out one) (its LCDC Acknowledged Comprehensive Plan) <i>or</i> (Statewide Planning Goals) and finds the proposal to be compatible.</p> <p>Signed _____ Title _____ Date _____</p> <p><input type="checkbox"/> City Concurrence inside Urban Growth Boundary:</p> <p>Signed _____ Title _____ Date _____</p>
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APPLICANT'S ALTERNATIVE	<p>REQUEST TO PROCEED WITH APPLICATION PROCESSING PENDING RECEIPT OF COMPATIBILITY STATEMENT</p> <hr style="border-top: 1px dashed black;"/> <p>I hereby certify that I have applied to _____ on _____ for the necessary Statement of Compatibility. The local review action is expected to be completed by _____. I hereby request DEQ to proceed with processing my application during this time period in order to minimize delays. I understand that the requested construction approval or preliminary certification, when issued, cannot become effective until the Compatibility Statement is filed with the Department.</p> <p>Signed _____ Date _____</p>
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LAND USE COMPATIBILITY REQUIREMENTS: INFORMATION TO DEQ APPLICANTS

1. Applicants are strongly encouraged to have the local statement in hand when applying. Optionally, applicants may submit evidence of application for local statements but DEQ approvals will be conditioned to not become effective until a favorable local statement is received.
2. Local statements must certify proposals compatible with LCDC-Acknowledged local comprehensive land use plans and implementing ordinances or Statewide Planning Goals.
3. Once the application is complete, DEQ will test the proposed action for compatibility with state and federal environmental quality requirements and relevant provisions of Goals 6 (Air, Water and Land Resources Quality) and 11 (Public Facilities and Services). However, DEQ actions are in themselves not findings of local land use or Goal compatibility. Both applicant and Local government will be informed of the nature and fact of DEQ's actions.
4. In urbanizing areas between city limits and Urban Growth Boundaries, applicants must provide evidence of city concurrence with the county statement on the proposal. The city evidence may be:
 - a. Sign-off below the county sign-off on DEQ's form, OR
 - b. A copy of the city-county management agreement included in the Urban Area Plan Acknowledged by LCDC, OR
 - c. A written statement covering the applicant's proposal.
5. Inside the Metropolitan Service District (MSD) surrounding Portland, evidence of compatibility with the current regional land use planning process and adopted requirements must be provided in addition to those discussed above.
6. Proposals within the jurisdiction and requirements of local government boundary commissions for the Portland, Salem, and Eugene areas must be separately cleared with them, as usual. That process is not linked in substance or timing to this new land use clearance, but both must be followed from now on.
7. If DEQ receives a negative local statement of compatibility, we cannot take action. The approval cannot be issued, or if already issued conditionally cannot become effective. DEQ expects the applicant to work with the local jurisdiction to obtain needed zone change, variance, or other modification to produce compatibility with the Acknowledged Plan and ordinances or the Goals. Return only when the issues are resolved and the local jurisdiction has made a statement of compatibility.

State of Oregon
Department of Environmental Quality

INSTRUCTIONS FOR COMPLETING APPLICATION FOR CERTIFICATION
OF
POLLUTION CONTROL FACILITY FOR TAX RELIEF PURPOSES

Any person who wishes to obtain tax relief for the installation of pollution control facilities as provided by Oregon law must submit an application for a Pollution Control Facility Certificate to the Oregon State Department of Environmental Quality. For facilities constructed or installed on or after October 5, 1973, a notice of intent to construct must have been filled with the Department prior to construction. For facilities constructed after September 12, 1975, a request for preliminary certification must have been filed with the Department prior to construction.

The applicant is responsible for providing in his application such information as may be necessary to justify his claim that the facility described and claimed in the application qualifies for certification as a pollution control facility. Under most circumstances, the information requested in the application form should be sufficient. However, in cases where the claimed facility is a part of the plant production facilities or where benefits other than pollution control are derived from such facilities, additional and more detailed explanations may be required.

In general, the completed application must clearly indicate exactly what the claimed facility is, why it was installed, when it was installed, what functions it performs other than pollution control, if any, the actual cost of the facility, and the percentage of the actual cost which is allocated to pollution control. Failure of the applicant to adequately complete the application and justify his claim may be grounds for denial of certification.

The Department of Environmental Quality is responsible for reviewing all applications submitted to determine whether or not the claimed facilities qualify for certification. Not all facilities which function to prevent, control or reduce pollution are eligible for certification under the terms of present statutes. Therefore, the burden of proof of eligibility for claimed facilities rests with the applicant.

Nearly all the information requested in the application form is of a technical or engineering nature. Most of the problems encountered to date in processing applications can be related to inadequate technical information which apparently arises from (a) the assumption that "The Department of Environmental Quality already knows that," or (b) the completion of the application by persons who are not qualified to understand and present the technical details. No problems have been encountered relative to the cost of facilities where such costs have been certified by an accountant as required in the application form.

For purposes of ensuring that the technical information is adequate and properly presented, the applicant should assume that the Department of Environmental Quality has no knowledge of his operation or problems and will assume that the claimed facility is not eligible for certification unless positive proof is offered to support the claim of eligibility.

Special Instructions

The following special instructions and notes refer to specific sections of the application form:

SECTION I - Identification of Applicant

1. Indicate the type of pollution control facility you are requesting to be certified. If more than one facility is involved, separate applications should be submitted for each. Air, noise, water, solid waste, hazardous wastes or used oil facilities should always be considered in separate applications. Similarly, when the percent of cost allocable to pollution control is different for two or more units or facilities, separate applications should be submitted.
2. The official name and address of the applicant should be the same as that used for tax purposes in the state of Oregon. If corporation, exact name as specified on charter; if partnership or joint venture, the name of the partners or principals.
3. The requested information refers to the status of ownership of the plant and the claimed facility. In a case where the claimed facility is leased, the applicant (lessee) must include with the application (a) a copy of the lease agreement and (b) the notarized statement from the lessor authorizing the lessee to take any allowable credit on the facility.
4. Indicate the person to whom a copy of staff report and recommendations, notice of the Environmental Quality Commission Meeting, and final certificate should be mailed.
5. Indicate the person whom the staff should contact to obtain additional technical information regarding the claimed facility.
6. Indicate the address of the plant where the claimed facility is located, if different from the official address of the applicant.
7. Indicate directions for access to the claimed facility, including the name of the appropriate person at the plant site who should be contacted relative to an inspection of the claimed facility.
8. Self-explanatory.
9. Self-explanatory.

SECTION II - Description of Operation

1. Indicate the type of material or commodity processed, and the final products produced at the plant or site where the claimed facility is located.

SECTION III - Description of Claimed Facility

1. This requested brief technical description of the facility claimed for certification is extremely important. It should be carefully worded to adequately describe the nature and extent of the claimed facility in a clear and concise manner. The description should be suitable for identifying the specific facility on the certificate itself. Model and serial numbers of all components should be included where such exist.

The complete function of the claimed facility should also be described.

Example:

Effluent clarifier system consisting of (a) effluent collection sump constructed in old outfall line, (b) wet pit-type pumping station with two Brand X, Model Y vertical waste pumps and necessary controls, (c) pressure main to convey waste from pump station to clarifier, (d) 40-foot diameter reinforced concrete clarifier constructed on site with Brand Z scraper mechanism and including two Brand M, Model N sludge pumps with necessary electrical controls and associated piping and miscellaneous equipment.

The facility functions to remove settleable solids from the waste water which is pumped into the clarifier. Removed solids are disposed of by burial on plant property. Clarified waste waters are returned to the existing outfall line below the collection sump.

2. Self-explanatory.
3. Self-explanatory.
4. Self-explanatory.

SECTION IV - Significant Information and Dates

1. through 9. The evaluation of your application is dependent on the information and dates requested in these questions.
10. The original 1967 tax relief act provided for certification of facilities installed for the principal purpose of preventing, controlling or reducing pollution. If the principal purpose of a facility was something other than pollution control, the facility was not eligible for certification.

The 1969 tax relief act permits certification of facilities if a substantial purpose of such facility is the prevention, control or reduction of pollution. The certification, however, must include

the percentage of the actual cost of the facility which is allocable to pollution control. This in essence allows partial credit for facilities which may not have been eligible for certification under the 1967 act. It also allows partial credit for facilities which may have been fully eligible under the 1967 act.

If construction of the claimed facility was begun by April 30, 1969, and was substantially complete by June 30, 1971, the applicant may choose to apply for certification either under the 1967 act (the all-or-nothing concept) or the 1969 act (the percentage allocation of cost concept). This election is extremely important since it determines the basis for review of the application.

11. Clearly indicate all functions or benefits other than pollution control derived from the claimed facility.

12-A Self-explanatory.

12-B Description of the salable or usable source of power or end product, its utilization, economic value, and the waste products utilized.

12-C If yes, indicate the other state and describe the competitiveness of the end product. If no, explain why product is not competitively produced.

13. A facility must be certified as one of the following: air, noise, water, solid waste, hazardous wastes, or used oil pollution control facility. It cannot be issued more than one certificate for the same equipment, as that would, potentially, result in double tax relief. Further, after the original certificate expires on the facility, typically 10 years, the facility cannot be certified again.
14. A facility that is certified by the State Department of Energy as an Energy Conservation Facility cannot be certified as a Pollution Control Facility under ORS 316.097 or 317.072.

SECTION V - Allocation of Cost

The applicant must complete the information in Section V to the best of his ability to provide a basis for the determination of eligibility and percentage of the actual cost which is properly allocable to pollution control. Since each installation differs greatly, there is no specific formula offered for determining such allocation. The applicant must make his own case through the information requested and through any additional information which he may deem necessary to justify the percentage of the actual cost which he considers should be properly allocated to pollution control. If upon reviewing the application the Department disagrees with the applicant's claim, a conference will be scheduled with the applicant to discuss the matter prior to making any recommendation to the Commission regarding final action on the application.

1. The actual cost of the claimed facility entered on line "a" must be supported and documented by the accountant's certification of cost required in "Exhibit D" (Section VII). The remaining items under number 2 should be estimated as accurately as possible. For a facility that is owned by more than one person, and the applicant wishes to have the portion he owns certified separately, the actual

cost of the total facility must be documented, as well as the cost of the portion claimed in the application. (Solid waste hazardous wastes or used oil utilization facility applicants need only answer a and b of this question.)

2. A discussion of the alternative pollution control methods which were considered and rejected is an extremely important factor in determining whether the pollution control functions served by the claimed facility are "substantial" within the context of the law. This information is also used in conjunction with other information to determine the percent of cost allocable to pollution control if the pollution control purpose of the facility is found to be substantial.
3. If there are any factors other than those mentioned in this application which may assist in establishing the percent of cost allocable to pollution control for the particular installation, please indicate and fully explain.
4. As stated before, since each installation varies so greatly and the factors surrounding each installation are different, no formula can be offered for establishing the percent of cost allocable to pollution control. Therefore, the applicant must carefully consider his particular case and develop the best possible estimate of the percentage of cost allocated to pollution control. The rationale for arriving at this percentage figure must be completely explained.

SECTION VI - Required Exhibits

The required exhibits are an essential part of the application and cannot be omitted.

1. (Exhibit A) - If a pilot plan is not available, a sketch should be made which clearly indicates the location of the claimed facility relative to other plant facilities and identifiable landmarks in the area. The plot plan should be clearly marked to show the location of the claimed facility.
2. (Exhibit B) - Detailed plans which clearly document, describe and identify the claimed facility are absolutely essential. If as-built engineering plans are not available, drawings should be made which clearly and distinctly describe the claimed facility and identify the extent of the facility. Structural details are normally not necessary. Overall plan and profile drawings, cutaway section views and process schematic diagrams are often adequate to fully identify and describe the claimed facility. Photographs are helpful providing they are clearly marked to indicate exactly what portion of the facility shown in the photographs is part of the claimed facility. Photographs without clear marking to show what is claimed are of little value. Normally the plans and descriptive documents are adequate if an individual unfamiliar with the plant can locate the facility and identify exactly which components are part of the claimed facility and which are not.

3. (Exhibit C) - The information contained in this exhibit must be related closely to the plans required as Exhibit B. Materials expended in construction but not made a part of the permanent facility should not be included in the listing required in Exhibit C. Materials which lose their identity when incorporated in the facility should not be listed separately. Component parts which are removable or identifiable in themselves, such as motors, blowers, pumps, etc. should be clearly listed by make, model, serial number and other identifying information.

Examples:

- a. For a concrete tank the itemized listings might be (1) excavation, (2) 10 ft. x 30 ft. x 6 ft. reinforced concrete open-topped tank including form work, reinforcing steel, concrete and labor to install.
 - b. For pumping station the itemized listing might be (1) excavation, (2) structure consisting of reinforced concrete wet and dry well pumping station with above-ground control building, (3) two 30 HP vertical waste pumps, Brand Y, Model X, (4) discharge piping (5) pumping control system.
 - c. For a baghouse the itemized listing might be (1) Brand X baghouse, Model Y, (2) Brand A fan, Model B, with 30 HP motor Brand D, Serial No. 1234567, (3) Water Deluge System, Brand F, Type G, (4) Ductwork, (5) structural steel and foundation, (6) electrical, (7) labor and engineering.
4. (Exhibit D) - The actual cost of the facility is the total of those costs directly related to the acquisition and installation of the claimed facility and may include engineering fees, legal fees, overhead and other costs directly attributable to the facility. Start-up and operation costs are not considered to be part of the actual cost of the facility.

In a case where the claimed facility is leased, the accountant's certification of cost normally will not be required. The documentation of the actual value of the facility will be provided by the notarized statement from the lessor, which was discussed under Section I, Item 3 of these instructions.

Also, in cases where the total actual cost of the claimed facility is less than \$20,000 and where the costs can be completely and thoroughly documented by copies of invoices, canceled checks, etc., the Department of Environmental Quality may accept copies of such documentation in lieu of the accountant's certificate.

5. (Exhibit E) - Attach copy of document indicating construction approval, as requested in Section IV, Item 3 of the application.
6. (Exhibit F) - Attach a copy of the approved preliminary certification for a pollution control facility, as requested in Section IV, Item 5 of the application.

Any questions relative to the application form or the intent of requested information should be directed to the Department of Environmental Quality. Two copies of the completed five-page application form together with two copies of all exhibits should be mailed to:

State of Oregon
Department of Environmental Quality
Management Services Division
Box 1760
Portland, OR 97207

IMPORTANT

- 1) READ APPLICATION INSTRUCTIONS CAREFULLY,
- 2) SUBMIT TWO (2) COPIES OF APPLICATION AND EXHIBITS TO:

**DEPARTMENT OF ENVIRONMENTAL QUALITY
MANAGEMENT SERVICES DIVISION
Post Office Box 1760
Portland, Oregon 97207**

For DEQ Use Only
Date Rec'd _____
Application No. _____

**APPLICATION FOR CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR
TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 et. seq.**

SECTION I IDENTIFICATION OF APPLICANT	(1) Indicate the Type of Facility by Placing Check (✓) in Appropriate Box. <input 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	
	(2) Official Name of Applicant (if corporation, exact name as specified in charter; if partnership or joint venture the names of all partners or principals). _____ style="text-align: center;">official name _____ style="text-align: center;">division identification _____ style="text-align: center;">names of general partners or principals _____ style="text-align: center;">address _____ style="text-align: center;">city, state, zip code	(3) Status of Applicant _____ Lessee _____ Owner _____ Individual _____ Partnership _____ Corporation
	(4) Person Authorized to Receive Certification _____ style="text-align: center;">name _____ style="text-align: center;">title _____ style="text-align: center;">address _____ style="text-align: center;">city zip phone no.	(5) Person to Contact for Additional Details _____ style="text-align: center;">name _____ style="text-align: center;">title _____ style="text-align: center;">address _____ style="text-align: center;">city zip phone no.
	(6) Location of Claimed Facility _____ style="text-align: center;">address _____ style="text-align: center;">city _____ style="text-align: center;">county	(7) Access Directions:
(8) Applicant's IRS Employer Identification Number _____	(9) Applicant's Tax Year _____ style="text-align: center;">beginning date ending date	
SECTION II DESCRIPTION OF OPERATION	(1) Briefly describe the nature of the industrial or commercial process conducted at the plant, and the end product produced.	

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR
TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 et. seq.

(Continued)

SECTION III DESCRIPTION OF CLAIMED FACILITY	<p>(1) Provide a brief technical description of the claimed facility for certification as a pollution control or a waste utilization facility (including model and serial numbers of equipment) and describe the complete function of such facility. Attach additional sheet if necessary.</p>
	<p>(2) Describe the conditions which existed, or would have existed had the claimed facility not been provided, and describe the methods of pollutant or waste disposal which were utilized prior to installation or construction of the claimed facility. Attach additional sheet if necessary.</p>
	<p>(3) Describe the conditions which currently exist as a result of the installation of the claimed facility. How has the impact on the environment been reduced or minimized as a result of the claimed facility? Attach additional sheet if necessary.</p>
	<p>(4) Describe the effectiveness of the claimed facility to reduce pollution and solid waste, quantitative data preferred though not mandatory. Attach additional sheet if necessary.</p>

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR
TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 et. seq.

(Continued)

SECTION IV SIGNIFICANT DATES AND INFORMATION	(1) Was claimed facility required by the department or any other governmental organization? _____ (Yes or No) If yes who required facility? _____ _____ (Date)
	(2) Did claimed facility replace an existing facility? _____ (Yes or No)
	(3) Were plans and specifications or construction approval obtained prior to construction from the department or Regional Air Pollution Authority? _____ If yes attach a copy of approval document. (Exhibit E—Page 5) (Yes or No)
	(4) Was claimed facility constructed according to approved plans and specifications? _____ If no explain deviations on an attached sheet. (Yes or No)
	(5) Was a preliminary certification for tax credit obtained from the department for the claimed facility? (ORS 468.175) _____ (Yes or No) If yes attach a copy of the certification document (Exhibit F—Page 5)
	(6) Date erection, construction or installation of claimed facility was started. _____
	(7) Date erection, construction or installation of claimed facility was completed. _____
	(8) Date claimed facility was placed into operation. _____
	(9) Estimated useful life of claimed facility. _____
	NOTE: If construction began on a pollution control facility by April 30, 1969, and was substantially complete by June 30, 1971, the applicant may elect to apply the tax relief available under the certification either under the original 1967 act or the 1969 act. (See instructions for explanation of differences).
	(10) If applicable, state your election to take relief under the _____ 1967 act or the _____ 1969 act.
	(11) Does the claimed facility perform any function other than pollution control? _____ Explain. (Yes or No)
(12)* A—To what extent is the claimed facility used to recover and convert waste products into a salable or usable commodity? * B—Describe the salable or usable source of power or end product being produced through the recovery and conversion of waste products by the claimed facility; also describe the economic value of the end product. C—Is the end product, other than a usable source of power, competitive with an end product produced in another state? _____ Explain. (Yes or No)	
*Attach additional sheets if necessary.	

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR
TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 et. seq.

(Continued)

SECTION IV
SIGNIFICANT DATES AND INFORMATION

(13) 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 _____

(14) 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 _____

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR
TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 et. seq.

(Continued)

SECTION V
ALLOCATION OF COSTS

(1) Complete the following information regarding costs associated with the claimed facility. (Solid waste, hazardous wastes or used oil utilization facility applicants need only answer a and b of the question.)

a. Actual cost of the claimed facility \$ _____

b. Annual income derived from claimed facility or value of recovered or reclaimed materials \$ _____

c. Annual Operating Expenses

Labor \$ _____

Utilities \$ _____

Maintenance \$ _____

Average Annual Depreciation \$ _____

_____ \$ _____

_____ \$ _____

_____ \$ _____

d. Total Annual Operating Expenses \$ _____

e. Net Annual Profit Before Taxes (b-d) \$ _____

f. Return on Investment Before Taxes (e/a x 100) _____%

What is the lowest acceptable return on an investment, before taxes, which will justify an investment in your particular plant? _____% Please explain and justify on an attached sheet.

(2) What alternative method or facilities were considered for achieving the same pollution, solid waste, hazardous wastes or used oil control objective. Indicate the estimated cost of each and the reasons for selection of the method used.

(3) List any other facts which may be relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, noise or water pollution.

(4) Percent of Cost of Claimed Facility properly allocable to pollution control: _____%
Explain the method used for arriving at this figure.

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR
TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 et. seq.

(Continued)

SECTION VI REQUIRED EXHIBITS	<p>Attach the Following Exhibits to the application:</p> <p>(1) As EXHIBIT A, attach a plot plan or site map which shows the overall plant site and the location within the plant site where the claimed facility is located. The general location and extent of the claimed facility should be clearly marked.</p>
	<p>(2) As EXHIBIT B, attach detailed as built engineering plans which clearly and completely identify and describe the claimed facility. Any other facility shown on the plans which are not claimed should be clearly marked accordingly. Photographs of the claimed facility can also be attached to supplement the plans.</p>
	<p>(3) As EXHIBIT C, attach a listing of the land, material, machinery, and equipment incorporated into the claimed facility together with the associated cost. All items should be grouped into logical units and referenced to the specific unit on the as built plans provided as Exhibit B.</p>
	<p>(4) As EXHIBIT D, attach a statement from an independent public accountant or certified public accountant which gives a breakdown of the actual cost of the claimed facility and certifies that the total cost indicated is a true and correct representation of the actual cost of the facility. Reference should be made to the listing of costs in Exhibit C.</p> <p>NOTE: In cases where the total actual cost of the claimed facility is less than \$20,000 and where the cost can be completely and thoroughly documented by copies of invoices, canceled checks, etc., the Department of Environmental Quality may accept copies of such documentation in lieu of the accountant's certification.</p>
	<p>(5) As EXHIBIT E, if erection, construction or installation of the claimed facility was begun on or after October 5, 1973, attach a copy of the document which indicates that prior to commencing on project a notice of intent to construct was filed with the Department, and that construction was approved.</p>
	<p>(6) As EXHIBIT F, if erection, construction or installation of the claimed facility was begun on or after September 13, 1975, attach a copy of document which indicates that prior to commencing on project a request for Preliminary Certification for Tax Credit was filed with the Department, and that a Preliminary Certification was granted.</p>

IMPORTANT, each item of the application must be completed. If inapplicable explain why. Failure to complete application shall constitute basis for denial of Certification.

I hereby certify that I have completed this application to the best of my ability, and that the information provided herein and in the attached exhibits is true and correct to the best of my knowledge, and that the facility described in this application was erected, constructed, or installed and will be operated to a substantial extent for the purpose of preventing, controlling, or reducing air, noise or water pollution, or solid waste, hazardous wastes or used oil.

SIGNATURE: _____

TITLE: _____

DATE: _____

SECTION VIII

FORM LETTERS

	<u>Page</u>
NC-1, Notice of Approved Construction Completion	VIII-1
TC-3, Construction and Preliminary Certification Approval	VIII-3
TC-4, Notification of Receipt of Notice of Intent to Construct and Request for Preliminary Certification for Tax Credit	VIII-5
TC-5, Request for Further Information	VIII-7

State of Oregon
Department of Environmental Quality
Post Office Box 1760
Portland, Oregon 97207

NOTICE OF APPROVED CONSTRUCTION COMPLETION

To: Owner or Applicant

This form must be filled in and returned within 30 days upon completion of the approved construction.

MAIL TO: Department of Environmental Quality
Post Office Box 1760
Portland, Oregon 97207

Attention: Air Quality Division
 Water Quality Division
 Solid Waste Division

The facility described below was completed on _____,
and was or will be in operation _____.

(signature) (title) (date)

(for DEQ use only - below this line)

Applicant Name _____ Request No. _____

Address _____ File No. _____

City & Zip Code _____

Description of Facility _____

Date Notice Received _____

Assigned for inspection to _____ by _____ on _____

Date of Inspection Report _____ by _____

Summary of Inspection _____

Date cc to EI _____ Attachments



Department of Environmental Quality

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-

To:

Date:

File Reference:

Department action as indicated below has been taken on your Notice of Intent to Construct and Request(s) for Construction Approval and/or Preliminary Certification for Tax Credit for the proposed facility.

<u>Project</u>	<u>Project Description</u>	<u>Plans & Specifications Identification</u>
----------------	----------------------------	--

PLANS AND SPECIFICATIONS AND CONSTRUCTION APPROVAL

- APPROVED - Subject to the conditions listed on the reverse side.

Plans and Specifications reviewed by: _____

PRELIMINARY CERTIFICATION FOR TAX CREDIT OF A POLLUTION CONTROL FACILITY

- APPROVED - This preliminary certification makes the proposed facility eligible for consideration for tax credit but does not insure that any specific part or all of the pollution control facility will be issued a tax credit certificate.

Tax credit review by: _____

If the Department can be of assistance, or if there are any questions, please contact:

Name: _____ Title: _____ Phone: _____



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PLANS AND SPECIFICATIONS AND CONSTRUCTION APPROVAL CONDITIONS

1. The construction of the project shall be in strict conformance to approved plans and specifications identified above. No changes or deviations shall be made without prior written approval of the Department of Environmental Quality. (Air contaminant facilities are subject to confirmation by the Environmental Quality Commission.)
2. Granting approval does not relieve the owner of the obligation to obtain required local, state and other permits and to comply with the appropriate statutes, Administrative Rules, Standards, and if applicable, to demonstrate compliance.
3. Please fill out and return the enclosed Notice of Construction Completion form within 30 days upon completion of this approved project.
- 4.



Department of Environmental Quality

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-

To:

Date:

File Reference:

Your Notice of Intent to Construct and Request(s) for:

- Construction Approval

- Preliminary Certification for Tax Credit

was received for the following proposed facility:

<u>Name and Address</u>	<u>Description</u>
-------------------------	--------------------

Unless the Department requests additional information within thirty (30) days of the date of this letter, you will be notified of approval or disapproval within sixty (60) days.

Sincerely,



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Material

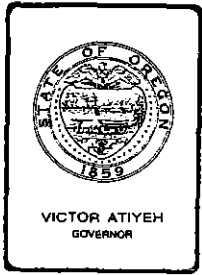
DEQ-1

DEQ/TC-4-3/78

VIII-5

AGG

1981



Department of Environmental Quality

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-

To:

Date:

File Reference:

Further information is required to evaluate your request(s) for:

- Construction Approval

Preliminary Certification for Tax Credit

for the following:

_____ Name and Address

_____ Description

Please submit further information within the time specified to: _____,
at _____.

Upon receipt of the requested information, the Department will complete the evaluation and notify you of its findings within sixty (60) days.

Sincerely,



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Material.

SECTION IX

TAX CREDIT STAFF REPORT FORMATS

	<u>Page</u>
Tax Credit Certification, Air, Water, Noise	IX-1
Tax Credit Certification, Solid Waste, Hazardous Waste, Used Oil	IX-5
Preliminary Certification, Air, Water, Noise	IX-9
Preliminary Certification, Solid Waste, Hazardous Waste and Used Oil	IX-11

Application No. _____

STATE OF OREGON - DEPARTMENT OF ENVIRONMENTAL QUALITY

Tax Relief Application Review Report

1. Applicant

Company Name
Division (if any)
Address
City, State, Zip Code

The applicant owns (leases) and operates a (describe type of operation, e.g., pulp and paper mill) at (city, state).

Application was made for tax credit for an (air, noise, water) pollution control facility.

2. Description of Claimed Facility

The facility described in this application is (give enough detail about facility to ensure that it won't be confused with other existing or future facilities at the plant site and include a breakdown of costs where appropriate.)

(Choose one of the following statements as appropriate.)

Request for Preliminary Certification for Tax Credit was made (date), and approved (date). (Use if construction commenced on or after September 13, 1975.)

(--or--)

Requirement to file an application for Preliminary Certification was waived by the Commission (date).

(--or--)

Notice of Intent to Construct was made (date), and approved (date). Preliminary Certification for Tax Credit not required. (Use if construction commenced on or after October 5, 1973 and before September 13, 1975.)

(--or--)

Notice of Intent to Construct and Preliminary Certification for Tax Credit not required. (Use if construction commenced before October 5, 1973.)

(--or--)

Request for Preliminary Certification was not made; applicant requests that Commission waive requirements for filing.

(Continue with the following.)

Construction was initiated on the claimed facility (date), completed (date), and the facility was placed into operation (date).

Facility Cost: \$ _____ (Accountant's certification was provided.)

3. Evaluation of Application

(Give brief but complete evaluation of application. Compliance or non-compliance status of the project must be clearly stated and explained, if necessary, relative to treatment standards and/or permit conditions. Briefly describe how percent allocable was derived.)

4. Summation

(Remember that every conclusion of Summation must be supported by information in the report, attached materials, or references.)

A. (Choose one of the following statements as applicable.)

Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification. (Use if construction commenced on or after September 13, 1975.)

(--or--)

Facility was constructed under a certificate of approval to construct issued pursuant to ORS 468.175. (Use if construction commenced after October 5, 1973, and before September 13, 1975.)

(--or--)

Facility was not required to have prior approval to construct or preliminary certification. (Use if construction commenced before October 5, 1973.)

(--or--)

Special circumstances (list in Evaluation) exist which made the filing of an application for preliminary certification unreasonable, and the facility would otherwise be eligible for tax credit. (Use only for facilities constructed on or after October 3, 1979.)

B. (Choose one of the following statements as applicable.)

Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1) (a). (Use for air or water pollution control facilities.)

(--or--)

Facility was constructed on or after January 1, 1977, as required by ORS 468.165(1) (b). (Use for noise pollution control facilities.)

- C. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing (choose one of the following: air pollution, water pollution, noise pollution.)
- D. The facility is necessary to satisfy the intents and purposes of ORS Chapter ____ (fill in blank with one of the following) 468 (air and water) 467 (noise) and the rules adopted under that chapter.
- E. The portion of the facility cost that is properly allocable to pollution control is (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 \$_____ with (see below) allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number T-_____.

(The second blank space in number five should be filled in with ONE of the following phrases)

- 80 percent or more
- 60 percent or more but less than 80 percent
- 40 percent or more but less than 60 percent
- 20 percent or more but less than 40 percent
- Less than 20 percent

Name of Section Supervisor or Division Head: typist initials
Phone number of above
Date report actually typed

GDLNS

Appl. No. _____

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

Tax Relief Application Review Report

1. Applicant

Company Name
Division (if any)
Address
City, State Zip Code

The applicant owns (leases) and operates a (describe type of operation, e.g., pulp and paper mill) at (city, state).

Application was made for tax credit for a (solid waste, hazardous waste, used oil) pollution control facility.

2. Description of Claimed Facility

The facility described in this application is (give enough detail about facility to ensure that it won't be confused with other existing or future facilities at the plant site, and include a breakdown of costs where appropriate.)

(CHOOSE ONE OF THE FOLLOWING STATEMENTS AS APPROPRIATE)

Request for Preliminary Certification for Tax Credit was made (date), and approved (date). (Use if construction commenced on or after September 13, 1975.)

(-or-)

Requirement to file an Application for Preliminary Certification was waived by the Commission (date).

(-or-)

Notice of Intent to Construct was made (date), and approved (date). Preliminary Certification for Tax Credit was not required. (Use if construction commenced on or after October 5, 1973 and before September 13, 1975.)

(-or-)

Notice of Intent to Construct and Preliminary Certification for Tax Credit not required. (Use if construction commenced before October 5, 1973.)

(-or-)

Request for Preliminary Certification was not made; applicant requests that Commission waive requirements for filing.

(CONTINUE WITH THE FOLLOWING)

Construction was initiated on the claimed facility (date), completed (date), and the facility was placed into operation (date).

Facility Cost: \$ _____ (Accountant's certification was provided.)

3. Evaluation of Application

(Give brief but complete evaluation of application. Compliance or non-compliance status of the project must be clearly stated and explained, if necessary, relative to treatment standards and/or permit conditions. Explain how applicant meets requirements of 468.165(1)(c)(A), (B), and (C), and 468.170(8)(b).)

4. Summation

(Remember that every conclusion of the Summation must be supported by information in the report, attached materials, or references.)

A. *(Choose one of the following statements as applicable)*

Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification. *(Use if construction commenced on or after September 13, 1975.)*

(-or-)

Facility was constructed under a certificate of approval to construct issued pursuant to ORS 468.175. *(Use if construction commenced after October 5, 1973 and before September 13, 1975.)*

(-or-)

Facility was not required to have prior approval to construct or preliminary certification. *(Use if construction commenced after January 1, 1973 and before October 5, 1973.)*

(-or-)

Special circumstances *(explain in Evaluation)* exist which made the filing of an Application for Preliminary Certification unreasonable, and the facility would otherwise qualify for tax credit under ORS 468.150 to 468.190. *(Use only for facilities constructed on or after October 3, 1979.)*

B. As required by ORS 468.165, the facility was under construction on or after January 1, 1973 (solid waste) OR October 3, 1979 (hazardous waste or used oil facilities), and

- (1) The substantial purpose of the facility is to utilize material that would otherwise be (*solid waste, hazardous waste, or used oil*), by (*USE ONE OF THE FOLLOWING: burning; mechanical process; chemical process; or through the production, processing including presegregation or otherwise, use of materials for their heat content or other forms of energy of or from the material, use of materials which have useful chemical or physical properties and which may be used for the same or other purposes, materials which may be used in the same kind of application as its prior use without change in identity*);
- (2) The end product of the utilization is a usable source of power or other item of real economic value;
- (3) The end product of the utilization, other than a usable source of power, is competitive with an end product produced in another state; and
- (4) The Oregon law regulating solid waste imposes standards at least substantially equivalent to the federal law.

C. (*Use for facilities commenced after December 31, 1980 and before December 31, 1983. Explain in Evaluation.*)

In addition, the Commission finds that (*use one or more of the following statements*)

The facility is necessary to assist in solving a severe or unusual (*solid waste, hazardous waste, used oil*) problem;

(*and/or*)

The facility will provide a new or different solution to a (*solid waste, hazardous waste, used oil*) problem than has been previously used, or the facility is a significant modification and improvement of similar existing facilities;

(*and/or*)

The Department has recommended the facility as the most efficient method of (*solid waste, hazardous waste, used oil*) control;

(*and/or*)

The Department has recommended the facility as the most environmentally sound method of (*solid waste, hazardous wastes, used oil*) control.

- D. The facility is necessary to satisfy the intents and purposes of ORS Chapter 459, and the rules adopted under that chapter.
- E. The portion of the facility cost that is properly allocable to pollution control is 100%.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$ _____, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application T-_____.

Name of Section Supervisor or Division Head: typist initials
Phone number of above
Date report actually typed

(Commission staff reports are needed only to deny a preliminary certification, or to waive filing of an application for preliminary certification)

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

Preliminary Certification Review Report

1. Applicant

Company Name
Division (if any)
Address
City, State, Zip Code

The applicant owns (leases) and operates a (describe type of operation, e.g., pulp and paper mill) at (city and state).

Preliminary certification is required for an (air, noise, water) pollution control facility.

2. Description of Claimed Facility

The facility described in this application is (give enough detail about facility to ensure that it won't be confused with other existing or future facilities at the plant site and include a breakdown of costs where appropriate).

It is estimated the facility will be placed in operation (date).

The estimated cost of the facility is (dollar amount).

3. Evaluation of Application

(Give a brief but complete evaluation of application)

4. Summation (Provide a list of findings that support one of the following conclusions, and then state the chosen conclusion. Remember that every conclusion in Summation must be supported by information in report, attached materials, or references.)

Special circumstances (listed above) exist which made the filing of an application for preliminary certification unreasonable, and the facility is otherwise eligible for tax credit certification pursuant to ORS 468.155 to 468.190. (Use only for facilities constructed on or after October 3, 1979.)

(--or--)

Erection, construction, or installation of the facility was commenced before a request for Preliminary Certification was filed with the Department pursuant to ORS 468.175(1); therefore the facility is not eligible for tax credit certification.

(--or--)

The Department has determined that the erection, construction or installation does not comply with the applicable provisions of ORS Chapters 454, 467, or 468 and the applicable rules or standards adopted pursuant thereto; therefore the facility is not eligible for tax credit certification.

5. Director's Recommendation

(Choose one of the following.)

Based upon the findings in the summation, it is recommended that the Commission issue an order denying the applicant's request for Preliminary Certification.

(--or--)

Based upon the findings in the summation it is recommended that the Commission waive the filing of an application for Preliminary Certification for the facility proposed.

Responsible manager's name: typist initials
Phone number of above
Date report actually typed

GDLNS

(Commission staff reports are needed only to deny a preliminary certification or to waive filing of an application for preliminary certification.)

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

Preliminary Certification Review Report

1. Applicant

Company Name
Division *(if any)*
Address
City, State Zip Code

The applicant owns *(leases)* and operates a *(describe type of operation, e.g., pulp and paper mill)* at *(city and state)*.

Preliminary Certification is required for a *(solid waste, hazardous wastes, used oil)* pollution control facility.

2. Description of Claimed Facility

The facility described in this application is *(give enough detail about facility to ensure that it won't be confused with other existing or future facilities at the plant site and include a breakdown of costs where appropriate)*.

It is estimated the facility will be placed in operation *(date)*.

The estimated cost of the facility is \$ _____.

3. Evaluation of Application

(Give a brief but complete evaluation of application.)

4. Summation

(Provide a list of findings that support one of the following conclusions, and then state the chosen conclusion. Remember that every conclusion in the Summation must be supported by information in this report, attached materials, or references.)

Special circumstances *(explain above)* exist which made the filing of an application for preliminary certification unreasonable, and the facility is otherwise eligible for tax credit certification pursuant to ORS 468.155 to 468.190. *(Use only for facilities commenced on or after October 3, 1979.)*

(-or-)

Erection, construction, or installation of the facility was commenced before a request for preliminary certification was filed with the Department pursuant to ORS 468.175(1); therefore the facility is not eligible for tax credit certification.

(-or-)

The Department has determined that the facility is not eligible for tax credit certification because the erection, construction and installation does not comply with the applicable provisions and applicable rules or standards adopted pursuant to ORS Chapters 459 and 468, including:
(use one or more of the following statements)

The substantial purpose of the facility is not to utilize material that would otherwise be *(solid waste, hazardous waste, used oil)*

(and/or)

The end product of the utilization is not a usable source of power or other item of real economic value.

(and/or)

The end product of the utilization is not competitive with an end product produced in another state.

(After December 31, 1980 and before December 31, 1983, all of the following statements must be used in addition to the above.)

The facility is not necessary to assist in solving a severe or unusual *(solid waste, hazardous waste, used oil)* problem; and

The facility will not provide a new or different solution to a *(solid waste, hazardous waste, used oil)* problem that has been previously used, nor it is a significant modification and improvement of similar existing facilities; and

The Department has not recommended the facility as the most efficient or the most environmentally sound method of *(solid waste, hazardous waste, used oil)* control.

5. Director's Recommendation *(Choose one of the following statements.)*

Based upon the findings in the Summation, it is recommended that the Commission issue an order denying the applicant's request for Preliminary Certification.

(-or-)

Based upon the findings in the Summation, it is recommended that the Commission waive the filing of an application for Preliminary Certification for the proposed facility.

Name of Section Supervisor or Division Head: typist initials
Phone number of above
Date report actually typed

SECTION X

PROCEDURES

	<u>PAGE</u>
Processing Request for Preliminary Certification	X-1
Processing Tax Credit Applications	X-3
Processing Requests for Federal Tax Credit Relief	X-7

STATE OF OREGON
Department of Environmental Quality

.....
: MANAGEMENT SERVICES DIVISION Page 1 of 2
: Tax Credits Section 10/21/80
:
:
: Subject PROCEDURES FOR PROCESSING REQUEST FOR PRELIMINARY CERTIFICATION
: FOR TAX CREDITS
:
:.....

Responsibility

Action

DIVISION
OR REGION

Receive Notice of Intent to Construct and Request for Preliminary Certification for Tax Credit (form DEQ/TC-1-10/79).

DIVISION
OR REGION

Acknowledge receipt of notice and request within seven (7) calendar days of receipt. Use form letter DEQ/TC-4-3/78.

DIVISION
OR REGION

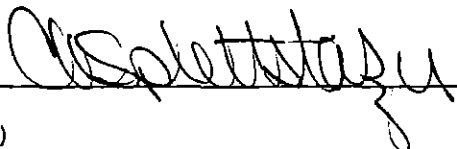
If additional information is necessary to evaluate the request, use form letter DEQ/TC-5-3/78 to request the information required. Always specify the date the information is to be submitted by.

DIVISION
OR REGION

Review request and supporting documents and upon approval of the request prepare a "Plan and Specifications and Construction Approval and Preliminary Certification for Tax Credit of a Pollution Control Facility," form DEQ/TC-3-3/78, and forward to requestor. (Enclose "Notice of Approved Construction Completion," DEQ/NC-1-3/78, with approval form.)

POLICY

An applicant may start construction after requesting construction approval and preliminary certification for tax credit. However, if he does, it is at his own risk that the preliminary certification may not later be approved, with the consequent loss of tax credit benefit which the applicant had anticipated (see ORS 468.175(1) and informal Attorney General opinion dated April 27, 1978).

.....
Approved 
MG256 (1)

Date 10-21-80

STATE OF OREGON
Department of Environmental Quality

MANAGEMENT SERVICES DIVISION
Tax Credits Section

Page 2 of 2
10/21/80

Subject PROCEDURES FOR PROCESSING REQUEST FOR PRELIMINARY CERTIFICATION
FOR TAX CREDITS

Responsibility

Action

DIVISION
OR REGION

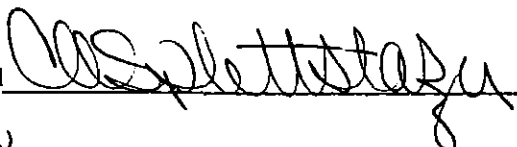
If a denial is recommended for Preliminary Certification for Tax Credit, send denial recommendations (use format dated 12/1/80) to Management Services Division for presentation to EQC. It is the Division/Region responsibility to notify the applicant of a recommendation to the EQC to deny their request for preliminary certification for tax credit.

ORS 468.175(4) states, "If within 60 days of the receipt of plans, specifications or any subsequently requested revisions or corrections to the plans and specifications...the Department fails to issue a preliminary certificate of approval and the Commission fails to issue an order denying certification, the preliminary certificate shall be considered to have been issued." It is therefore important that notification be given to Management Services Division of a recommendation to deny within the 60 day time period from receipt of the request, and in time to request EQC action.

DIVISION
OR REGION

Upon approval of Preliminary Certification for Tax Credit, send a copy of the request and approval to the Region or Division concerned.

Approved



Date

10-21-80

MG256 (1)


STATE OF OREGON
Department of Environmental Quality

MANAGEMENT SERVICES DIVISION
Tax Credits Section

Page 1 of 3
7/8/80

Subject PROCEDURES FOR PROCESSING TAX CREDIT APPLICATIONS FOR POLLUTION
CONTROL FACILITIES

<u>Responsibility</u>	<u>Action</u>
<u>Management Services Div.</u> (MSD) (Receptionist)	Receive two (2) copies of Application and supporting documents and review for completeness, proper attachments, and number of copies.
<u>MSD (Receptionist)</u> <u>or Division</u>	If considered incomplete, consult with Division to verify and advise applicant of the necessary requirements to complete application.
<u>MSD (Receptionist)</u>	If considered complete, assign application number, and enter date received on application form; also enter date received and processing schedule on log sheet and acknowledge receipt to applicant by letter.
<u>MSD (Receptionist)</u>	Retain one complete copy of the application and supporting documents for the permanent tax credit file; forward one to the appropriate division for processing.
<u>Division</u>	Review application and supporting documents, survey facility, and prepare review report within assigned processing schedule (60 days). If Division requests any additional information from the applicant, it is the responsibility of the appropriate division to forward a copy of the request and a copy of the information received to MSD (Receptionist) for placing into the permanent file. Every request for additional information shall require submission by a specific date to allow EQC action on each and every application within the 120 day statutory time limit. If no action is taken within the 120 day period, the application is automatically denied.

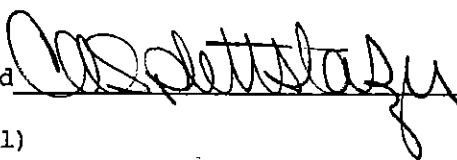
Approved 
MG259 (1)

Date 7-8-80

STATE OF OREGON
Department of Environmental Quality

.....
: MANAGEMENT SERVICES DIVISION Page 2 of 3
: Tax Credits Section 7/8/80
:
: Subject PROCEDURES FOR PROCESSING REQUEST FOR PRELIMINARY CERTIFICATION
: FOR TAX CREDITS
:

<u>Responsibility</u>	<u>Action</u>
<u>Division</u>	Prepare recommendations for EQC review and forward to MSD (Management Assistant) with rough-drafted certificate. (These recommendations must be submitted so that the EQC can act on them within the 120 day statutory time limit.)
<u>MSD</u> (Receptionist)	Send letter to applicant advising of Department's recommendations and the date EQC will review staff recommendations and act upon application.
<u>MSD</u> (Management Asst.)	Prepare Certificate for Commission Chairman's signature as recommended by staff.
<u>Environmental Quality Commission</u> (EQC)	Approve or deny Department recommendations. Issue and sign Pollution Control Certificate or denial letter.
<u>MSD</u> (Receptionist)	If approved, send Pollution Control Certificate to applicant along with two (2) Notice of Tax Election forms (certified mail).
<u>MSD</u> (Receptionist)	If denied, send denial letter to applicant (certified mail.)
<u>MSD</u> (Receptionist)	Upon return of tax election forms from applicant (within 60 days from date of mailing) send copy of Certificate and tax election form to Department of Revenue and County Assessor (if ad valorem credit). File copy of Notice of Election form in master file.

.....
Approved  Date 7-8-80
MG259 (1)

STATE OF OREGON
Department of Environmental Quality

.....
: MANAGEMENT SERVICES DIVISION Page 3 of 3
: Tax Credits Section 7/8/80
:
: Subject PROCEDURES FOR PROCESSING REQUEST FOR PRELIMINARY CERTIFICATION
: FOR TAX CREDITS
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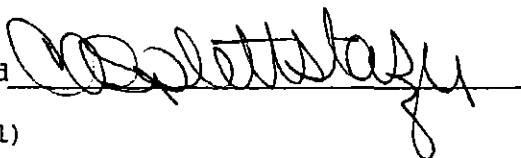
Responsibility

Action

Note: If Tax Credit Applications are received directly from applicant by a Region or Division, send complete packet to MSD for receipting and logging.

- | | |
|------------------|-------------------------|
| Receptionist | - 3rd Floor, Anne Doyle |
| Division | - AQ, Ray Potts |
| | - WQ, Larry Patterson |
| | - SW, Bob Brown |
| | - NS, John Hector |
| Management Asst. | - Carol Spletstaszer |

.....
Approved



Date

7-8-80

MG259 (1)

STATE OF OREGON
Department of Environmental Quality

MANAGEMENT SERVICES DIVISION
Tax Credits Section

Page 1 of 2
7/8/80

Subject PROCEDURES FOR PREPARATION OF NOTICE OF STATE CERTIFICATION TO EPA FOR
FEDERAL TAX RELIEF ON POLLUTION CONTROL FACILITIES

Responsibility

Action

Background

Section 169 of the Internal Revenue Code permits 5-year straight-line depreciation of pollution abatement facilities placed in operation on or after January 1, 1969 to abate air or water pollution discharged by plants or properties that were in operation before that date. In order to utilize this depreciation method, taxpayers must file an election in accordance with regulations of the Treasury Department. In addition, two certifications must be presented; one from the appropriate state authority (DEQ), and another from the regional federal authority (EPA Seattle).

Applicant

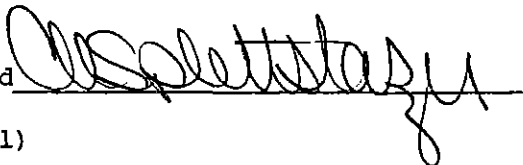
An applicant wishing state certification for federal tax relief obtains forms from EPA (Seattle). The applicant completes pages 1-5 of EPA Form 3300-1 (9-71) (Application for Certification of Pollution Control Facility); forwards the original to EPA (Seattle) and copies 1 and 2 to DEQ (or in the case of air pollution facilities located in Lane County, to the Lane Regional Air Pollution Authority), along with EPA Form 3300-2(9-71) (Notice of State Certification). If the applicant has questions regarding these forms, they should be directed to EPA.

DEQ or LRAPA:

It is DEQ's (or LRAPA's) responsibility to certify that the claimed facility:

"...is in conformity with State and local programs and requirements for the control of water pollution, air pollution, as required by Section 169 of the Internal Revenue Code of 1954, as amended, and regulations issued thereunder."

Approved



Date

7-8-80

MG258 (1)

STATE OF OREGON
Department of Environmental Quality

.....
: MANAGEMENT SERVICES DIVISION Page 2 of 2
: Tax Credits Section 7/8/80
:
: Subject PROCEDURES FOR PROCESSING REQUEST FOR PRELIMINARY CERTIFICATION
: FOR TAX CREDITS
:

Responsibility

Action

Divisions:

Upon receipt of the application for state certification, the Division involved should forward it to the Management Services Division (MSD) for completion. The Division supplies the information requested in section #6 of EPA Form 3300-2 (9-71) (the applicant should have filled out the rest of the form).

MSD

Types in the supplied information, assigns a state certification number, logs in the request, and forwards the certification form to the Director for signature.

MSD

After the Director signs, sends the completed certification form and copy 1 of the application to EPA (Seattle); retains copy 2 of the application and a copy of the completed certification form.

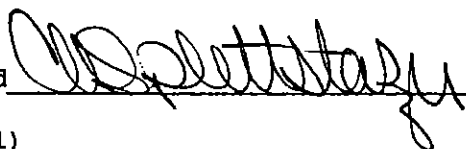
MSD

Files a copy of the application and the certification form with the applicant's state tax credit file (if applicable), and a copy in a separate federal tax credit certification file.

Note:

It is possible that we may be certifying facilities to the federal government which have not applied for tax credit under Oregon law.

.....

Approved 

Date 7-8-80

MG258 (1)

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

POLLUTION CONTROL FACILITIES
TAX CREDIT PROGRAM
GUIDANCE HANDBOOK

MARCH 1981

MANAGEMENT SERVICES DIVISION
522 SOUTHWEST FIFTH AVENUE
P. O. BOX 1760
PORTLAND, OREGON 97207

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
I - INTRODUCTION	I-1
Figure 1 - Certification Process	I-2
Table 1 - Certificates Issued	I-3
Table 2 - Air Pollution Control Facilities	I-4
Table 3 - Noise Pollution Control Facilities	I-5
Table 4 - Water Pollution Control Facilities	I-6
Table 5 - Solid Waste Control Facilities	I-7
II - TAX CREDIT STATUTES AND RULES	
ORS Chapter 468, Pollution Control Facilities Tax Credit	II-1
OAR Chapter 340-26-030, Tax Credits for Approved Alternative Methods to Field Burning	II-7
ORS Chapter 307, Property Tax	II-9
ORS Chapter 314, Tax Credits to be Offset Against State Income or Excise Tax Credits	II-13
ORS Chapter 316, Personal Income Tax	II-14
ORS Chapter 317, Corporation Excise Tax	II-19
III - SUMMARY OF ATTORNEY GENERAL OPINIONS	III-1
IV - SUMMARY OF PREVIOUSLY CERTIFIED FACILITIES	IV-1
Air Quality	IV-3
Water Quality	IV-7
Solid Waste	IV-11
Noise	IV-13
V - GUIDELINES FOR PRELIMINARY CERTIFICATION	V-1
VI - METHOD OF DETERMINING PERCENT OF COST ALLOCABLE TO POLLUTION CONTROL	VI-1

VII - FORMS AND INSTRUCTIONS FOR APPLICANTS	
TC-8, Pollution Control Facility Tax Relief in Oregon	VII-1
1979 Amendments to Pollution Control Facilities Tax Credit Law	VII-9
TC-1a, Instructions for Completing Notice of Intent to Construct and Request for Preliminary Certification for Tax Credit	VII-11
TC-1, Notice of Intent to Construct and Request for Preliminary Certification for Tax Credit	VII-13
TC-12, Statement of Compatibility with Local Comprehensive Lane Use Plans	VII-15
TC-7, Instructions for Completing Application for Certification of Pollution Control Facility for Tax Relief in Oregon	VII-17
TC-2, Application for Certification of Pollution Control Facility for Tax Relief Purposes	VII-25
VIII - FORM LETTERS	
NC-1, Notice of Approved Construction Completion	VIII-1
TC-3, Construction and Preliminary Certification Approval	VIII-3
TC-4, Notification of Receipt of Notice of Intent to Construct and Request for Preliminary Certification for Tax Credit	VIII-5
TC-5, Request for Further Information	VIII-7
IX - TAX CREDIT STAFF REPORT FORMATS	
Tax Credit Certification, Air, Water, Noise	IX-1
Tax Credit Certification, Solid Waste, Hazardous Waste and Used Oil	IX-5
Preliminary Certification, Air, Water, Noise	IX-9
Preliminary Certification, Solid Waste, Hazardous Waste and Used Oil	IX-11
X - INTERNAL DEPARTMENT PROCEDURES	
Processing Request for Preliminary Certification	X-1
Processing Tax Credit Applications	X-3
Processing Requests for Federal Tax Credit Relief	X-5

SECTION I

INTRODUCTION

INTRODUCTION

The Pollution Control Facilities Tax Credit Program was first enacted by the Oregon Legislative Assembly in 1967. At that time, facilities constructed to prevent, control, or reduce air or water pollution were made eligible for tax credit certification. In 1973 the Legislature made the use of a resource recovery process which obtains useful material or energy resources from material that would otherwise be solid waste eligible for tax credit certification.

The Legislature further amended the statutes in 1977 to add noise pollution control facilities to the list of facilities eligible for tax credit certification. Then in 1979 the recovery of useful material or energy resources from hazardous wastes or used oil was also made eligible for certification.

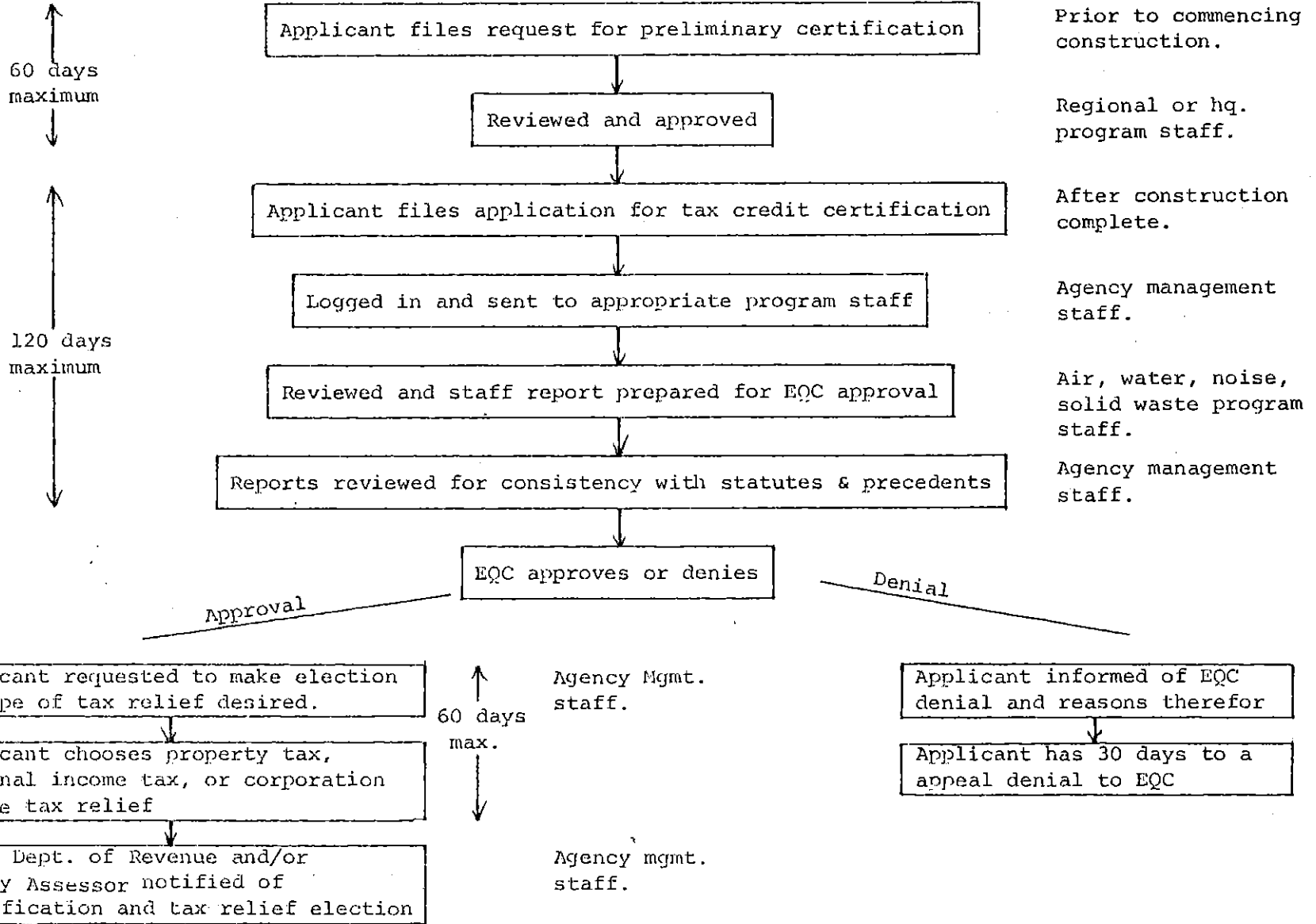
Persons interested in obtaining tax credit certification must follow a specific procedure outlined in the statutes by making application to the Department of Environmental Quality and receiving final approval from the Environmental Quality Commission. Figure 1 diagrams the application, review and approval process. More detailed information is contained in this booklet in the Statutes Section and the Forms and Instructions Section. It is very important that the procedures be followed exactly to ensure eligibility for certification is not forfeited due to procedural error.

After certification is received from the Environmental Quality Commission, the person holding the certification obtains actual tax relief from the Oregon Department of Revenue or County Assessor, where the facility is located, depending upon the tax relief elected. The choices are personal income tax, corporate excise tax, or property tax relief. Further information is contained in this booklet in the Statutes Section or may be obtained by contacting the Oregon Department of Revenue or County Assessor directly.

Since the commencement of the program, facilities costing in excess of \$350 million have been certified for tax relief. Table 1 shows the number and cost of facilities certified by year by agency program. Tables 2, 3, 4 and 5 show the types of facilities certified and their number and cost, for the air quality, noise, water quality, and solid waste management programs respectively.

The remainder of this document is devoted to providing the best information available on the details of the tax credit program for the use of potential applicants as well as Department staff and other interested parties.

POLLUTION CONTROL FACILITY TAX CREDIT CERTIFICATION PROCESS



I-2

FIGURE 1

Department of Environmental Quality
Tax Credit Certificates Issued for Pollution Control Facilities

Calendar Year	<u>Air Pollution Control Facilities</u>		<u>Water Pollution Control Facilities</u>		<u>Solid Waste Control Facilities</u>		<u>Noise Pollution Control Facilities</u>		<u>T O T A L</u>	
	No. Cert.	Certified Cost	No. Cert.	Certified Cost	No. Cert.	Certified Cost	No. Cert.	Certified Cost	No. Cert.	Certified Cost
1968	24	\$ 1,958,781	17	\$ 3,945,435	--	N/A	--	N/A	41	\$ 5,904,216
1969	22	1,305,789	14	3,855,141	--	N/A	--	N/A	36	5,160,930
1970	23	1,693,919	26	5,862,684	--	N/A	--	N/A	49	7,556,603
1971	38	7,345,826	26	9,946,636	--	N/A	--	N/A	64	17,292,462
1972	82	13,268,426	41	2,202,401	--	N/A	--	N/A	123	15,470,827
1973	97	12,124,500	47	13,764,649	-0-	-0-	--	N/A	144	25,889,149
1974	63	19,851,841	16	3,697,894	-0-	-0-	--	N/A	79	23,549,735
1975	56	18,674,741	34	10,590,618	6	\$ 5,703,350	--	N/A	96	34,968,709
1976	66	15,917,093	33	14,308,742	10	6,833,330	--	N/A	109	37,059,165
1977	49	11,095,785	40	2,121,713	7	7,040,082	-0-	-0-	96	20,257,580
1978	36	28,026,670	34	14,668,638	12	18,779,276	-0-	-0-	82	61,474,584
1979	39	7,952,278	34	13,460,697	11	14,402,536	1	\$ 84,176	85	35,899,637
1980	<u>97</u>	<u>25,407,199</u>	<u>35</u>	<u>12,088,442</u>	<u>25</u>	<u>33,708,372</u>	<u>4</u>	<u>85,680</u>	<u>161</u>	<u>71,289,693</u>
TOTAL	692	\$164,622,848	397	\$110,513,690	71	\$ 86,466,946	5	\$169,856	1165	\$361,733,340

TABLE 1

TABLE 2

DEPARTMENT OF ENVIRONMENTAL QUALITY

JANUARY 1981

AIR POLLUTION CONTROL FACILITIES CERTIFIED FOR TAX CREDIT

JANUARY 1, 1967 THROUGH DECEMBER 31, 1980

Type of Facility	Number Certified	Certified Cost	Percent of Total Certified Cost
Steel Mills and Foundries Emission Control Systems	32	\$ 4,305,311	2.5
Pulp and Paper Industry Emission Control Systems	117	54,700,684	33.2
Nickel and Aluminum Smelting Industry Emission Control Systems	32	42,786,922	26.0
Carbide Alloys, Silicon and Exotic Metals Manufacturing Emission Control Systems	29	5,533,861	3.4
Wood Products Industry Emission Control Systems	299	37,818,068	23.0
Cement, Asphalt, and Rock Crushing Industry Emission Control Systems	58	10,250,732	6.2
Chemical and Electronics Industry Emission Control Systems	10	2,667,411	1.6
Orchard Heating Systems	65	2,564,164	1.5
Food Processing Industry Emission Control Systems	16	2,367,804	1.4
Miscellaneous	35	1,679,127	1.0
TOTAL	692	\$164,622,848	

MN41

TABLE 3

DEPARTMENT OF ENVIRONMENTAL QUALITY

JANUARY 1981

NOISE POLLUTION CONTROL FACILITIES CERTIFIED FOR TAX CREDIT

JANUARY 1, 1977 THROUGH DECEMBER 31, 1980

Type of Facility	Number Certified	Certified Cost	Percent of Total Certified Cost
Acoustical Enclosure for Refrigeration Compressor	1	\$ 5,157	3.0
Relocation of Chip Fractionation Facility and Associated Equipment	1	67,145	39.5
Acoustical Insulation and Wrapping	2	87,026	51.2
Concrete Block Sound Wall	<u>1</u>	<u>10,528</u>	6.2
TOTAL	5	\$ 169,856	

MN41.C

TABLE 4
DEPARTMENT OF ENVIRONMENTAL QUALITY
JANUARY 1981

WATER POLLUTION CONTROL FACILITIES CERTIFIED FOR TAX CREDIT
JANUARY 1, 1967 THROUGH DECEMBER 31, 1980

Type of Facility	Number Certified	Certified Cost	Percent of Total Certified Cost
Chemical, Exotic Metals, and Metal Plating Industries, Waste Treatment Systems	53	\$ 12,608,651	11.4
Electronics Industry Waste Treatment Systems	23	888,670	< 1.0
Steel and Aluminum Manufacturing Industries Waste Treatment Systems	8	6,325,309	5.7
Pulp and Paper Industry Waste Treatment Systems	114	71,619,016	64.8
Wood Products Industry Waste Treatment Systems	52	5,018,490	4.5
Log Handling Systems	14	3,519,734	3.2
Food Processing Industry Waste Treatment Systems	45	8,099,266	7.3
Farm Animal Wastes Treatment Systems	39	414,881	< 1.0
Surface Runoff and Spill Prevention Systems	21	945,722	< 1.0
Miscellaneous	<u>21</u>	<u>1,073,951</u>	1.0
TOTAL	397	\$110,513,690	

MN41.A

TABLE 5
DEPARTMENT OF ENVIRONMENTAL QUALITY
JANUARY 1981

SOLID WASTE CONTROL FACILITIES CERTIFIED FOR TAX CREDIT
JANUARY 1, 1973 THROUGH DECEMBER 31, 1980

Type of Facility	Number Certified	Certified Cost	Percent of Total Certified Cost
Waste Wood Fuel Boilers	12	\$ 28,026,336	32.4
Turbine Generators	2	4,536,629	5.2
Industrial Wood Waste Utilization Facilities	16	5,461,615	6.3
Wood Hogs, Chippers, and Hogged Fuel Preparation Facilities	8	1,494,960	1.7
Conversion of Wood Waste to Fuel For Sale to Public	2	222,872	< 1.0
Particleboard Plant	2	17,542,818	20.2
Bark Utilization Plant	2	5,024,812	5.8
Paved Log Deck	7	1,691,182	2.0
Waste Paper Baler/Shredder	6	101,855	< 1.0
Wastepaper/Newsprint Deinking/Cleaning Facility	8	19,639,458	22.7
Straw Bailing and Storage Facility	2	257,176	< 1.0
Shredded Tire Storage and Metering Facility	1	91,083	< 1.0
Aggregate Reclaiming Facility	1	21,307	< 1.0
Glass Manufacturing Plant	1	1,952,954	2.8
Waste Glass Processing Facility	<u>1</u>	<u>401,889</u>	< 1.0
TOTAL	71	\$ 86,466,946	

MN41.B

SECTION II

TAX CREDIT STATUTES AND RULES

OREGON REVISED STATUTES
CHAPTER 468
1979 Replacement Part

POLLUTION CONTROL

POLLUTION CONTROL
FACILITIES TAX CREDIT

468.150 Field sanitation and straw utilization and disposal methods as "pollution control facilities." After alternative methods for field sanitation and straw utilization and disposal are approved by the committee and the department, "pollution control facility," as defined in ORS 468.155, shall include such approved alternative methods and persons purchasing and utilizing such methods shall be eligible for the benefits allowed by ORS 468.155 to 468.190. [1975 c.559 §15]

Note: 468.150 was enacted into law by the Legislative Assembly but was not added to or made a part of ORS chapter 468 or any series therein by legislative action. See the Preface to Oregon Revised Statutes for further explanation.

468.155 Definitions for ORS 468.155 to 468.190. (1) As used in ORS 468.155 to 468.190, unless the context requires otherwise, "pollution control facility" or "facility" means any land, structure, building, installation, excavation, machinery, equipment or device, or any addition to, reconstruction of or improvement of, land or an existing structure, building, installation, excavation, machinery, equipment or device reasonably used, erected, constructed or installed by any person if a substantial purpose of such use, erection, construction or installation is the prevention, control or reduction of air, water or noise pollution or solid waste, hazardous wastes or used oil by:

(a) The disposal or elimination of or redesign to eliminate industrial waste and the use of treatment works for industrial waste as defined in ORS 468.700;

(b) The disposal or elimination of or redesign to eliminate air contaminants or air pollution or air contamination sources and the use of air cleaning devices as defined in ORS 468.275;

(c) The substantial reduction or elimination of or redesign to eliminate noise pollution or noise emission sources as defined by rule of the commission; or

(d) The use of a resource recovery process which obtains useful material or energy resources from material that would otherwise be solid waste as defined in ORS 459.005, hazardous wastes as defined in ORS 459.410, or used oil as defined in ORS 468.850. For the purposes of ORS 468.155 to 468.190, "solid waste facility" shall also include subsequent additions, made either to an already certified facility or to an operation which would have qualified as a facility but for the fact that it was erected, constructed or installed prior to January 1, 1973, which will increase the production or recovery of useful materials or energy over the amount being produced or recovered by the original facility whether or not the materials or energy produced or recovered are similar to those of the original facility.

(2) "Pollution control facility" or "facility" does not include air conditioners, septic tanks or other facilities for human waste, nor any property installed, constructed or used for the moving of sewage to the collecting facilities of a public or quasi-public sewerage system, nor any distinct portion or portions of a solid waste, hazardous wastes or used oil facility which make an insignificant contribution to the purpose of utilization of solid waste, hazardous wastes or used oil. The following specific items shall be among those portions considered for exclusion hereunder: Office buildings and furnishings, parking lots and road improvements, landscaping, external lighting, company signs, artwork and automobiles. [Formerly 449.605; 1975 c.496 §1; 1977 c.795 §1; 1979 c.802 §1]

Note: Section 8, chapter 802, Oregon Laws 1979, provides:

Sec. 8. The amendments to ORS 468.155, 468.160, 468.165, 468.170 and 468.185 by sections 1 to 4 and 7 of this Act that relate to pollution control facilities for hazardous wastes and used oil shall not apply to erection, construction or installation of such facilities begun before the effective date of this Act [October 3, 1979].

468.160 Policy. In the interest of the public peace, health and safety, it is the policy of the State of Oregon to assist in the prevention, control and reduction of air, water and noise pollution and solid waste, hazardous wastes and used oil in this state by providing tax relief with respect to Oregon facilities constructed to accomplish such prevention, control and reduction. [Formerly 449.615; 1975 c.496 §2; 1977 c.795 §2; 1979 c.802 §2]

Note: See note under 468.155.

468.165 Application for certification of pollution control facilities. (1) Any person may apply to the commission for certification under ORS 468.170 of a pollution control facility or facilities or portion thereof erected, constructed or installed by him in Oregon if:

(a) The air or water pollution control facility was erected, constructed or installed on or after January 1, 1967.

(b) The noise pollution control facility was erected, constructed or installed on or after January 1, 1977.

(c) The solid waste, hazardous wastes or used oil facility was under construction on or after January 1, 1973, and if:

(A) The substantial purpose of the facility is to utilize material that would otherwise be solid waste as defined in ORS 459.005, hazardous wastes as defined in ORS 459.410 or used oil as defined in ORS 468.850 by burning, mechanical process or chemical process or through the production, processing including presegregation or otherwise, or use of materials for their heat content or other forms of energy of or from the material, or the use of materials which have useful chemical or physical properties and which may be used for the same or other purposes, or materials which may be used in the same kind of application as its prior use without change in identity;

(B) The end product of the utilization is a usable source of power or other item of real economic value;

(C) The end product of the utilization, other than a usable source of power, is competitive with an end product produced in another state; and

(D) The Oregon law regulating solid waste imposes standards at least substantially equivalent to the federal law.

(2) The applications shall be made in writing in a form prescribed by the department and shall contain information on the actual cost of the facility or facilities, a description of the materials incorporated therein, all machinery and equipment made a part thereof, the existing or proposed operational procedure thereof, and a statement of the purpose of prevention, control or reduction of air, water or noise pollution or solid waste, hazardous wastes or used oil served or to be served by the facility or facilities and, for a facility qualifying under paragraph (a) or (b) of subsection (1) of this section, the portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution as set forth in subsection (2) of ORS 468.190.

(3) The director may require such further information as he considers necessary prior to issuance of a certificate. [Formerly 449.625; 1974 s.s. c.37 §2; 1975 c.496 §3; 1977 c.795 §3; 1979 c.802 §3]

Note: See note under 468.155.

468.170 Action on application; effect of rejection; appeal; issuance of certificate; effect of certification. (1) The commission shall act on an application for certification before the 120th day after the filing of the application under ORS 468.165. The action of the commission shall include certification of the actual cost of the facility and, for facilities qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, the portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution as set forth in subsection (2) of ORS 468.190. Each certificate shall bear a separate serial number for each such facility.

(2) If the commission rejects an application for certification, or certifies a lesser actual cost of the facility or a lesser portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution or solid waste, hazardous wastes or used oil than was claimed in the application for certification, the commission shall cause written notice of its action, and a concise statement of the findings and reasons therefor, to be sent by registered or certified mail to the applicant before the 120th day after the filing of the application. Failure of the commission to act constitutes rejection of the application.

(3) If the application is rejected for any reason, including the information furnished by the applicant as to the cost of the facility, or if the applicant is dissatisfied with the certification of actual cost or portion of the actual cost properly allocable to prevention, control or reduction of air, water or noise pollution or solid waste, hazardous wastes or used oil, the applicant may appeal from the rejection as provided in ORS 468.110. The rejection or the certification is final and conclusive on all parties unless the applicant takes an appeal therefrom as provided in ORS 468.110 before the 30th day after notice was mailed by the commission.

(4) If the commission finds that a pollution control or solid waste, hazardous wastes or used oil facility or portion thereof, for which an application has been made under ORS 468.165, 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 the facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, ORS chapters 459 and 467 and this chapter and rules thereunder, it shall certify such facility. No determination of the proportion of the actual cost of the facility to be certified shall be made until receipt of the application. Where one or more facilities constitute an operational unit, the commission may certify such facilities under one certificate. A certificate under this section is effective for purposes of tax relief in accordance with ORS 307.405, 316.097 and 317.072 if erection, construction or installation of the facility was commenced prior to December 31, 1988. The commission shall attach to the front of each certificate a copy of the notice and election requirements imposed by subsection (5) of this section.

(5) A person receiving a certificate under this section shall make an irrevocable election to take the tax credit relief under ORS 316.097 or 317.072 or the ad valorem tax relief under ORS 307.405 and shall notify the commission, within 60 days after the receipt of such certificate, of his election. This election shall apply to the facility or facilities certified and shall bind all subsequent transferees. Failure to make a timely notification shall make the certificate ineffective for any tax relief under ORS 307.405, 316.097 and 317.072.

(6) If the person receiving the certificate is an electing small business corporation as defined in section 1371 of the Internal Revenue Code, and if the corporation elects to take tax credit relief, such election shall be on behalf of the corporation's shareholders. Each shareholder shall be entitled to take tax credit relief as provided in ORS 316.097, based on that shareholder's pro rata share of the certified cost of the facility.

(7) Certification under this section of a pollution control facility qualifying under subsection (1) of ORS 468.165 shall be granted for a period of 10 consecutive years which 10-year period shall begin with the tax year of the person in which the facility is certified under this section, except that if the person elects ad valorem tax relief the provisions of ORS 307.405 shall apply.

(8) (a) A facility commenced prior to December 31, 1980, and qualifying under paragraph (c) of subsection (1) of ORS 468.165 shall be certified if it meets such requirements.

(b) For a facility commenced after December 31, 1980, and prior to December 31, 1983, the commission, in addition to, and not in lieu of, the requirements under paragraph (c) of subsection (1) of ORS 468.165, shall only certify such a facility if it meets one of the following conditions:

(A) That the facility is necessary to assist in solving a severe or unusual solid waste, hazardous wastes or used oil problem;

(B) That the facility will provide a new or different solution to a solid waste, hazardous wastes or used oil problem than has been previously used, or the facility is a significant modification and improvement of similar existing facilities; or

(C) That the department has recommended the facility as the most efficient or environmentally sound method of solid waste, hazardous wastes or used oil control.

(c) However, such a facility certified after December 31, 1983, shall be certified pursuant to the procedures, costs properly allocable and all other matters as if it were a facility subject to certification under paragraph (a) of subsection (1) of ORS 468.165.

(9) Portions of a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165 may be certified separately under this section if ownership of the portions is in more than one person. Certification of such portions of a facility shall include certification of the actual cost of the portion of the facility to the person receiving the certification. The actual cost certified for all portions of a facility separately certified under this subsection shall not exceed the total cost of the facility that would have been certified under one certificate. The provisions of subsection (10) of ORS 316.097 or 317.072, whichever is applicable, shall apply to any sale, exchange or other disposition of a certified portion of a facility.

[Formerly 449.635; 1974 s.s. c.37 §3; 1975 c.496 §4; 1977 c.795 §4; 1979 c.531 §6; 1979 c.802 §4]

Note: See note under 468.155.

468.175 Application for certification before construction; order granting or denying certification; hearing. (1) Any person proposing to apply for certification of a pollution control facility pursuant to ORS 468.165, before the commencement of erection, construction or installation of the facility, shall file a request for preliminary certification with the Department of Environmental Quality. The request shall be in a form prescribed by the department. For facilities constructed on or after October 3, 1979, the commission may waive the filing of the application if it finds the filing inappropriate because special circumstances render the filing unreasonable and if it finds such facility would otherwise qualify for tax credit certification pursuant to ORS 468.150 to 468.190.

(2) Within 30 days of the receipt of such request, the department may require, as a condition precedent to issuance of a preliminary certificate of approval, the submission of plans and specifications. After examination thereof, the department may request corrections and revisions to the plans and specifica-

tions. The department may also require any other information necessary to determine whether the proposed construction is in accordance with the provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, this chapter and ORS chapters 459 and 467 and applicable rules and standards adopted pursuant thereto.

(3) If the department determines that the proposed erection, construction or installation is in accordance with the provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, this chapter and ORS chapters 459 and 467 and applicable rules or standards adopted pursuant thereto, it shall issue a preliminary certificate approving the erection, construction or installation. If the department determines that the erection, construction or installation does not comply with the provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, this chapter and ORS chapters 459 and 467 and applicable rules or standards adopted pursuant thereto, the commission shall issue an order denying certification.

(4) If within 60 days of the receipt of plans, specifications or any subsequently requested revisions or corrections to the plans and specifications or any other information required pursuant to this section, the department fails to issue a preliminary certificate of approval and the commission fails to issue an order denying certification, the preliminary certificate shall be considered to have been issued. The construction must comply with the plans, specifications and any corrections or revisions thereto, if any, previously submitted.

(5) Within 20 days from the date of mailing of the order, any person against whom an order is directed pursuant to subsection (3) of this section may demand a hearing. The demand shall be in writing, shall state the grounds for hearing and shall be mailed to the director of the department. The hearing shall be conducted in accordance with the applicable provisions of ORS 183.310 to 183.500.

[1973 c.831 §2; 1975 c.496 §5; 1977 c.795 §5; 1979 c.802 §5]

468.180 Conditions for issuance of certificate under ORS 468.170. (1) No certification shall be issued by the commission pursuant to ORS 468.170 unless the facility, facilities or part thereof was erected, constructed or installed in accordance with the requirements of ORS 468.175 and in accordance with the applicable provisions of ORS 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, this chapter and ORS chapters 459 and 467 and the applicable rules or standards adopted pursuant thereto.

(2) Nothing in this section or ORS 468.175 is intended to apply to erection, construction or installation of pollution control facilities begun before October 5, 1973. [1973 c.831 §3; 1975 c.496 §6; 1977 c.795 §6; 1979 c.802 §6]

468.185 Procedure to revoke certification. (1) Pursuant to the procedures for a contested case under ORS 183.310 to 183.500, the commission may order the revocation of the certification issued under ORS 468.170 of any pollution control or solid waste, hazardous wastes or used oil facility, if it finds that:

(a) The certification was obtained by fraud or misrepresentation; or

(b) The holder of the certificate has failed substantially to operate the facility for the purpose of, and to the extent necessary for, preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil as specified in such certificate.

(2) As soon as the order of revocation under this section has become final, the commission shall notify the Department of Revenue and the county assessor of the county in which the facility is located of such order.

(3) If the certification of a pollution control or solid waste, hazardous wastes or used oil facility is ordered revoked pursuant to paragraph (a) of subsection (1) of this section, all prior tax relief provided to the holder of such certificate by virtue of such certificate shall be forfeited and the Department of Revenue or the proper county officers shall proceed to collect those taxes not paid by the certificate holder as a result of the tax relief provided to the holder under any provision of ORS 307.405, 316.097 and 317.072.

(4) If the certification of a pollution control or solid waste, hazardous wastes or used oil facility is ordered revoked pursuant to paragraph (b) of subsection (1) of this section, the certificate holder shall be denied any further relief provided under ORS 307.405, 316.097 or 317.072 in connection with such facility, as the case may be, from and after the date that the order of revocation becomes final. [Formerly 449.645; 1975 c.496 §7; 1977 c.795 §7; 1979 c.802 §7]

Note: See note under 468.155.

468.190 Allocation of costs to pollution control. (1) In establishing the portion of costs properly allocable to the prevention, control or reduction of air, water or noise pollution for facilities qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, the commission shall consider the following factors:

(a) If applicable, the extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

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

(c) If applicable, the alternative methods, equipment and costs for achieving the same pollution control objective.

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

(e) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution.

(2) The portion of actual costs properly allocable shall be:

(a) Eighty percent or more.

(b) Sixty percent or more but less than 80 percent.

(c) Forty percent or more but less than 60 percent.

(d) Twenty percent or more but less than 40 percent.

(e) Less than 20 percent. [Formerly 449.655; 1974 s.s. c.37 §4; 1977 c.795 §8]

Tax Credits for Approved Alternative Methods, Approved Interim Alternative Methods, or Approved Alternative Facilities
340-26-030 (1) As provided in ORS 468.150, approved alternative methods or approved alternative facilities are eligible for tax credit as pollution control facilities as described in ORS 468.155 through 468.190.

(2) Approved alternative facilities eligible for pollution control facility tax credit shall include:

(a) Mobile equipment including, but not limited to:

(A) Straw gathering, densifying, and handling equipment.

(B) Tractors and other sources of motive power.

(C) Trucks, trailers, and other transportation equipment.

(D) Mobile field sanitizers and associated fire control equipment.

(E) Equipment for handling all forms of processed straw.

(F) Special straw incorporation equipment.

(b) Stationary equipment and structures including, but not limited to:

(A) Straw loading and unloading facilities.

(B) Straw storage structures.

(C) Straw processing and in-plant transport equipment.

(D) Land associated with stationary straw processing facilities.

(E) Drainage tile installations which will result in a reduction of acreage burned.

(3) Equipment and facilities included in an application for certification for tax credit under this rule will be considered at their current depreciated value and in proportion to their actual use to reduce open field burning as compared to their total farm or other use.

(4) Procedures for application and certification of approved alternative facilities for pollution control facility tax credit:

(a) Preliminary certification for pollution control facility tax credit:

(A) A written application for preliminary certification shall be made to the Department prior to installation or use of approved alternative facilities in the first harvest season for which an application for tax credit certification is to be made. Such application shall be made on a form provided by the Department and shall include, but not be limited to:

(i) Name, address, and nature of business of the applicant;

(ii) Name of person authorized to receive Department requests for additional information;

(iii) Description of alternative method to be used;

(iv) A complete listing of mobile equipment and stationary facilities to be used in carrying out the alternative methods, and for each item listed include:

(I) Date or estimated future date of purchase;

(II) Percentage of use allocated to approved alternative methods and approved interim alternative methods as compared to their total farm or other use.

(v) Such other information as the Department may require to determine compliance with state air, water, solid waste, and noise laws and regulations and to determine eligibility for tax credit.

(B) If, upon receipt of a properly completed application for preliminary certification for tax credit for approved alternative facilities the Department finds the proposed use of the approved alternative facilities are in accordance with the provisions of ORS 468.175, it shall, within 60 days, issue a preliminary certification of approval. If the proposed use of the approved alternative facilities are not in accordance with provisions of ORS 468.175, the Commission shall, within 60 days, issue an order denying certification.

(b) Certification for pollution control facility tax credit:

(A) A written application for certification shall be made to the Department on a form provided by the Department and shall include, but not be limited to, the following:

(i) Name, address, and nature of business of the applicant;

(ii) Name of person authorized to receive Department requests for additional information;

(iii) Description of the alternative method to be used;

(iv) For each piece of mobile equipment and/or for each stationary facility, a complete description including the following information as applicable:

(I) Type and general description of each piece of mobile equipment;

(II) Complete description and copy of proposed plans or drawings of stationary facilities including buildings and contents used for straw storage, handling, or processing of straw and straw products or used for storage of mobile field sanitizers and legal description of real property involved;

(III) Date of purchase or initial operation;

(IV) Cost when purchased or constructed and current value;

(V) General use as applied to approved alternative methods and approved interim alternative methods;

(VI) Percentage of use allocated to approved alternative methods and approved interim alternative methods as compared to their farm or other use.

(B) Upon receipt of a properly completed application for certification for tax credit for approved alternative facilities or any subsequently requested additions to the application, the Department shall return within 120 days the decision of the Commission and certification as necessary indicating the portion of the cost of each facility allocable to pollution control.

(5) Certification for tax credits of equipment or facilities not covered in sections (1) through (4) of this rule shall be processed pursuant to the provisions of ORS 468.165 through 468.185.

(6) Election of type of tax credit pursuant to ORS 468.170(5):

(a) As provided in ORS 468.170(5), a person receiving the certification provided for in subsection (4)(b) of this rule shall make an irrevocable election to take the tax credit relief under ORS 316.097, 317.072, or the ad volorem tax relief under ORS 307.405 and shall inform the Department of his election within 60 days of receipt of certification documents on the form supplied by the Department with the certification documents.

(b) As provided in ORS 468.170(5) failure to notify the Department of the election of the type of tax credit relief within 60 days shall render the certification ineffective for any tax relief under ORS 307.405, 316.097, and 317.072.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 114, f. & ef. 6-4-76; DEQ 138, f. 6-30-77; DEQ 6-1978, f. & ef. 4-18-78; DEQ 8-1978(Temp), f. & ef. 6-8-78 thru 10-5-78; DEQ 2-1980, f. & ef. 1-21-80; DEQ 12-1980, f. & ef. 4-21-80

OREGON REVISED STATUTES
CHAPTER 307
1979 Replacement Part

PROPERTY TAX

(Agricultural Equipment and
Facilities)

307.390 Mobile field incinerators. Mobile field incinerators owned by farmers or by groups of farmers that are exclusively used for sanitizing grass seed fields by means other than open field burning shall be exempt from taxation if they are purchased within five years after they are certified as a feasible alternative to open field burnings by the Department of Environmental Quality pursuant to ORS 468.455 to 468.480. [1971 c.678 §2; 1977 c.650 §12]

307.395 Agricultural waste storage facilities. (1) In order to minimize air pollution from field burning, an agricultural waste storage facility is exempt from ad valorem taxation so long as such facility is used exclusively for such storage and the taxpayer has not claimed an income tax credit therefor under ORS 316.092, 316.097 or 317.072.

(2) Before any exemption from taxation under this section is allowed for any year, the person claiming the exemption shall file with the county assessor, on or before April 1 each year, a statement verified by oath or affirmation of the claimant, listing the property claimed to be exempt and showing the purpose for which such property is used. Statements shall be in a form prescribed by the Department of Revenue and furnished by the assessor. If the ownership and use of the property included in the statement filed with the county assessor for a prior year remains unchanged, a new statement is not required, except that if the use changes, within 30 days after the change the owner shall notify the assessor of such change. If the owner fails to give notice, the assessor shall add a penalty of 10 percent of the taxes assessed against the property for the assessment year in which the change in use occurred. When the property for which exemption is claimed is acquired after January 1 and before July 1, the claim for that year must be filed before April 1 of that year or within 30 days from the date of acquisition, whichever is later.

(3) "Agricultural waste storage facility" or "facility" means any building or other structure used for the storage of agricultural wastes, which would otherwise be disposed of by burning, from perennial or annual grass seed crops or from other grain crops, and any equipment, machinery or fixtures erected upon, under, above or affixed to such building or structure to facilitate such storage.

(4) Subsections (1), (2) and (3) of this section apply to assessment years beginning on and after January 1, 1972, but shall not apply to assessment years beginning on and after January 1, 1982. [1971 c.141 §§ 1, 2]

(Pollution Control Facilities)

307.405 Pollution control facilities; qualifications; expiration; revocation; limitations. (1) A pollution control facility or facilities which have been constructed in accordance with the requirements of subsection (1) of ORS 468.165, and have been certified by the Environmental Quality Commission pursuant to ORS 468.170 are exempt to the extent of the highest percentage figure certified by the Environmental Quality Commission as the portion of the actual cost properly allocable to the prevention, control or reduction of pollution. The exemption shall be allowed only if the taxpayer is a corporation organized under ORS chapter 61 or 62, or any predecessor to ORS chapter 62 relating to incorporation of cooperative associations, or is a subsequent transferee of such a corporation. If the subsequent transferee is organized under other than ORS chapter 61 or 62, the exemption shall only be allowed if the transfer occurs after the expiration of five years from the date of original certification by the commission.

(2) To qualify for the ad valorem tax relief:

(a) The pollution control facility must be erected, constructed or installed in connection with the trade or business conducted by the taxpayer on Oregon property owned or leased by said taxpayer.

(b) The taxpayer must be the owner of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution or a person who, as a lessee under a written lease or pursuant to a written agreement, conducts the trade or business that operates or utilizes such property and who by the terms of such lease or agreement is obliged to pay the ad valorem taxes on such property. As used in this subsection, "owner" includes a contract purchaser.

(3) The ad valorem exemption of a facility shall expire, in any event, 20 years from the date of its first certification for any owner or lessee by the Environmental Quality Commission.

(4) Upon any sale, exchange, or other disposition of a facility, notice thereof shall be given to the Environmental Quality Commission who shall revoke the certification covering such facility as of the date of such disposition. The transferee may apply for a new certificate under ORS 468.170, but the number of years of ad valorem tax exemption that may be claimed by the transferee is the remainder of the exemption period specified in subsection (3) of this section.

(5) If the facility also functions to prevent pollution from operations conducted on other property owned or leased by the taxpayer the Environmental Quality Commission shall state in its certification of the facility the percentage of the facility used to prevent pollution from such qualifying trade or business conducted on such qualifying property. The exemption from ad valorem taxes under this section shall be limited to such percentage of the value of the facility. [1967 c.592 §13; 1969 c.340 §1; 1971 c.678 §1; 1973 c.831 §7; 1977 c.796 §9]

Note: Subsection (3), section 14 and section 15, chapter 795, Oregon Laws 1977, provide:

Sec. 14. (3) The amendments to ORS 307.405 by section 9 of this Act apply on or after January 1, 1977, to a facility under construction on or after January 1, 1975, by a corporation organized under ORS chapter 61 or 62 or under any predecessor to ORS chapter 62 relating to incorporation of cooperative associations. The amendments to ORS 307.405 do not apply to a facility commenced prior to December 31, 1980, by a person other than a corporation described in the preceding sentence if the facility is certified prior to December 31, 1982, and ORS 307.405 as it reads the day before the effective date of amendments made by section 9 of this Act shall apply thereto.

Sec. 15. Nothing in this Act relieves a person or taxpayer of any obligation with respect to a tax, fee, fine or other charge, interest, penalty, forfeiture or other liability, duty or obligation accruing under the law repealed by this Act. After the operative date of such repeals, the Department of Revenue may undertake the collection or enforcement of such tax, fee, fine, charge, interest, penalty, forfeiture or other liability, duty or obligation.

307.420 Necessity of filing claim and certificate to secure exemption; annual statements of ownership. Before any exemption from taxation is allowed under ORS 307.405, the person claiming the exemption shall file with the county assessor a written claim for such exemption prepared on a form prescribed by the Department of Revenue and furnished by the assessor, and shall file with the assessor with his first claim for exemption the certificate issued by the Environmental Quality Commission under ORS 468.170 covering the property for which exemption is sought. The claim shall be filed not later than April 1 in the first year in which the exemption is claimed; except that if the person receives his certificate either before or after April 1 and makes his election to receive ad valorem tax relief, as required by ORS 468.170, after April 1 and before July 1, he may file a claim on or before July 15 of that calendar year. The county clerk shall record the certificate in the county record of deeds, upon presentation by the assessor. Each year thereafter to continue such exemption, the taxpayer must file not later than April 1 a statement with the county assessor, on a form prescribed by the Department of Revenue and furnished by the assessor, stating that the ownership of all property included in the certificate and its use remain unchanged. [1967 c.592 §14; 1973 c.831 §10]

307.430 Correction of assessment and tax rolls; termination of exemption. (1) Upon receipt of notice of the revocation of a certification of a pollution control facility pursuant to paragraph (a) of subsection (1) of ORS 468.185, the county assessor shall proceed to correct the assessment and tax roll or rolls from which the facility was omitted from taxation, in the manner provided in ORS 311.207 to 311.213, and in all cases shall add interest in the manner provided in ORS 311.213. The five-year limitation provided for in ORS 311.205 shall not apply to such corrections.

(2) Upon receipt of notice of the revocation of a certification of a pollution control facility pursuant to paragraph (b) of subsection (1) of ORS 468.185, if the final revocation occurs before October 15 of any calendar year, the exemption otherwise allowable shall terminate and not be allowed beginning with the assessment and tax rolls prepared as of January 1 of such calendar year. [1967 c.592 §15]

**POLLUTION CONTROL
FACILITIES**

314.250 Federal grants or tax credits for pollution control facility to be offset against state income or excise tax credits. If a taxpayer obtains grants or tax credits from the Federal Government, other than investment credits granted under section 46 of the Internal Revenue Code of 1954, in connection with a pollution control facility which has been certified by the Environmental Quality Commission, the income or excise tax credits which such taxpayer would be entitled to after any such grant or credit has been made available to or received by such taxpayer, shall be offset or reduced by such federal grants or tax credits, dollar for dollar. Taxpayers applying for such grants shall notify the Department of Revenue of each such application, and of the receipt of any such grant or tax credits. Notification shall be made in the taxpayer's next Oregon income or excise tax return. [1967 c.592 §18]

314.255 Collection of taxes due after revocation of certification of pollution control facility; exceptions to tax relief allowed for pollution control facility. (1) Upon receipt of notice of the revocation of a certification of a pollution control facility pursuant to subsection (1) of ORS 468.185, the Department of Revenue immediately shall collect any taxes due by reason of such revocation, and shall have the benefit of all laws of this state pertaining to the collection of income and excise taxes. No assessment of such taxes shall be necessary and no statute of limitation shall preclude the collection of such taxes.

(2) No tax relief shall be allowed under ORS 307.405, 316.097 or 317.072 for any pollution control facility constructed or used by or for the benefit of any governmental or quasi-governmental body or public corporation or form thereof, except where such facilities are used for resource recovery. [1967 c.592 §§16, 17; 1969 c.493 §83; 1979 c.531 §5]

OREGON REVISED STATUTES
CHAPTER 316
1979 Replacement Part

PERSONAL INCOME TAX

316.097 Credit for pollution control facility. (1) A credit against taxes imposed by this chapter for taxpayers owning a pollution control facility or facilities certified under ORS 468.170 shall be allowed if the taxpayer has not claimed an exemption therefor under ORS 307.405.

(2) (a) For a facility qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, and having a useful life of 10 years or longer, the maximum credit allowed in any one tax year shall be the lesser of the tax liability of the taxpayer or the following portion of the cost of the facility:

(A) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 80 percent or more, five percent of the cost of the facility.

(B) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 60 percent or more and less than 80 percent, four percent of the cost of the facility.

(C) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 40 percent or more and less than 60 percent, three percent of the cost of the facility.

(D) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 20 percent or more and less than 40 percent, two percent of the cost of the facility.

(E) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is less than 20 percent, one percent of the cost of the facility.

(b) For a facility qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, and having a useful life of less than 10 years, the maximum credit allowed in any one taxable year shall be the lesser of the tax liability of the taxpayer or the following:

(A) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 80 percent or more, 50 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(B) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 60 percent or more and less than 80 percent, 40 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(C) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 40 percent or more and less than 60 percent, 30 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(D) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 20 percent or more and less than 40 percent, 20 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(E) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is less than 20 percent, 10 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(c) For facilities having a useful life of less than 10 years and for which some portion of the maximum total credit is allowed or allowable in tax years beginning on or after January 1, 1977, such remaining credit shall be prorated over the remaining useful life of the property under administrative rules to be prepared by the department.

(3) (a) For a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165, and having a useful life of 10 years or longer, the maximum credit allowed in any one tax year shall be five percent of the cost of the facility or facilities, but shall not exceed the tax liability of the taxpayer.

(b) For a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165, and having a useful life of less than 10 years, the maximum credit allowed in any one tax year shall be 50 percent of the cost of the facility divided by the number of years of useful life of the facility, but shall not exceed the tax liability of the taxpayer.

(4) To qualify for the credit the pollution control facility must be erected, constructed or installed in accordance with the provisions of subsection (1) of ORS 468.165.

(5) (a) The taxpayer who is allowed the credit must be the owner of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution or a person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property. As used in this paragraph, "owner" includes a contract purchaser; and

(b) The facility must be owned or leased during the tax year by the taxpayer claiming the credit and must have been in use and operation during said tax year.

(6) Regardless of when the facility is erected, constructed or installed, a credit under this section may be claimed by a taxpayer:

(a) For a facility qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, only in those tax years which begin on or after January 1, 1967.

(b) For a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165, in those tax years which begin on or after January 1, 1973.

(7) For a facility qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, the maximum total credit allowable shall not exceed:

(a) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 80 percent or more, 50 percent of the cost of such facility or facilities.

(b) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 60 percent or more and less than 80 percent, 40 percent of the cost of such facility or facilities.

(c) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 40 percent or more and less than 60 percent, 30 percent of the cost of such facility or facilities.

(d) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 20 percent or more and less than 40 percent, 20 percent of the cost of such facility or facilities.

(e) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is less than 20 percent, 10 percent of the cost of such facility or facilities.

(8) For a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165, the maximum total credit allowable shall not exceed 50 percent of the cost of such facility.

(9) The credit provided by this section is not in lieu of any depreciation or amortization deduction for the facility to which the taxpayer otherwise may be entitled under this chapter for such year.

(10) Upon any sale, exchange, or other disposition of a facility, notice thereof shall be given to the Environmental Quality Commission who shall revoke the certification covering such facility as of the date of such disposition. The transferee may apply for a new certificate under ORS 468.170, but the tax credit available to such transferee shall be limited to the amount of credit not claimed by the transferor.

(11) Any tax credit otherwise allowable under this section which is not used by the taxpayer in a particular year may be carried forward and offset against the taxpayer's tax liability for the next succeeding tax year. Any credit remaining unused in such next succeeding tax year may be carried forward and used in the second succeeding tax year, and likewise, any credit not used in that second succeeding tax year may be carried forward and used in the third succeeding tax year, but may not be carried forward for any tax year thereafter. Credits may be carried forward to and used in a tax year beyond the years specified in ORS 468.170.

(12) The taxpayer's adjusted basis for determining gain or loss shall not be further decreased by any tax credits allowed under this section.

(13) If the taxpayer is a shareholder of a Subchapter S corporation that has elected to take tax credit relief pursuant to subsection (6) of ORS 468.170, the credit shall be computed using the shareholder's pro rata share of the corporation's certified cost of the facility. In all other respects, the allowance and effect of the tax credit shall apply to the corporation as otherwise provided by law. [See 316.480; 1973 c.831 §8; 1977 c.795 §11; 1977 c.866 §10; 1979 c.691 §6]

Note: Section 8, chapter 691, Oregon Laws 1979, provides:

Sec. 8. The amendment to subsection (12) of ORS 316.097 by section 6 of this Act shall apply to tax years beginning on or after January 1, 1977, and the amendments to ORS 316.052, 316.078 and 316.087 by sections 2, 4 and 5 of this Act shall apply to tax years beginning on or after January 1, 1979.

OREGON REVISED STATUTES
1979 Replacement Part

Chapter 316.142

316.142 Government and quasi-governmental bodies not eligible for credit; ineligibility of recipients of other credits. (1) No tax credit shall be allowed under ORS 316.140 to 316.142, 317.104 and 469.185 to 469.225 for any facility constructed or used by or for the benefit of any governmental or quasi-governmental body or public corporation or form thereof.

(2) A person who applies for and receives a tax credit on a pollution control facility or an alternate energy device under ORS 316.097, 316.116 or 317.072 is not eligible to apply for and receive a tax credit on the same facility or device under the provisions of ORS 316.140 to 316.142, 317.104 and 469.185 to 469.225. (1979 c.512 §16, 17)

OREGON REVISED STATUTES
CHAPTER 317
1979 Replacement Part

CORPORATION EXCISE TAX

317.072 Credit for pollution control facility; limitations; unused credit, taxpayer's basis. (1) A credit against taxes imposed by this chapter for taxpayers owning a pollution control facility or facilities certified under ORS 468.170 shall be allowed if the taxpayer has not claimed an exemption therefor under ORS 307.405.

(2) (a) For a facility qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, and having a useful life of 10 years or longer, the maximum credit allowed in any one taxable year shall be the lesser of the tax liability of the taxpayer or the following portion of the cost of the facility:

(A) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 80 percent or more, five percent of the cost of the facility.

(B) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 60 percent or more and less than 80 percent, four percent of the cost of the facility.

(C) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 40 percent or more and less than 60 percent, three percent of the cost of the facility.

(D) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 20 percent or more and less than 40 percent, two percent of the cost of the facility.

(E) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is less than 20 percent, one percent of the cost of the facility.

(b) For a facility qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, and having a useful life of less than 10 years, the maximum credit allowed in any one taxable year shall be the lesser of the tax liability of the taxpayer or the following:

(A) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 80 percent or more, 50 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(B) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 60 percent or more and less than 80 percent, 40 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(C) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 40 percent or more and less than 60 percent, 30 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(D) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 20 percent or more and less than 40 percent, 20 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(E) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is less than 20 percent, 10 percent of the cost of the facility, divided by the number of years of useful life of the facility.

(c) For facilities having a useful life of less than 10 years and for which some portion of the maximum total credit is allowed or allowable in tax years beginning on or after January 1, 1977, such remaining credit shall be prorated over the remaining useful life of the property under administrative rules to be prepared by the department.

(3) (a) For a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165, and having a useful life of 10 years or longer, the maximum credit allowed in any one tax year shall be five percent of the cost of the facility, but shall not exceed the tax liability of the taxpayer.

(b) For a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165, and having a useful life of less than 10 years, the maximum credit allowed in any one tax year shall be 50 percent of the cost of the facility divided by the number of years of useful life of the facility, but shall not exceed the tax liability of the taxpayer.

(4) To qualify for the credit the pollution control facility must be erected, constructed or installed in accordance with the provisions of subsection (1) of ORS 468.165.

(5) (a) The taxpayer who is allowed the credit must be the owner of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution or a person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property. As used in this paragraph, "owner" includes a contract purchaser; and

(b) The facility must be owned or leased during the tax year by the taxpayer claiming the credit and must have been in use and operation during said tax year.

(6) Regardless of when the facility is erected, constructed or installed, a credit under this section may be claimed by a taxpayer:

(a) For a facility qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, only in those tax years which begin on or after January 1, 1967.

(b) For a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165, only in those tax years which begin on or after January 1, 1973.

(7) For a facility qualifying under paragraph (a) or (b) of subsection (1) of ORS 468.165, the maximum total credit allowable shall not exceed:

(a) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 80 percent or more, 50 percent of the cost of such facility or facilities.

(b) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 60 percent or more and less than 80 percent, 40 percent of the cost of such facility or facilities.

(c) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 40 percent or more and less than 60 percent, 30 percent of the cost of such facility or facilities.

(d) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is 20 percent or more and less than 40 percent, 20 percent of the cost of such facility or facilities.

(e) If the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution is less than 20 percent, 10 percent of the cost of such facility or facilities.

(8) For a facility qualifying under paragraph (c) of subsection (1) of ORS 468.165, the maximum total credit allowable shall not exceed 50 percent of the cost of the facility.

(9) The credit provided by this section is not in lieu of any depreciation or amortization deduction for the facility to which the taxpayer otherwise may be entitled under this chapter for such year.

(10) Upon any sale, exchange, or other disposition of facility, notice thereof shall be given to the Environmental Quality Commission who shall revoke the certification covering such facility as of the date of such disposition. The transferee may apply for a new certificate under ORS 468.170, but the tax credit available to such transferee shall be limited to the amount of credit not claimed by the transferor.

(11) Any tax credit otherwise allowable under this section which is not used by the taxpayer in a particular year may be carried forward and offset against the taxpayer's tax liability for the next succeeding tax year. Any credit remaining unused in such next succeeding tax year may be carried forward and used in the second succeeding tax year, and likewise, any credit not used in that second succeeding tax year may be carried forward and used in the third succeeding tax year, but may not be carried forward for any tax year thereafter. Credits may be carried forward to and used in a tax year beyond the years specified in ORS 468.170.

(12) The taxpayer's adjusted basis for determining gain or loss shall not be further decreased by any tax credits allowed under this section. [1967 c.592 §9; 1969 c.340 §3; 1973 c.831 §9; 1977 c.795 §12; 1977 c.866 §11]

Note: Sections 14 and 15, chapter 795, Oregon Laws 1977, provide:

Sec. 14. (1) The deletion of paragraph (a) of subsection (7) of ORS 316.068 by section 10 of this Act and the amendments to ORS 316.097 and 317.072 by sections 11 and 12 of this Act apply to tax years beginning on or after January 1, 1977.

(2) The deletion of paragraph (b) of subsection (7) of ORS 316.068 by section 10 of this Act and the amendment to ORS 317.220 by section 13 of this Act are applicable as to property sold or disposed of in taxable years beginning on or after January 1, 1977.

(3) The amendments to ORS 307.405 by section 9 of this Act apply on or after January 1, 1977, to a facility under construction on or after January 1, 1975, by a corporation organized under ORS chapter 61 or 62 or under any predecessor to ORS chapter 62 relating to incorporation of cooperative associations. The amendments to ORS 307.405 do not apply to a facility commenced prior to December 31, 1980, by a person other than a corporation described in the preceding sentence if the facility is certified prior to December 31, 1982, and ORS 307.405 as it reads the day before the effective date [October 4, 1977] of amendments made by section 9 of this Act shall apply thereto.

Sec. 15. Nothing in this Act relieves a person or taxpayer of any obligation with respect to a tax, fee, fine or other charge, interest, penalty, forfeiture or other liability, duty or obligation accruing under the law repealed by this Act. After the operative date of such repeals, the Department of Revenue may undertake the collection or enforcement of such tax, fee, fine, charge, interest, penalty, forfeiture or other liability, duty or obligation.

SECTION III

SUMMARY
OF
ATTORNEY GENERAL OPINIONS

Summary of Attorney General Opinions Involving the
Pollution Control Facilities Tax Credit Statutes

<u>Date Issued & Type</u>	<u>Subject</u>	<u>Question</u>	<u>Answer</u>	<u>Explanation or Comments</u>
08/27/80 Informal	Cattle feedlot	Does a cattle feedlot fall under the exclusion in ORS 459.005(11)(b); materials used for fertilizer?	Yes	The definition of solid waste in ORS 459.005 excludes materials used for fertilizer or other productive purposes.
06/02/80 Hearing Officer's Order	Appeal of Denial of Request for Preliminary Certification for Tax Credit by Stimson Lumber Company	Department denied preliminary certification for the replacement of two boilers and installation of a larger one contending that the installation was intended to provide operational efficiency and that the applicant was already meeting standards.	Ordered that Request for Preliminary Certification be accepted.	Hearing Officer found that the new boiler installation met the substantial purpose test and found no evidence that the Legislature intended to exclude facilities already in compliance.
01/15/80 Formal	Vehicle conversion to liquified petroleum or natural gas	May a person receive tax credit for conversion of vehicles to use of liquified petroleum gas (LPG) or natural gas (NG)?	Yes, if meet substantial purpose test.	The taxpayer obtaining such tax credit must own a trade or business which would use the converted motor vehicles.
12/11/79 Informal	Reconstructed or replaced facilities	Is the complete reconstruction of an existing facility resulting in its replacement rather than repair eligible for tax credit certification, whether or not the facility has previously been certified, and received credit?	Yes	If an existing facility is in need of extensive repair and is replaced rather than repaired, the facility is eligible for tax credit but only to the extent of the excess replacement cost over the cost that would have been necessary to repair the existing facility.

<u>Date Issued & Type</u>	<u>Subject</u>	<u>Question</u>	<u>Answer</u>	<u>Explanation or Comments</u>
10/04/79 Informal	Van Pools	Is the Commission prevented from certifying for tax credit an automobile passenger van purchased by a private employer for the purpose of providing to his employees a mode of transportation to and from work in order to reduce the amount of air pollution and noise that would otherwise result from the use of individual automobiles?	Yes	Legislature only intended to cover pollution control facilities directly related to operation of the industry or enterprise seeking the tax credit.
06/04/79 Informal	Facilities required by law before 1967	Is the Commission prevented from certifying for tax credit a facility required by law before the passage of the original tax credit statutes in 1967?	No	The tax credit statutes do not state or imply that a facility is not eligible for tax credit because it is required to be constructed by virtue of any governmental law or rule in existence at any time.
11/06/78 Informal	Steam turbine generator	Is a generator, added to an already certified hog fuel boiler, eligible for tax credit if more wood waste is burned even though the original design capacity of the boiler is not exceeded?	No	The intent behind the tax credit statutes seems to be that the original productive capacity of the boiler is the base against which the determination is made as to whether the addition of the generator will increase the production of energy over the amount being produced by the boiler alone.
11/06/78 Informal	Dry kilns	Is a dry kiln installed with a hog fuel boiler to dry green lumber eligible for tax credit certification?	Yes, if meet substantial purpose test.	The statutes require that the substantial purpose of their construction be the reduction and utilization of solid waste.

111-2

Date Issued & Type	Subject	Question	Answer	Explanation or Comments
07/24/78 Informal	Leased facilities	May person leasing a pollution control facility obtain tax credit certification?	Yes	Based upon precedent established early in the program. However, to avoid tax credits being obtained by both the lessor and lessee, the lessee must provide DEQ with a copy of the complete and current lease agreement on the facility and a notarized statement from the lessor acknowledging that only one tax credit will be allowed for the facility and authorizing the lessee to take the credit.
06/14/78 Informal	Preliminary Certification	Under what circumstances may the Commission certify a facility when the applicant has never filed a request for preliminary certification on Department form number DEQ/TC-1-10/777	A verbal or written request may be accepted if made before construction commenced.	Statutes require the request be in a form prescribed by Department. Thus, the Department has flexibility in determining what constitutes a request.
		Note: Oregon Laws 1979, Chapter 802, Section 5, now allows the Commission to waive the filing of a request for preliminary certification if special circumstances render the filing unreasonable, and the facility would otherwise be eligible for tax credit.		
04/27/78 Informal	Preliminary Certification	Must a person proposing to apply for certification of a facility be <u>issued</u> a preliminary certificate of approval <u>before</u> commencing construction of the facility?	No	The statutes require the applicant to file a request for preliminary certification before commencing construction, but not that the preliminary certificate be issued prior to construction. Of course the applicant proceeds at his own risk. (Also see note under 6/14/78 opinion).

III-3

<u>Date Issued & Type</u>	<u>Subject</u>	<u>Question</u>	<u>Answer</u>	<u>Explanation or Comments</u>
04/27/78 Informal	Preliminary Certification	Must the facility be designed such that it can reasonably be expected to comply with the applicable statutes and regulations of the Department in order to be issued preliminary certification?	Yes	The facility must meet the "substantial purpose" test as well as be in accordance with, and necessary to satisfy the intents and purposes of the statutes, rules and standards referenced in the tax credit statutes. It is not merely required that the facility be designed to a substantial extent for the purpose of preventing controlling or reducing pollution.
04/27/78 Informal	Preliminary Certification	Can preliminary certification be denied on the grounds that the facility proposed is not a reasonable or cost effective solution to the pollution problem involved?	No	The tests set forth in the statute do not appear to include a requirement that the facility be the most reasonable or cost effective way to deal with the problem.
04/27/78 Informal	Preliminary Certification	If it is obvious on the face of a request for preliminary certification that construction was commenced before the request was filed with the Department, can the request be rejected as incomplete (legally flawed) and not processed further?	Yes (see note under 6/14/78 opinion)	The request can be rejected by DEQ as incomplete because not in compliance with ORS 468.175(1), however the applicant should be given prompt written notice of rejection. Of course, DEQ must be careful that it has not, by actions of staff, caused the applicant to understand that his request has been received informally by DEQ prior to construction.

III-4

Date Issued & Type	Subject	Question	Answer	Explanation or Comments
04/27/78 Informal	Preliminary Certification	Must a person applying for certification of a noise pollution control facility have filed a request for preliminary certification before commencing construction if construction began after January 1, 1977, and before October 4, 1977, (effective date of 1977 amendments)?	No	Intent was that facilities constructed after January 1, 1977 be eligible for tax credit. Preliminary certification not required until after October 3, 1977.
04/27/78 Informal	Hearings	Is the hearing allowed under ORS 468.175(5) a contested case type hearing?	Yes	Statute states that hearing shall be conducted in accordance with the applicable provisions of ORS Chapter 183.
04/01/77 Informal	Commencement of Construction	Does issuance of purchase orders for equipment to construct a facility by the applicant constitute the commencement of erection, construction or installation of the facility?	No	Such purchase orders, without more, would not constitute the commencement of erection, construction or installation of the facility.
03/22/77 Informal	Paved log deck	If the substantial purpose of paving a log deck was not for utilizing solid waste, could the EQC certify a portion of the facility proportional to the benefits received which were attributable to solid waste utilization?	No	The EQC could only certify a portion of a facility if the applicant could physically identify that portion of the facility whose substantial purpose was utilization of solid waste.

5-III-5

Date Issued & Type	Subject	Question	Answer	Explanation or Comments
03/03/76 Informal	Sale or exchange of facilities	What is the statutory responsibility of the EQC and DEQ for policing sales or exchanges of pollution control facilities granted tax credit and nonuse of such facilities for pollution control purpose?	None	Policing is by the tax authorities, Department of Revenue or County Assessors. Neither the EQC or DEQ has any obligation to affirmatively inquire whether the pollution control facility has been in use or operation for the intended purpose or has been sold or exchanged. However, if it does somehow obtain knowledge thereof, the EQC must then revoke the certificate.
02/23/76	Field burning alternatives	Are a straw baler and bale accumulator used to remove grass seed straw from fields prior to open burning eligible for tax credit certification?	No, unless designated under ORS 468.150.	ORS 468.150 states that after alternative methods for field sanitation and straw utilization and disposal are approved by the Field Burning Advisory Committee and DEQ, they will be eligible for tax credit certification. At the time only mobile field sanitizers have been given approval.
01/16/76 Informal	Application review period	Does the 120-day period, within which the EQC must take action, start running on the date of receipt of the application, or on the date the Department notifies the applicant that the application is deemed to be complete for processing?	Starts when application completed for processing.	Once the application filed is complete, the 120-day period would begin the run even before the Department notification of the applicant that the application was deemed completed by the Department.
01/16/76 Informal	Notice upon application denial	If an application is rejected by failure of the Commission to act within 120 days, is notice required?	No, but recommended.	Notice is not required but recommend it be given in written form to provide a basis for the beginning of the time period applicant has to appeal the denial.

9-III

<u>Date Issued & Type</u>	<u>Subject</u>	<u>Question</u>	<u>Answer</u>	<u>Explanation or Comments</u>
01/16/76 Informal	Appeal procedure upon application denial	If an application is rejected by failure of the Commission to act, is applicant's appeal procedure still operative and within what time frame?	Yes, applicant can appeal denial within statutory time frame.	If notice is given, the 30-day time period of 468.170(3) would apply. If notice not given, a 60-day period for taking of an appeal is probably applicable.
01/16/76 Informal	Determination of eligibility	When does determination and notice to applicant of extent of eligibility for tax credit need to be made?	At time final certificate is issued to applicant.	The determination of the full extent a facility is eligible for tax credit does not need to be made at the preliminary certification stage, although it should be determined to the extent possible at that time.
01/16/76 Informal	Withdrawal and resubmission of applications	Can an application be withdrawn and resubmitted at any time by an applicant?	Yes	An application could be withdrawn at any time, or resubmitted at any time by the applicant.
01/16/76 Informal	Incomplete applications	Can Department reject an application on the basis of incomplete information?	Yes	No action may be taken by the Department on an application for preliminary certification or tax credit certification until the application is complete. The Department should notify the applicant of incomplete application and in what respects it is incomplete.
12/19/75 Informal	Certificate approval	Can a tax credit certification be approved on condition?	No	The Commission must either unconditionally issue the certificate or deny it.
08/13/74 Informal	Motor vehicle pollution control equipment	Can the installation of propane carburetion equipment on company vehicles be certified for tax credit?	Yes, if meets substantial purpose test.	It might well come within the definition of pollution control facility if company can show that a substantial purpose of its installation is for air pollution control.

III-7

<u>Date Issued & Type</u>	<u>Subject</u>	<u>Question</u>	<u>Answer</u>	<u>Explanation or Comments</u>
07/09/74 Informal	Agricultural facilities	Can facilities used for agricultural operations be certified for tax credit even though most agricultural operations are exempt from Oregon's air pollution control laws?	Yes	There is no language in the tax credit statutes which specifically excepts such facilities when used for agricultural operations from the benefits of these statutes. The disposal or elimination of air pollution by a facility in an agricultural operation may be rewarded in the form of a tax credit under one statute even though of control of such air pollution is denied by another statute.
01/03/74 Informal	Pressure backflow prevention facilities	Can reduced pressure backflow prevention devices and doublecheck valve installations used to prevent industrial wastes from entering the water supply of the city of Portland be certified for tax credit?	Yes, if meets substantial purpose test.	The water in a municipal water system qualifies as waters of the state and therefore pollution of them constitutes water pollution, within the definition of tax credit statutes. However, private waters which do not combine or effect a junction with natural surface or underground waters are not included within the definition of waters of the state as used in the definition of water pollution and therefore devices used to protect such waters from pollutants are not eligible for tax credit.

8-III

Date Issued & Type	Subject	Question	Answer	Explanation or Comments
11/07/73 Informal	Sale or exchange of a facility	Does the merger of a wholly-owned corporate subsidiary corporation into the parent corporation under Oregon corporation law constitute a sale, exchange, or other disposition of a facility within the meaning of ORS 316.0977	NO	Title to the facility is changed from the subsidiary to the parent corporation by operation of law and without any transfer document. Therefore, revocation of the tax certification and application for a new certificate is not required. However, a notation should be made on the certificate that a merger has occurred giving the names and date it occurred.
01/12/72	Sale or exchange of a facility	What is the procedure to be followed in transferring a tax credit certificate from one holder to another?	The Commission should revoke the certificate and grant a new one to the new holder for the balance of the available credit.	This procedure is set forth in ORS 307.405, 316.097, and 317.072.
09/01/70 Informal	Compliance status of facility	Must a facility claimed for tax credit be in full compliance with the applicable regulations of the EQC in order to qualify for certification?	No	A facility does not have to be "perfect" nor totally eliminate all pollutants before certification is authorized. It need only be used for the substantial purpose of pollution control and at least prevent or reduce pollution. DEQ does have discretion to determine if a facility meets the intents and purposes of its statutes and rules. Certainly if a facility does not meet established rules, it is an important factor for the Commission to consider in arriving at whether or not it should be granted certification.

6-III-9

Date Issued & Type	Subject	Question	Answer	Explanation or Comments
Unknown Informal	Facility not in operation	Is a firm who has constructed or installed pollution control facilities eligible for tax relief certification even though the facilities are not being operated to control or prevent pollution?	Yes, if applicant gives evidence that they will be operated.	A pollution control facility not yet in operation may be certified by the Commission if it finds it will be placed in operation. The word "will" as used in the statutes does not mean capability, ability, or could. Will denotes certainty, not speculation. The Commission must find, therefore, that the facility will at least operate to prevent, control or reduce pollution.

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01-111

SECTION IV

SUMMARY
OF
PREVIOUSLY CERTIFIED FACILITIES

PREVIOUSLY CERTIFIED FACILITIES

Following is a listing by program of facilities which have previously been certified for tax credit by the Environmental Quality Commission. The list is in order of most frequently certified followed by one-of-a-kind certifications. This list is meant only as a guideline for reviewers on what has been certified previously, and not as an exact list of eligible facilities.

October 1980

Air Quality

<u>Type of facility</u>	<u>No. Certificates Issued</u>
Baghouse	93
Scrubber	69
Scrubber towers	2
Dust collectors/filters	47
Conveyor systems/hoppers/bins	26
Wigwam burner modifications	25
Monitors/transmitters/recorders	23
Hoods/ductwork/exhaust fans	22
Boilers (additions/conversions/modifications)	22
Fume incineration/collection/control	20
Orchard fans	16
Orchard heating systems	6
Orchard overtree sprinkler systems	10
Cyclones	15
Black liquor oxidation system	13
Buildings/enclosures	13
Electrostatic precipitators	10
Hogged fuel handling system	10
Wood waste residue processing, handling, and storage system to eliminate wigwam burner	9
Paving	8
Multiclone	6
Recovery furnace	5
Digester pumpout system	5

Air Quality

<u>Type of facility</u>	<u>No. Certificates Issued</u>
Samplers/sampling platforms	5
Incinerator	5
Fly ash collectors/handling system	5
Balers/refuse compactors	4
Afterburner incineration	4
Mist eliminator	2
Boiler incineration	2
Gas chromatograph	2
Veneer dryer air curtains	2
Flue gas oxygen analyzer	3
Lime kiln modifications	3
Kraft mill noncondensable gas incineration	2
Hydraulic log carriage (bring boiler into compliance by reducing steam load) (T-455, T-419)	

Air Quality
One-of-a-Kind Certifications

<u>Facility</u>	<u>Application No.</u>
Carbon adsorption system on hafnium process stream	T-84
PS 300 oil burner	T-578
Incinerator roof	T-42
Sand classifier for cinder collectors on hogged fuel boilers	T-657
Evaporator vapor vacuum system	T-18
Overfire fan on hogged fuel boiler	T-148
Electric power feeder for electric motor to move air through Becker Sandair Filter	T-718
Variable speed drive for induced draft fan on hogged fuel boiler	T-678
Clay unloading system	T-653
Dust transportation system from plant site to landfill (lug loader, lug loader containers, misc. metal work)	T-633
Rader tube control device	T-593
Roof vent stack extensions	T-522
Wet centrifugal wood dust cleaning system	T-521
Super sucker industrial vacuum loader	T-824
Air Compressor and motor	T-446
Tri-Mar separators as pretreatment devices for pure chlorination scrubber	T-347
Lime mud filter system	T-1207
Elevator in kiln dust scoop building for reintroducing collected dust into kiln	T-203
Electric crane and semi-automation of impregnation tank cover mechanism	T-202
Washing machine and gas fired batch oven for grease removal from wheel hubs	T-195
Liquid propane gas standby facility	T-192

Air Quality
One-of-a-Kind Certifications

<u>Facility</u>	<u>Application No.</u>
Spray booths to remove paint overspray particles from air	T-191
Inert gas closed ovens for product drying	T-230
Introduction type steel melting furnaces	T-31
Spark suppression system	T-1189
Ore buckets used in pot room	T-1215
Transformer to supply power to recovery furnace electrostatic precipitator	T-1212
Matrix control system for rapping sequences and cycles in recovery furnace electrostatic precipitator	T-1213
Backup fan for acid plant overgas system	T-1224
Heat exchanger	T-1263
Aerator, extended aeration lagoon (certified air and water)	T-15
Atomic absorption spectrophotometer (certified air and water)	T-311
Continuous counter current belt pulp washers (certified air and water)	T-995

Water Quality

<u>Facility</u>	<u>No. Certificates Issued</u>
Pumps/sumps/motors/pipelines/associated equipment	44
Wastewater collection/treatment/recycle/disposal	31
Animal waste disposal	28
Screens/clarifiers/filters/piping/centrifuges	21
Tanks	14
Instrumentation	10
Glue wastewater recycling	8
Settling basin/pond/tank	8
Log handling	8
Chemical recovery and treatment/steam stripping	8
Lagoons	7
Wood fiber removal equipment	7
Aerators/aeration basins	7
Secondary treatment facilities	6
Structures/buildings/foundations	6
Spent liquor incineration	5
Spill containment	3
Cooling Tower (T-679, T-813)	2
Outfall lines (T-535, T-557)	2
Air aspirating units (T-168, T-173)	2
Primary treatment facilities (T-78, T-80)	2
Lime storage/slaker (T-556, T-836)	2
Holding pond (T-123, T-1179)	2
Wastewater field spray irrigation (T-335, T-617)	2
Stormwater treatment/diversion (T-1008, T-698)	2

Water Quality
One-of-a-Kind Certifications

<u>Facility</u>	<u>Application No.</u>
Extension of boiler house (for boiler required to eliminate contaminated discharges)	T-829
Boiler and ancillary piping (additional energy supply needed to eliminate 1000 pound per day ammonia)	T-832
Log deck paving	T-588
Zirconium vessel and related equipment	T-827
Waste solids storage pond	T-102
Chemical concentrator (wastewater evaporator to eliminate discharge)	T-109
Standby centrifuge screw	T-132
Waste solvent disposal	T-193
Crystalizer and dryer for production of ammonium sulfate	T-343
Enlargement of storage pond for solids removal	T-351
Grilled pit for catching dirt and petroleum waste	T-315
Load cell and scale for SO ₂ cylinders	T-279
Diversion dam for flush water	T-540
Lined pond to prevent groundwater contamination	T-552
Conversion of steam veneer block heating to hot water recycle	T-1167
Vapor compression reevaporation system	T-1190
Lining inserted in clay sewer of bleach plant effluent system	T-1214
Boiler ash handling system	T-1205
Railroad car unloading connector for control of clay spillage	T-1209

Water Quality
One-of-a-Kind Certifications

<u>Facility</u>	<u>Application No.</u>
High pressure showers for screens preceding settling basin	T-1261
Steam and brush vegetable peeling system to replace caustic peel system, resulting in greater BOD removal	T-1152
Aerator, extended aeration lagoon (certified air and water)	T-15
Atomic absorption spectrophotometer (certified air and water)	T-311
Continuous counter current belt pulp washers (certified air and water)	T-995

Solid Waste

<u>Facility</u>	<u>No. Certificates Issued</u>
Wood waste fired boilers/heat sources (e.g., for vener dryers)	19
Log chippers/hogs	13
Waste paper balers	6
Paving of log decks	5
Newsprint deinking	3
Steam turbine electric generators	2
Particleboard manufacturing plants	2

Solid Waste
One-of-a-Kind Certifications

<u>Facility</u>	<u>Application No.</u>
Land	T-646
Bale accumulator/loader (grass straw baler)	T-646
Shredded tire storage/metering system	T-968
Grass straw mulching facility	T-1170
Sawdust bin and cyclone	T-1193
Air heater (veneer dryer heat source)	T-1222
Line washing system	T-577
Bark conversion plant	T-623
Bark conversion plant expansion	T-1099
Aggregate reclaimer (from concrete)	T-1012
Hog fuel storage	T-1193
Classifier	
Truck/trailer	
Wastepaper cleaning/pulping	
Wood waste material dryer	

Noise

<u>Facility</u>	<u>Application No.</u>
Extension of building over bean washing area	T-1038
Acoustical enclosure for warehouse refrigeration compressors	T-1169
Relocation of chip fractionation facility, installation of new cyclone and larger blower, construction of a sound insulated shed	T-1201

MF150 (2)

SECTION V

GUIDELINES
FOR
PRELIMINARY CERTIFICATION

GUIDELINES ON PRELIMINARY CERTIFICATION FOR TAX CREDIT

INTRODUCTION

This guideline is intended to serve as a reference document for staff involved with preliminary certifications for tax credit. The purpose of the guideline is to help assure that preliminary certifications are consistent and are in accordance with the intents of the tax credit statutes, policies and procedures.

It is the POLICY of the Department and the Commission to inform people at the earliest opportunity of the availability of tax credits for pollution control facilities. The purpose of providing this information is to ensure that no project we are aware of fails to receive tax credit because the owner was unaware of the program, or the requirement to request preliminary certification prior to commencing construction.

PURPOSE OF PRELIMINARY CERTIFICATION

The purpose for requiring preliminary certification prior to construction is twofold:

1. It allows the agency to review plans and specifications and require modifications before a facility is constructed to reasonably ensure it will meet regulations and standards.
2. It lets an applicant know before a major commitment of resources is made to construction, whether a facility will be eligible for tax credit.

GENERAL REQUIREMENTS

All requests for preliminary certification for tax credit are subject to the following considerations:

1. Applicants desiring to request preliminary certification must complete a "Notice of Intent to Construct and Request for Preliminary Certification for Tax Credit" (DEQ Form TC-1/10/79). The request must be submitted to the Department on the form provided along with plans and specifications prior to the commencement of construction or installation of the facility (ORS 468.175). Applicants should be informed in writing that if they proceed to construct prior to Department approval, they do so at their own risk that the project, or portions thereof, may be ineligible for tax credit.

For facilities constructed on or after October 3, 1979, the Environmental Quality Commission (EQC) may waive the requirement for preliminary certification if special circumstances render the filing unreasonable and the facility would otherwise be eligible for tax credit. The "special circumstances" are not defined and will be reviewed on a case-by-case basis.

The request for waiver must be formally presented to the EQC at a regularly scheduled meeting.

2. Upon receipt of a request for preliminary certification, the Division or Region shall notify the applicant of having received the request (DEQ Form TC-4-3/78).
3. In the event the request is incomplete, unsigned or needs additional information, the form shall be returned or the additional information requested within 30 days from original receipt. (ORS 468.175(2)) (DEQ Form TC-5-3/78)
4. The Department has 60 days from the date of receipt of a completed request to either grant preliminary certification or obtain a denial order from the EQC at a regularly scheduled meeting (ORS 468.175). The denial order must be obtained within the 60-day period to avoid automatic approval.

If a request is to be denied, the applicant shall be notified in writing and be given an opportunity to withdraw the request.

Requests that are not processed within the 60-day period are automatically approved (ORS 468.175(4)). Should this occur, a facility that may not reasonably be expected to comply with Commission regulations and standards could become eligible for tax credit. However, the construction must comply with the plans, specifications and any corrections or revisions thereto, if any, previously submitted (ORS 468.175(4)). Therefore, processing must be within the 60-day period allowed.

5. The preliminary certification process is the only time the Department can require that plans and specifications be modified to produce a facility that can reasonably be expected to comply with EQC regulations and standards. Should a request be submitted for a "marginal" facility, it should be returned for modification. Construction must be in strict accordance with the submitted plans and specifications (ORS 468.175(4)).
6. If it is known that a facility was under construction prior to the company making a request for preliminary certification, then the Department can refuse to accept the request. This refusal should be in writing and also inform the company that they may seek a waiver from the EQC (see 1 above). Only the EQC can deny a request so the refusal letter should be worded carefully and not include the word deny.
7. A "Land Use Compatibility Statement" (DEQ form TC-12-10/79) is required before preliminary certification can be issued for noise pollution control facilities, or solid waste, hazardous wastes or used oil utilization facilities (ORS 197.180 and DEQ/DLCD Agreements).

PRELIMINARY CERTIFICATIONS

Once a request for preliminary certification has been deemed to be complete (form completed and signed, plans and specifications, or any other requested information has been submitted and is acceptable), the formal review and preliminary certification process can begin. Staff must consider the following in determining whether or not a proposed facility will be eligible for tax credit:

1. A substantial purpose of the proposed facility must be to prevent, control or reduce air, water or noise pollution or to utilize solid wastes, hazardous wastes or used oil (ORS 468.155).

A "substantial purpose" does not imply primary or exclusive purpose. There can be several substantial purposes for construction of a facility (e.g., pollution control, economic benefits, energy savings, worker protection, reduced maintenance). The burden of proof should be on the applicant to show at the time of preliminary certification that a substantial purpose is pollution control. Technical reports and test data should be submitted. The reviewer should document the pollution problem, its significance, and the contribution (or likelihood thereof) the proposed facility will make toward a solution.

2. Facilities utilizing solid wastes must produce as an end product a usable source of power or other item of real economic value; and the end product must be competitive with an end product produced in another state. Hazardous waste and used oil facilities are also eligible and must meet the same criteria as solid waste facilities (ORS 468.165(c)(A)).
3. Subsequent additions to a resource recovery facility which will increase the production of useful materials or energy (e.g., steam, power) are also eligible. The base facility must have been previously certified for tax credit or installed prior to January 1, 1973 and would have otherwise qualified (ORS 468.155).
4. In addition to other requirements, new eligibility criteria apply to solid waste, hazardous waste and used oil facilities constructed on or after December 31, 1980. These facilities must meet one or more of the following: (ORS 468.170(8))
 - a. The facility is necessary to assist in solving a severe or unusual solid waste, hazardous waste or used oil problem.
 - b. The facility will provide a new or different solution to a solid waste, hazardous waste or used oil problem than has been previously used, or the facility is a significant modification and improvement over similar existing facilities.

- c. The Department has recommended the facility as the most efficient or environmentally sound method of solid waste, hazardous waste or used oil control.

On December 12, 1980, the EQC adopted policies pertaining to the above requirements. (Refer to memo of December 24, 1980, from Bill Dana, attached.)

5. Facilities that are not eligible for tax credits are the following (ORS 468.155 (2)):

Air conditioners (includes heating systems)

Septic tanks or other facilities for human waste, nor any property installed, constructed or used for the moving of sewage to the collecting facilities or a public or quasi-public sewerage system

Portions of any solid waste, hazardous waste or used oil facilities which make an insignificant contribution to the purpose of utilization of solid waste, hazardous wastes or used oil. The following items are specifically excluded: office furniture and buildings, parking lots and road improvements, landscaping, external lighting, company signs, art work and automobiles.

In general, equipment installed to protect workers in their workspace (e.g., OSHA, Worker's Compensation requirements) is not eligible for tax credit.

6. A facility receiving tax credit for energy conservation is not eligible for pollution control tax credit on the same equipment (ORS 316.142 (2)).
7. When the formal review is completed, the Region or Division will prepare an approval letter (DEQ Form TC-3-3/78) granting the preliminary certification. The letter must include either a listing of or adequately reference the specific equipment included in the facility to be covered by the preliminary certification. If only a portion of a project or part of a single component is eligible, the portion shall be listed.

The approval letter should also include any request for additional information, justification or other documentation to be included when the final application for tax credit is submitted.
8. Applicants will frequently request a judgment on the anticipated eligibility of a proposal even before the request for preliminary certification is received. These informal requests generally occur during plantsite visits, compliance meetings, or by phone.

At the earliest opportunity, the applicant must be advised of the preliminary certification requirements. The applicant should be informed in writing of any device or portions of a facility that do not appear eligible.

9. Final tax credit certificates are granted by the EQC with percentages of the actual cost allocable to pollution control according to ORS 468.190.
10. A tax credit certificate can be revoked by the EQC if the facilities are not being operated to reduce air, water or noise pollution or solid or hazardous wastes or to control used oil. The certificate can also be revoked if it was obtained by fraud or misrepresentation.

CS:g
MG131

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

TO: Regional Offices

DATE: December 24, 1980

FROM: Bill Dana

Management Services Div.
Dept. of Environmental Quality

SUBJECT: Solid Waste Tax Credits -- NEW POLICY

R E A I V E D
DEC 31 1980

Background

December 31, 1980, is a significant date relative to the Department's tax credit program for solid waste management facilities. On that date legislation takes effect that apparently was intended to significantly reduce the number and types of facilities being certified for tax credit as solid waste pollution control facilities.

We believe that certain classes of facilities should be restricted more than others. Some types of waste are now commonly recycled or used for productive purposes and the availability of a tax credit does not seem to be a necessary incentive. With other materials, potential profits are less obvious and tax credits may be a major incentive. To provide guidance in implementing the new statutory requirements, policy statements were drafted for the Commission's review and approval. This memo is to advise you that the following policy was approved by the EQC on December 12, 1980, and is now in effect:

Statute Summary

ORS 468.170(8)(b) states, in part, that a facility commenced after December 31, 1980, and prior to December 31, 1983, shall only be certified for tax credit if it meets one or more of the following conditions:

1. The facility is necessary to assist in solving a severe or unusual solid waste, hazardous waste or used oil problem;
2. The facility will provide a new or different solution to a solid waste, hazardous waste or used oil problem than has been previously used, or the facility is a significant modification and improvement of similar existing facilities; or
3. The Department has recommended the facility as the most efficient or environmentally sound method of solid waste, hazardous waste or used oil control.

Policy Statements

1. In determining if a facility provides the most efficient or environmentally sound method of producing energy or a salable product

from solid waste, the Department shall consider the facility's cost effectiveness and the cost to the public of diverting material from the solid waste stream. For a few waste types, the Department can identify facilities or technologies which are the most efficient or environmentally sound. Specifically, the reprocessing of used motor oil into clean fuel or lubricants and the distillation of waste solvents to recover a clean product. For most waste types, however, the Department is not prepared to name a specific technology as the most efficient or environmentally sound. In these circumstances, judgement shall be made on a case-by-case basis.

2. Wood waste, with a few exceptions, is no longer considered to be a severe solid waste problem. Accordingly, facilities associated with wood waste utilization (e.g., hog fuel boilers, heat sources, hogs, chippers, particleboard plants, log yard paving and assorted hog fuel handling equipment) will normally no longer be certified. Also, the Department will not consider any of the facilities described above to be a new or different solution to a solid waste problem.
3. Waste cardboard and newsprint no longer represent a severe disposal problem. Balers, deinking and repulping equipment are no longer a new or different solution.
4. Grass straw, plastics, and tires, especially large truck tires, continue to represent severe disposal problems.
5. Virtually any hazardous waste management facility may be considered to be a new or different solution, since none have been certified to date.
6. "Commenced" means the date construction started, rather than the date the facility was placed in operation. (Note that a facility that has already received Preliminary Certification, but where construction has not yet started, could lose its eligibility for tax credit. I will be sending out some more information regarding this in the next few days.)

The Regional Agreements state that Preliminary Certification may be granted by the Regions. I don't care who signs the letters, but in view of these new requirements and evolving policy, it is particularly important that we communicate and agree on what action to take before any letter goes out. Clearly, the time to say "No," if appropriate, is before construction begins and a company spends its money.

I recognize that the primary responsibility for getting information out is mine. I will try to keep you up to date. If you have any questions, suggestions, concerns, etc., please don't hesitate to give me a call.

SECTION VI

METHOD
OF
DETERMINING PERCENT OF COST ALLOCABLE
TO
POLLUTION CONTROL

ALLOCATION OF COSTS TO POLLUTION CONTROL

Prior to determining what portion of the actual cost of a facility is allocable to pollution control, it must first be determined what part of the applied for facility cost will be the final certified cost appearing on the tax credit certificate. The cost of discrete parts of the facility that do not have pollution control as a substantial purpose for their installation, or are otherwise ineligible for tax credit, should be subtracted from the total facility cost, and the remainder entered on the tax credit certificate. Further, if the facility replaces an existing facility that could be repaired to meet pollution control requirements then the certified cost of the replacement facility should be reduced by the cost of repair.

The next step is to determine what portion of the actual facility cost, appearing on the tax credit certificate, is properly allocable to pollution control. Note that solid waste facilities are exempt from this percent allocable determination until January 1, 1984.

ORS 468.190(2) sets out five percentage ranges and all eligible facilities must be placed in one of these ranges. The ranges are:

- (a) Eighty percent or more.
- (b) Sixty percent or more but less than 80 percent.
- (c) Forty percent or more but less than 60 percent.
- (d) Twenty percent or more but less than 40 percent
- (e) Less than 20 percent.

Thus if 80 percent or more of the actual cost of a facility is allocable to pollution control, the owner is eligible for the maximum tax credit available under the corporate excise tax, personal income tax, or ad valorem tax laws of the State. If the facility is less than 20 percent allocable, it still receives tax credit but at the minimum rate available under State tax laws. Refer to ORS 307.405, 316.097, or 317.072 for specifics on tax credits available.

In establishing the portion of costs allocable to pollution control, ORS 468.190(1) sets forth five factors that must be considered in this determination. These factors are:

- (a) If applicable, the extent to which the facility is used to recover and convert waste products into a saleable or usable commodity.
- (b) The estimated annual percent return on the investment in the facility.

- (c) If applicable, the alternative methods, equipment and costs for achieving the same pollution control objective.
- (d) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.
- (e) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution.

Historically, the Department has found factor (b) to be the most useful and straightforward in making the percent allocable determination. Factor (d) is usually covered when factor (b) is considered. Factor (c) has been used occasionally.

What follows is a discussion and examples of how the factors most often considered by the Department are used to determine the portion of costs allocable to pollution control.

The estimated annual percent return on the investment in the facility--
This is the most commonly used factor and probably the most important. As used by the Department, annual percent return on investment equals the net annual income before taxes divided by the actual cost of the claimed facility. In equation form, the relationship is displayed as follows:

$$\%ROI = \frac{\text{Net Income}}{\text{Facility Cost}} \times 100$$

% ROI = Annual percent return on investment before taxes.

Net Income = Total annual income from claimed facility before taxes minus operating expenses, as determined for the first full year of normal operation.

Facility Cost = Actual certified cost of claimed facility minus salvage value of any facilities removed from service.

"Before taxes" means prior to assessment of federal and state income taxes.

"Operating expenses" means costs of operating claimed facility for the first full year of normal operation including labor, utilities, interest, property taxes, insurance, and other cash expenses, less any savings in expenses attributable to installation of the facility. Depreciation is not an allowed operating expense.

"Total annual income from claimed facility" means all income derived by sale or re-use of recovered materials or energy or any other means, as determined for the first full year of normal operation.

"Salvage value" means the value of a facility at the end of its useful life minus what it costs to remove it for disposal. Salvage value can never be less than zero.

Once the percent return on investment has been calculated from the equation above it must be related to the five percentage ranges for percent allocable to pollution control. The following table is used to accomplish this relationship:

Table 1

<u>Percent ROI (Pre-tax)</u>	<u>Percent of Actual Cost of Claimed Facility Allocable to Pollution Control</u>
25% or more	less than 20%
19% to 24%	20% or more but less than 40%
13% to 18%	40% or more but less than 60%
7% to 12%	60% or more but less than 80%
less than 7%	80% or more

Table 1 is based upon the assumption that a 25% ROI is generally an adequate return on investment before taxes over the long term for most companies to justify an investment without the added incentive of a tax credit. The Department developed the 25% ROI figure from data presented in the 1979 Statistical Abstract of United States, Table No. 944, "Manufacturing Corporations -- Sales, Profits, and Stockholders' Equity: 1960 to 1978." For the five year period 1974 through 1978, the average percent return on net worth before taxes for all manufacturing corporations was 22.6%. The Department raised the figure to 25% for use in the tax credit program for two reasons: (1) to account for the long term inflationary trend in the economy; and (2) to account for the somewhat higher ROI expected by most companies to justify investment in new facilities.

The Statistical Abstract is updated annually. At least on a biennial basis Table 1 will be updated to reflect the latest information on ROI.

An example of the use of % ROI to determine percent of cost allocable to pollution control follows:

Example 1: A pulp and paper mill installs a new sulfur dioxide absorption system on a recovery furnace. The actual cost of the facility is \$1,146,513 based upon an accountant's certification.

Sulfur dioxide is recovered by the facility and has a value of \$468,000 per year.

Operating expenses are as follows on annual basis:

Labor	\$ 9,000
Utilities	52,000
Maintenance	34,000
Property tax	20,270
Insurance	<u>1,720</u>
Total	\$116,990

The salvage value of the previous system is zero.

Net Income = \$468,000 - \$116,990 = \$351,010

Facility Cost = \$1,146,513

$$\%ROI = \frac{\$351,010}{\$1,146,513} \times 100 = 30.6\%$$

Based upon Table 1, the percent of the cost of this facility that is allocable to pollution control is less than 20%.

The alternative methods, equipment and costs for achieving the same pollution control objective -- This factor is fairly self explanatory and is probably best illustrated by specific examples.

Example 1:

The applicant owns and operates a veneer plant at Medford and a plywood plant at White City.

The facility described in this application consists of log vats, boiler, heat exchanger, sumps, pumps, piping and debris removal equipment, costing \$445,141.

This project is a series of log heating vats. The heating of logs by steam or hot water has several benefits to the production of plywood. The quality of all types of veneer is improved, veneer production is increased, less heat is required to dry the veneer and of special importance in this instance, allows the otherwise difficult peeling of hemlock and white fir. Log vats are in use in many plywood plants because of these benefits.

The log vats were installed in the green veneer plant at Medford. The veneer is dried and made into plywood at the plywood plant in White City. The emission reductions resulting from the steam vats in Medford would be realized at the veneer dryers in White City.

The plywood plant operates three veneer dryers in White City. Dryers #1 and #2 are controlled by scrubbers. Dryer #3 can comply with the emissions limits without a scrubber if it dries only hemlock or white fir. These species emit significantly lower amounts of hydrocarbons than the Douglas fir veneer processed in Dryers #1 and #2.

The air quality benefits from this project are the increased use of the low emitting hemlock and white fir veneer. The company estimates approximately 45% of the logs processed through the vats will be hemlock and white fir. This will enable Dryer #3 to process only hemlock and white fir and to comply with Department opacity limits.

The economic benefits to the company from the log vat installation are the ability to use the more readily available and lower cost hemlock and white fir logs, increased veneer quality and lower dryer heating costs. These benefits alone have proved adequate for other facilities to justify the cost of installation of log vats.

The scrubbers designed by plant personnel and installed on Dryers #1 and #2 have enabled these dryers to meet the opacity limits when drying Douglas fir, a high emission rate species. The scrubber installed on dryer #2 has been recommended for tax credit certification (T-1230). This scrubber has demonstrated an ability to comply with the veneer dryer opacity limit. The cost of this scrubber was approximately \$60,000. ORS 468.190(1)(c) requires the Commission to consider the alternatives to achieve the same objective. Since the scrubber on Dryer #2 can comply with the emission limits, a scrubber on Dryer #3 is considered a viable alternative.

The \$60,000 cost is approximately 14% of the total facility cost. Therefore, a certificate for less than 20% of the total cost should be issued.

Example 2:

The facility described in this application consists of a Clark 350 unit Flow-Matic Bin.

The applicant uses wood waste boilers to supply steam for operation of the plywood plant. Some of the fuel is generated by the plant but additional fuel must be purchased to meet steam demands.

The fuel generated by the plant was stored in a bin, but the bin was not large enough to store the purchased fuel. This bin was in a state of disrepair. Instead of repairing and expanding the old bin, the company replaced it with a larger bin which is the facility in this application.

The new bin now stores all of the fuel generated by the plant and the purchased fuel. When the excess fuel was stored outside the bin the moisture content increased from the rain and snow. This caused poor combustion, increased boiler emissions and increased the amount of fuel used, and

resulted in intermittent opacity violations. After installation of the new bin, the boiler has demonstrated and maintained compliance with the opacity and grain loading emission limits.

The company has requested the full amount of the bin, conveyors, classifier, foundation, and other installation costs of the new larger bin. The Department feels that since the conveyors are required to move the fuel to the boiler and the classifier is necessary to prevent bridging in the bin these items are process equipment and necessary for plant operation. The combined cost of the conveyors and classifier (\$80,511.99) is not allocable to pollution control and should be deducted from the certified cost (\$501,310.75 - \$80,511.99 = \$420,798.76).

Two methods were used to determine the portion of the new bin cost which was necessary to house the purchased fuel. The company submitted the cost of a bin equivalent to the old bin. The cost of such a bin was estimated to be 65% of the cost of the new bin. On this basis about 35% of the cost of the new bin was necessary to house the purchased fuel. The old bin was approximately 72% of the size of the new bin. Thus, 28% of the capacity of the new bin is necessary to house the purchased fuel. Both of these methods fall in the range of 20% to 40%. Therefore, it is concluded that more than 20% but less than 40% of the revised cost of the new bin (\$420,798) is allocable to pollution control.

Example 3:

A particle board plant installs a new scrubber system to collect wood fibers in exhaust gas. The actual cost of the facility is \$113,500 based upon an accountant's certification.

The wood fibers recovered are returned to the process, but the value of recovered material is less than the operating cost of the facility. Therefore, ROI is zero.

However, the new facility replaces an existing pollution control facility that is removed from service. This facility could have been reconstructed to achieve the same pollution control requirements as the new facility at a cost of \$79,500.

Since the same pollution control objective could have been achieved by reconstruction of the existing facility, only 70% (\$79,500 ÷ \$113,500) of the cost of the new facility is allocable to pollution control. Therefore, a certificate for \$113,500 with more than 60% but less than 80% of the cost allocated to pollution control should be issued.

Any other factors which are relevant in establishing the portion of the actual cost allocable to pollution control -- This factor is, of course, used when in the judgment of the Department none of the other listed factors is adequate to determine the percent of cost allocable. Common sense must be employed to determine on a case-by-case basis what factor is most useful in establishing percent of cost allocable. An example follows:

The facility described in this application is an overtree sprinkler system used for both irrigation and frost protection of 12 1/2 acres of pear orchard.

The claimed facility serves to provide frost protection for 12 1/2 acres of trees by replacing the need for some 400 oil fired orchard heaters. In addition, the facility provides irrigation by sprinklers instead of by an existing, more than adequate, irrigation system.

The Environmental Quality Commission has previously certified overtree sprinkler systems in the Medford area for the elimination of the smoke and soot air pollution from orchard heaters.

In these previous applications, the percent of the cost allocable to pollution control was based on the percentage of total operating time that the overtree sprinkler system was used for frost protection. The systems are typically used approximately equal time for frost protection and irrigation in the Medford area.

It is concluded that the facility operates to a substantial extent for reducing atmospheric emissions and that the portion of the cost allocable to pollution control should be 40% or more but less than 60%.

MB6 (1)

SECTION VII

FORMS AND INSTRUCTIONS

FOR

APPLICANTS

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY
POLLUTION CONTROL FACILITY TAX RELIEF IN OREGON

SECTION I

Introduction

The state of Oregon, through legislation originally adopted in 1967, seeks to encourage the construction, installation and use of facilities to prevent, control or reduce air, noise or water pollution and to utilize solid waste, hazardous wastes and used oil by providing tax relief for persons who do so. In order to actually obtain the allowed tax relief, the following steps must be taken:

- A. Prior to construction, a "Preliminary Certification for a Pollution Control Facility" must be requested from the Department of Environmental Quality (see Section IV, subsection A for facilities exempt from this requirement).
- B. Upon completion of the approved construction, a "Pollution Control Facility Certificate" must be obtained from the Department of Environmental Quality.
- C. An irrevocable election must be made to take the allowed credit, either: (a) as a credit against income or excise taxes; or (b) as an exemption from ad valorem taxes on the certified facility.
- D. The "Pollution Control Facility Certificate" must be filed with the appropriate taxing agency (based on the above mentioned election) in accordance with their requirements.

The information which follows is intended to explain the various aspects of the available tax relief, identify the qualifications which must be met, and prescribe the procedures for obtaining the necessary certificate from the Department of Environmental Quality.

SECTION II

Certification Requirements

A. Air, Noise and Water Pollution Control Facilities

The tax relief law permits the Department of Environmental Quality to certify a facility which operates to a substantial extent for the purpose of preventing, controlling or reducing air, noise or water pollution. For each certificate issued, the Department is required to certify the actual cost of the facility and a percentage of the actual cost which can be properly allocated to the prevention, control or reduction of pollution. Specifically, the Department must certify whether the percentage of the actual cost so allocated is 80 percent or more, 60 percent or more and less than 80 percent, 40 percent or more and less than 60 percent, 20 percent or more and less than 40 percent, or less than 20 percent.

B. Waste Utilization Facilities

The tax relief laws as amended in 1973 and 1975, permit the Department of Environmental Quality to certify a solid waste facility, the substantial purpose of which is to utilize solid waste (as defined in ORS 459.005). The 1979, amendments allow certification of hazardous wastes and used oil facilities, which meet the same requirements as solid waste facilities.

Such facilities, to be certified, must produce as an end product a usable source of power or other item of real economic value; and the end product must be competitive with an end product produced in another state. The 1977, amendments expand the definition of a solid waste facility to include additions to facilities which will increase the production or recovery of useful materials or energy over the amount being produced or recovered by the original facility.

For each certificate issued, the Department is only required to certify the actual cost of the facility which utilizes such solid waste, hazardous wastes, or used oil.

C. Field Sanitation and Straw Utilization and Disposal Facilities

After alternative methods for field sanitation and straw utilization and disposal are approved by the Advisory Committee on Field Burning and the Department, these methods will become eligible for tax relief.

SECTION III

Types of Tax Relief Available.

The law allows tax relief to be taken either (a) as a credit against income or excise taxes or (b) as an exemption from ad valorem taxation on the pollution control facility. The certificate holder is required to make an irrevocable election within 60 days after receipt of the certificate relative to his choice for tax relief. The law also provides that no tax relief shall be allowed for any pollution control facility constructed or used by, or for the benefit of, any governmental or quasi-governmental body or public corporation or form thereof, except where such facilities are used for resource recovery.

The alternate forms of tax relief are described in more detail as follows:

A. Credit Against Income or Excise Taxes

NOTE: Any questions regarding this alternative should be directed to the Income Division Administrator, Oregon State Department of Revenue, Salem, Oregon.

1. The maximum credit allowed in any one tax year on air, noise or water pollution control facilities, having a useful life of ten years or longer shall be the lesser of the liability of the taxpayer or the following portion of the cost of the facility:

- a. Five percent of the cost of the facility if the portion of the cost allocated to pollution control by the certificate is 80 percent or more.
 - b. Four percent of the cost of the facility if the portion of the cost allocated to pollution control by the certificate is 60 percent or more and less than 80 percent.
 - c. Three percent of the cost of the facility if the portion of the cost allocated to pollution control by the certificate is 40 percent or more and less than 60 percent.
 - d. Two percent of the cost of the facility if the portion of the cost allocated to pollution control by the certificate is 20 percent or more and less than 40 percent.
 - e. One percent of the cost of the facility if the portion of the cost allocated to pollution control by the certificate is less than 20 percent.
2. The maximum credit allowed in any one tax year or solid waste, hazardous wastes or used oil facilities shall be five percent of the cost of the facility, but shall not exceed the tax liability of the taxpayer.
 3. Air, noise or water pollution control facilities, or solid waste, hazardous wastes or used oil facilities, with a useful life of less than ten years are entitled to receive a tax credit prorated over the useful life of the facility. For example, a facility with 80 percent or more of the cost allocated to pollution control and a useful life of eight years would be eligible for a tax credit equal to 6.25 percent of the cost of the facility annually for eight years.
 4. A taxpayer who is allowed credit must be the owner, contract purchaser or lessee who conducts the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution. The facility must be owned or leased during the tax year by the taxpayer claiming the credit and must have been in use and operation during the tax year.
 5. Tax credit may be claimed by a taxpayer for:
 - a. Air and water quality facilities erected, constructed or installed on or after January 1, 1967.
 - b. Solid waste facilities under construction on or after January 1, 1973.
 - c. Noise pollution control facilities erected, constructed or installed on or after January 1, 1977.
 - d. Hazardous wastes and used oil facilities under construction on or after October 3, 1979.

The maximum total credit allowable shall not exceed that obtained by taking the allowed credit for ten consecutive years, or for the useful life of the facility if less than ten years.

6. Depreciation or amortization deductions may be taken in addition to tax credit for tax years beginning after January 1, 1977, but not in any prior tax years.
7. Upon any sale, exchange or other disposition of the facility, a taxpayer shall notify the Department of Environmental Quality, who shall revoke the certification covering such facility as of the date of disposition. The new owner may apply for the remaining portion of the tax credit not taken by the previous owner.
8. Any credit allowable, but not used in any particular year, may be carried forward and used only in the next three (3) years.
9. The taxpayer's adjusted basis for determining gain or loss shall not be further decreased by any tax credits received in tax years beginning after January 1, 1977.
10. If the person electing tax credit relief is a small business corporation as defined in section 1371 of the Internal Revenue Code, such election shall be on behalf of the corporation's shareholders. Each shareholder shall be entitled to take tax credit relief as provided in ORS 316.097, based on that shareholders pro rata share of the certified cost of the facility.
11. Tax credit allowed will be reduced dollar for dollar by any federal grant or tax credits other than investment credits.

B. Exemption from Ad Valorem Taxation

NOTE: Any questions regarding this alternative should be directed to the County Assessor in the county where the facilities are located.

1. The pollution control facility must be erected, constructed or installed in connection with the trade or business conducted by the taxpayer on Oregon property owned or leased by the taxpayer. The taxpayer must be the owner or contract purchaser of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution, or a person who, as a lessee under a written lease or pursuant to a written agreement, conducts the trade or business that operates or utilizes such property and who by the terms of such lease or agreement is obliged to pay the ad valorem taxes on such property.

2. A certified facility is exempt from ad valorem taxation to the extent of the highest percentage figure certified by the Department of Environmental Quality as the portion of the actual cost properly allocable to the prevention, control or reduction of air, noise or water pollution. Solid waste, hazardous wastes or used oil facilities are exempt to the extent of the certified cost of the facility.
3. If the facility was constructed on or before December 31, 1971, the ad valorem exemption of a facility shall expire, in any event, twenty years from the date of it's first certification by the Environmental Quality Commission. If the facility is completed in any year subsequent to 1973, the twenty-year exemption period shall be reduced by the number of years determined by subtracting 1973 from the year in which the facility is completed and multiplying the difference by two. In other words a facility completed in 1974 would be exempt for 18 years; a facility completed in 1975 would be exempt for 16 years; and a facility completed in 1978 would be exempt for 10 years.
4. A taxpayer is not eligible to receive an exemption from ad valorem taxation on a pollution control facility installed or first used after December 31, 1973, unless the taxpayer owned or leased the Oregon property it was installed upon and conducted the trade or business requiring pollution control as of January 1, 1967.
5. The ad valorem relief option for profit-making corporations or individuals remains in effect for facilities under construction by December 31, 1980, and certified prior to December 31, 1982. This option is repealed thereafter. For cooperatives and nonprofit corporations the ad valorem option remains in effect through 1988. Further, they are eligible for the full twenty years of relief and are not required to have constructed the facility for prevention of pollution from a trade or business activity conducted on January 1, 1967, on Oregon property owned or leased by them on January 1, 1967.
6. Upon sale, exchange or other disposition of the facility the taxpayer shall notify the Department of Environmental Quality, who shall revoke the certification covering such facility as of the date of disposition.
7. Federal grants or tax credits do not affect the ad valorem exemption.

SECTION IV Eligibility of Claim Facilities for Certification

In general, a claimed facility is eligible for certification as a pollution control facility if:

- A. It was constructed after requesting preliminary certification from the Department (required if construction commenced on or after September 13, 1975); or it was constructed after requesting approval to construct from the Department (required if construction commenced on or after October 5, 1973); and
- B. It is an air or water pollution control facility that was erected, constructed or installed on or after January 1, 1967; or

It is a noise pollution control facility that was erected, constructed or installed on or after January 1, 1977; or

It is a solid waste facility that was under construction on or after January 1, 1973; or

It is a hazardous wastes or used oil facility that was under construction on or after October 3, 1979; and
- C. It is necessary to satisfy the intents and purposes of ORS 468 and regulations adopted thereunder (air and water facilities), ORS 467 and regulations adopted thereunder (noise facilities), or ORS 459 and regulations adopted thereunder (solid waste, hazardous wastes and used oil facilities); and
- D. It is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, noise or water pollution or solid waste, hazardous wastes or used oil; and
- E. It is not: (1) an air conditioner (or other device which is installed or used in heating, cooling, filtering or otherwise treating or conditioning the air inside of buildings); (2) a septic tank or other facilities for human waste; (3) any property installed, constructed or used for the moving of sewage to the collecting facilities of a public or quasi-public sewerage system; (4) any district portion or portions of a solid waste, hazardous wastes or used oil facility which makes an insignificant contribution to the purpose of utilization of solid waste, hazardous wastes or used oil (the following specific items shall be among those portions considered for exclusion: office buildings and furnishings, parking lots and road improvements, landscaping, external lighting, company signs, art work, and automobiles).

If a tax credit has been received on an energy conservation facility, you are not eligible to apply for or receive a tax credit on the same facility as a pollution control facility under ORS 316.097 or 317.072.

SECTION V

Application for Tax Credit Certification

Application for preliminary certification for tax credit pursuant to ORS 468.175 and 468.180 shall be made prior to construction of the proposed facility on DEQ tax credit form DEQ/TC-1-10/79.

Application for tax credit certification pursuant to ORS 468.165 shall be made after completion of construction of the facility on DEQ Tax Credit form DEQ/TC-2-10/79. Application forms can be obtained from:

State of Oregon
Department of Environmental Quality
Management Services Division
Box 1760
Portland, OR 97207

SECTION VI

References

The following references identify the applicable sections of Oregon Law.
Original Law:

Chapter 592, Oregon Laws 1967

Amendments to Original Law:

Chapter 340, Oregon Laws 1969
Chapter 493, Section 19, Oregon Laws 1969
Chapter 678, Oregon Laws 1971
Chapter 402, Section 31, Oregon Laws 1973
Chapter 831, Oregon Laws 1973
Chapter 835, Oregon Laws 1973
Chapter 496, Oregon Laws 1975
Chapter 650, Oregon Laws 1975
Chapter 795, Oregon Laws 1977
Chapter 866, Section 10 and 11, Oregon Laws 1977
Chapter 802, Oregon Laws 1979
Chapter 531, Sections 5 and 6, Oregon Laws 1979
Chapter 512, Section 17, Oregon Laws 1979

Statutory Reference

Brief Summary

ORS 468.155 Et seq.	Provisions of the above-referenced laws which relate to the certification of facilities by the Department of Environmental Quality.
ORS 307.405 ORS 307.420 ORS 307.430	Provisions of the above-referenced laws which relate to the ad valorem tax exemption alternative.
ORS 316.068 ORS 316.097	Provisions of the above-referenced laws which relate to the personal income tax alternative.
ORS 317.072 ORS 317.220	Provisions of the above-referenced laws which relate to the corporate excise tax credit alternative.
ORS 314.255	

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY
1979 AMENDMENTS TO POLLUTION CONTROL FACILITIES TAX CREDIT LAW

1. Pollution control facilities for hazardous wastes and used oil, constructed on or after October 3, 1979, are eligible for tax credit certification. Senate Bill 139 amending ORS 468.155, 160, 165, 170, 175, and 185.
2. Distinct portions of solid waste, hazardous wastes, or used oil facilities, which make an insignificant contribution to the purpose of utilization of solid waste, hazardous waste, or used oil, are not eligible for tax credit certification effective October 3, 1979. The following specific items shall be among those portions considered for exclusion: office buildings and furnishings, parking lots and road improvements, landscaping, external lighting, company signs, artwork, and automobiles. Senate Bill 139 amending ORS 468.155(2).
3. The Oregon law regulating solid waste must impose standards at least substantially equivalent to the federal law in order for solid waste, hazardous wastes, and used oil facilities to be eligible for tax credit. Senate Bill 139 amending ORS 468.165(1)(c)(D).
4. For facilities constructed on or after October 3, 1979, the Commission may waive the filing of the application for preliminary certification if it finds the filing inappropriate because special circumstances render the filing unreasonable and if it finds such facility would otherwise qualify for tax credit certification. Senate Bill 139 amending ORS 468.175(1), 468.170(4), and 468.180(1).
5. All references to ORS 448.305 have been deleted from the tax credit statutes. Senate Bill 139 amending ORS 468.170, 175, and 180.
6. Effective October 3, 1979, facilities used for resource recovery that are constructed or used by or for the benefit of any government or quasi-governmental body or public corporation or form there of shall be eligible for tax credit certification under ORS 307.405, 316.097, or 317.072. House Bill 2846 amending ORS 314.255(2).
7. Effective October 3, 1979, portions of a solid waste, hazardous waste, or used oil facility may be certified separately if ownership of a portion is in more than one person. Certification of such portions of a facility shall include certification of the actual cost of the portion of the facility to the person receiving the certification.

The actual cost certified for all portions of a facility separately certified, shall not exceed the total cost of the facility that would have been certified under one certificate. The provisions of subsection (10) of ORS 316.097 or 317.072, whichever is applicable, shall apply to any sale, exchange, or other disposition of a certified portion of a facility. House Bill 2846 amending ORS 468.170.
8. Any person who applies for and receives a tax credit on an energy conservation facility is not eligible to apply for and receive a tax credit on the same facility as a pollution control facility under ORS 316.097 or 317.072. House Bill 2843 effective October 3, 1979.

This document does not attempt to provide all the details contained in the 1979 amendments to the tax credit statutes. Please refer to the bills for specifics.

MO2057

State of Oregon
Department of Environmental Quality

INSTRUCTIONS FOR COMPLETING NOTICE OF INTENT TO CONSTRUCT
AND
REQUEST FOR PRELIMINARY CERTIFICATION FOR TAX CREDIT FORM

Form number DEQ/TC-1-10/79 may be used to notify the Department of intent to construct a new source of air contaminant emissions or a confined animal feeding or holding operation, and to request construction approval. It may also be used to request preliminary certification for tax credit for a pollution control or waste utilization facility. Or, it may be used for both purposes. Where it is used to both request construction approval and preliminary certification, it must be clearly indicated in the application which portion of the facility is being forwarded for preliminary certification.

Oregon statutes and Department administrative rules require the submission of this form and Department approval before commencing construction, installation or establishment of a new, modified or expanded source of air contaminant emissions, including air pollution control equipment, or a confined animal feeding or holding operation.

Oregon tax credit statutes require the submission of this form requesting preliminary certification before commencing erection, construction or installation of a pollution control or waste utilization facility in order to be eligible for consideration for tax credit certification upon completion of the facility. It further requires Department approval of preliminary certification, and that the facility be constructed in accordance with the plans and specifications submitted with the form and approved by the Department.

If the facility has been certified as an energy conservation facility, pursuant to Oregon Laws 1979, Chapter 512, by the Oregon Department of Energy, it may not be certified for tax credit as a pollution control or waste utilization facility under ORS 316.097 (personal income tax) or ORS 317.072 (corporate excise tax).

Oregon land use statutes require the Department to receive evidence from the responsible local planning authorities that any new or expanded facility will be compatible with local comprehensive land use plan provisions before it issues final approval of such facilities. Applicants using this form to request construction approval of new or expanded air contaminant sources or confined animal feeding or holding operations, or to request preliminary certification for noise pollution control facilities or solid waste, hazardous wastes or used oil utilization facilities must obtain a local compatibility statement in order for the Department to give final approval to the proposed project. Applicants should use Department form number DEQ/TC-12-10/79 to obtain the local compatibility statement.

DEPARTMENT OF ENVIRONMENTAL QUALITY
MANAGEMENT SERVICES DIVISION
POST OFFICE BOX 1760
PORTLAND, OREGON 97207

FOR DEQ USE ONLY	
Date Rec'd	_____
Request No.	_____
File No.	_____

NOTICE OF INTENT TO CONSTRUCT
AND
REQUEST FOR PRELIMINARY CERTIFICATION FOR TAX CREDIT

ALL APPLICANTS COMPLETE	<p>(1) If Notice of Intent to Construct and Request for Construction Approval, indicate type of facility by placing check (✓) in appropriate box.</p> <p><input type="checkbox"/> Air Contaminant Source <input type="checkbox"/> Confined Animal Feeding or Holding Operation</p>	
	<p>(2) If request for Preliminary Certification, indicate type of pollution control or waste utilization facility proposed by placing check (✓) in appropriate box.</p> <p><input type="checkbox"/> Air <input type="checkbox"/> Noise <input type="checkbox"/> Water <input type="checkbox"/> Solid Waste <input type="checkbox"/> Hazardous Wastes <input type="checkbox"/> Used Oil</p>	
	<p>(3) Official Name of Applicant</p> <p>_____</p> <p style="text-align: center;">Official Name</p> <p>_____</p> <p style="text-align: center;">Mailing Address, City, State, Zip Code</p>	
	<p>(4) Location of Facility</p> <p>_____</p> <p style="text-align: center;">Business Name or Division</p> <p>_____</p> <p style="text-align: center;">Street Address</p> <p>_____</p> <p>City _____ County _____</p>	<p>(5) Person to Contact for Additional Details</p> <p>_____</p> <p style="text-align: center;">Name</p> <p>_____</p> <p style="text-align: center;">Title</p> <p>_____</p> <p style="text-align: center;">Address</p> <p>_____</p> <p>City _____ Zip Code _____ Phone No. _____</p>
	<p>(6) Briefly describe nature of business where facility will be located and whether business is new or new at this location.</p> <p>_____</p>	
	<p>(7) Provide a brief technical description of the proposed facility and its function. Attach process flow diagram and plot plan as appropriate.</p> <p>_____</p>	
	<p>(8) Briefly describe pollution control or waste utilization equipment to be incorporated and/or utilized in facility.</p> <p>_____</p>	

NOTE: Tax credit law (ORS 468.175) requires that a request for preliminary certification be on file with the Department before commencing on a project in order to be eligible for consideration for tax credit certification upon completion of the project.

ALL APPLICANTS COMPLETE	(9) List types and amounts of pollutants discharged or produced and/or wastes utilized <u>before</u> installation of facility. Also indicate how wastes are disposed.
	(10) List types and amounts of pollutants discharged, produced or reduced and/or wastes utilized <u>after</u> installation of facility. Also indicate how wastes are disposed.
	(11) Estimated total cost of facility: \$ _____ Estimated cost of pollution control or waste utilization equipment: \$ _____
	(12) Date construction estimated to begin ____/____/____. Date construction estimated to end ____/____/____.
	(13) Has a statement of compatibility with local comprehensive land use plans been obtained from appropriate local jurisdictions? (see instructions) Yes _____, please attach. No _____, please attach explanation.
COMPLETE ONLY IF REQUESTING PRELIMINARY CERTIFICATION	(14) If facility is solid waste, hazardous wastes, or used oil facility, describe what usable source of power or other item of real economic value is produced and its value.
	(15) Has facility, or any portion of it, previously been certified for tax credit, or is a tax credit application pending? Yes _____, please attach explanation. No _____.
	(16) Has facility or any portion of it, previously been certified as an energy conservation facility by the Oregon Department of Energy, or is an application pending? Yes _____, please attach explanation. No _____.
APPLICANT SIGNATURE	I hereby certify that I have completed this application to the best of my ability and that the information provided herein and in the attached exhibits is true and correct to the best of my knowledge.
	Signature _____ Title _____ Date ____/____/____

STATEMENT OF COMPATIBILITY
WITH
LOCAL COMPREHENSIVE LAND USE PLANS

Oregon land use laws and DEQ's Land Use Coordination Program, as approved by the Oregon and Conservation and Development Commission, require that DEQ approval of proposed construction of new or expanded air contaminant sources or confined animal feeding or holding operations, and that DEQ approval of preliminary certification for tax credit for noise pollution control facilities or solid waste, hazardous wastes or used oil utilization facilities, not become effective until a Statement of Compatibility with applicable local land use plans and Statewide Planning Goals is provided to DEQ from the responsible local planning authorities. This form may be used to obtain such a Statement of Compatibility.

APPLICANT COMPLETE	<p>APPLICANT'S DESCRIPTION OF THE NATURE AND LOCATION OF PROPOSED NEW OR EXPANDED FACILITY. (Include appropriate legal description, planning reference information. <input type="checkbox"/> Check if the site is inside an Urban Growth Boundary but outside city limits. Attach evidence of city concurrence with the county Statement if concurrence not given below.)</p>
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COMPLETE ONLY ONE OF THE FOLLOWING:

PLANNING AUTHORITY STATEMENT	<p>STATEMENT OF COMPATIBILITY FROM APPROPRIATE LAND USE AUTHORITY. (An equivalent Statement may be provided in lieu of this form.)</p> <hr style="border-top: 1px dashed black;"/> <p>_____ has reviewed the above-referenced proposal for compatibility with (cross out one) (its LCDC Acknowledged Comprehensive Plan) <i>or</i> (Statewide Planning Goals) and finds the proposal to be compatible.</p> <p>Signed _____ Title _____ Date _____</p> <p><input type="checkbox"/> City Concurrence inside Urban Growth Boundary:</p> <p>Signed _____ Title _____ Date _____</p>
---------------------------------	--

APPLICANT'S ALTERNATIVE	<p>REQUEST TO PROCEED WITH APPLICATION PROCESSING PENDING RECEIPT OF COMPATIBILITY STATEMENT</p> <hr style="border-top: 1px dashed black;"/> <p>I hereby certify that I have applied to _____ on _____ for the necessary Statement of Compatibility. The local review action is expected to be completed by _____.</p> <p>I hereby request DEQ to proceed with processing my application during this time period in order to minimize delays. I understand that the requested construction approval or preliminary certification, when issued, cannot become effective until the Compatibility Statement is filed with the Department.</p> <p>Signed _____ Date _____</p>
----------------------------	---

LAND USE COMPATIBILITY REQUIREMENTS: INFORMATION TO DEQ APPLICANTS

1. Applicants are strongly encouraged to have the local statement in hand when applying. Optionally, applicants may submit evidence of application for local statements but DEQ approvals will be conditioned to not become effective until a favorable local statement is received.
2. Local statements must certify proposals compatible with LCDC-Acknowledged local comprehensive land use plans and implementing ordinances or Statewide Planning Goals.
3. Once the application is complete, DEQ will test the proposed action for compatibility with state and federal environmental quality requirements and relevant provisions of Goals 6 (Air, Water and Land Resources Quality) and 11 (Public Facilities and Services). However, DEQ actions are in themselves not findings of local land use or Goal compatibility. Both applicant and local government will be informed of the nature and fact of DEQ's actions.
4. In urbanizing areas between city limits and Urban Growth Boundaries, applicants must provide evidence of city concurrence with the county statement on the proposal. The city evidence may be:
 - a. Sign-off below the county sign-off on DEQ's form, OR
 - b. A copy of the city-county management agreement included in the Urban Area Plan Acknowledged by LCDC, OR
 - c. A written statement covering the applicant's proposal.
5. Inside the Metropolitan Service District (MSD) surrounding Portland, evidence of compatibility with the current regional land use planning process and adopted requirements must be provided in addition to those discussed above.
6. Proposals within the jurisdiction and requirements of local government boundary commissions for the Portland, Salem, and Eugene areas must be separately cleared with them, as usual. That process is not linked in substance or timing to this new land use clearance, but both must be followed from now on.
7. If DEQ receives a negative local statement of compatibility, we cannot take action. The approval cannot be issued, or if already issued conditionally cannot become effective. DEQ expects the applicant to work with the local jurisdiction to obtain needed zone change, variance, or other modification to produce compatibility with the Acknowledged Plan and ordinances or the Goals. Return only when the issues are resolved and the local jurisdiction has made a statement of compatibility.

State of Oregon
Department of Environmental Quality

INSTRUCTIONS FOR COMPLETING APPLICATION FOR CERTIFICATION
OF
POLLUTION CONTROL FACILITY FOR TAX RELIEF PURPOSES

Any person who wishes to obtain tax relief for the installation of pollution control facilities as provided by Oregon law must submit an application for a Pollution Control Facility Certificate to the Oregon State Department of Environmental Quality. For facilities constructed or installed on or after October 5, 1973, a notice of intent to construct must have been filed with the Department prior to construction. For facilities constructed after September 12, 1975, a request for preliminary certification must have been filed with the Department prior to construction.

The applicant is responsible for providing in his application such information as may be necessary to justify his claim that the facility described and claimed in the application qualifies for certification as a pollution control facility. Under most circumstances, the information requested in the application form should be sufficient. However, in cases where the claimed facility is a part of the plant production facilities or where benefits other than pollution control are derived from such facilities, additional and more detailed explanations may be required.

In general, the completed application must clearly indicate exactly what the claimed facility is, why it was installed, when it was installed, what functions it performs other than pollution control, if any, the actual cost of the facility, and the percentage of the actual cost which is allocated to pollution control. Failure of the applicant to adequately complete the application and justify his claim may be grounds for denial of certification.

The Department of Environmental Quality is responsible for reviewing all applications submitted to determine whether or not the claimed facilities qualify for certification. Not all facilities which function to prevent, control or reduce pollution are eligible for certification under the terms of present statutes. Therefore, the burden of proof of eligibility for claimed facilities rests with the applicant.

Nearly all the information requested in the application form is of a technical or engineering nature. Most of the problems encountered to date in processing applications can be related to inadequate technical information which apparently arises from (a) the assumption that "The Department of Environmental Quality already knows that," or (b) the completion of the application by persons who are not qualified to understand and present the technical details. No problems have been encountered relative to the cost of facilities where such costs have been certified by an accountant as required in the application form.

For purposes of ensuring that the technical information is adequate and properly presented, the applicant should assume that the Department of Environmental Quality has no knowledge of his operation or problems and will assume that the claimed facility is not eligible for certification unless positive proof is offered to support the claim of eligibility.

Special Instructions

The following special instructions and notes refer to specific sections of the application form:

SECTION I - Identification of Applicant

1. Indicate the type of pollution control facility you are requesting to be certified. If more than one facility is involved, separate applications should be submitted for each. Air, noise, water, solid waste, hazardous wastes or used oil facilities should always be considered in separate applications. Similarly, when the percent of cost allocable to pollution control is different for two or more units or facilities, separate applications should be submitted.
2. The official name and address of the applicant should be the same as that used for tax purposes in the state of Oregon. If corporation, exact name as specified on charter; if partnership or joint venture, the name of the partners or principals.
3. The requested information refers to the status of ownership of the plant and the claimed facility. In a case where the claimed facility is leased, the applicant (lessee) must include with the application (a) a copy of the lease agreement and (b) the notarized statement from the lessor authorizing the lessee to take any allowable credit on the facility.
4. Indicate the person to whom a copy of staff report and recommendations, notice of the Environmental Quality Commission Meeting, and final certificate should be mailed.
5. Indicate the person whom the staff should contact to obtain additional technical information regarding the claimed facility.
6. Indicate the address of the plant where the claimed facility is located, if different from the official address of the applicant.
7. Indicate directions for access to the claimed facility, including the name of the appropriate person at the plant site who should be contacted relative to an inspection of the claimed facility.
8. Self-explanatory.
9. Self-explanatory.

SECTION II - Description of Operation

1. Indicate the type of material or commodity processed, and the final products produced at the plant or site where the claimed facility is located.

SECTION III - Description of Claimed Facility

1. This requested brief technical description of the facility claimed for certification is extremely important. It should be carefully worded to adequately describe the nature and extent of the claimed facility in a clear and concise manner. The description should be suitable for identifying the specific facility on the certificate itself. Model and serial numbers of all components should be included where such exist.

The complete function of the claimed facility should also be described.

Example:

Effluent clarifier system consisting of (a) effluent collection sump constructed in old outfall line, (b) wet pit-type pumping station with two Brand X, Model Y vertical waste pumps and necessary controls, (c) pressure main to convey waste from pump station to clarifier, (d) 40-foot diameter reinforced concrete clarifier constructed on site with Brand Z scraper mechanism and including two Brand M, Model N sludge pumps with necessary electrical controls and associated piping and miscellaneous equipment.

The facility functions to remove settleable solids from the waste water which is pumped into the clarifier. Removed solids are disposed of by burial on plant property. Clarified waste waters are returned to the existing outfall line below the collection sump.

2. Self-explanatory.
3. Self-explanatory.
4. Self-explanatory.

SECTION IV - Significant Information and Dates

1. through 9. The evaluation of your application is dependent on the information and dates requested in these questions.
10. The original 1967 tax relief act provided for certification of facilities installed for the principal purpose of preventing, controlling or reducing pollution. If the principal purpose of a facility was something other than pollution control, the facility was not eligible for certification.

The 1969 tax relief act permits certification of facilities if a substantial purpose of such facility is the prevention, control or reduction of pollution. The certification, however, must include

the percentage of the actual cost of the facility which is allocable to pollution control. This in essence allows partial credit for facilities which may not have been eligible for certification under the 1967 act. It also allows partial credit for facilities which may have been fully eligible under the 1967 act.

If construction of the claimed facility was begun by April 30, 1969, and was substantially complete by June 30, 1971, the applicant may choose to apply for certification either under the 1967 act (the all-or-nothing concept) or the 1969 act (the percentage allocation of cost concept). This election is extremely important since it determines the basis for review of the application.

11. Clearly indicate all functions or benefits other than pollution control derived from the claimed facility.
- 12-A Self-explanatory.
- 12-B Description of the salable or usable source of power or end product, its utilization, economic value, and the waste products utilized.
- 12-C If yes, indicate the other state and describe the competitiveness of the end product. If no, explain why product is not competitively produced.
13. A facility must be certified as one of the following: air, noise, water, solid waste, hazardous wastes, or used oil pollution control facility. It cannot be issued more than one certificate for the same equipment, as that would, potentially, result in double tax relief. Further, after the original certificate expires on the facility, typically 10 years, the facility cannot be certified again.
14. A facility that is certified by the State Department of Energy as an Energy Conservation Facility cannot be certified as a Pollution Control Facility under ORS 316.097 or 317.072.

SECTION V - Allocation of Cost

The applicant must complete the information in Section V to the best of his ability to provide a basis for the determination of eligibility and percentage of the actual cost which is properly allocable to pollution control. Since each installation differs greatly, there is no specific formula offered for determining such allocation. The applicant must make his own case through the information requested and through any additional information which he may deem necessary to justify the percentage of the actual cost which he considers should be properly allocated to pollution control. If upon reviewing the application the Department disagrees with the applicant's claim, a conference will be scheduled with the applicant to discuss the matter prior to making any recommendation to the Commission regarding final action on the application.

1. The actual cost of the claimed facility entered on line "a" must be supported and documented by the accountant's certification of cost required in "Exhibit D" (Section VII). The remaining items under number 2 should be estimated as accurately as possible. For a facility that is owned by more than one person, and the applicant wishes to have the portion he owns certified separately, the actual

cost of the total facility must be documented, as well as the cost of the portion claimed in the application. (Solid waste hazardous wastes or used oil utilization facility applicants need only answer a and b of this question.)

2. A discussion of the alternative pollution control methods which were considered and rejected is an extremely important factor in determining whether the pollution control functions served by the claimed facility are "substantial" within the context of the law. This information is also used in conjunction with other information to determine the percent of cost allocable to pollution control if the pollution control purpose of the facility is found to be substantial.
3. If there are any factors other than those mentioned in this application which may assist in establishing the percent of cost allocable to pollution control for the particular installation, please indicate and fully explain.
4. As stated before, since each installation varies so greatly and the factors surrounding each installation are different, no formula can be offered for establishing the percent of cost allocable to pollution control. Therefore, the applicant must carefully consider his particular case and develop the best possible estimate of the percentage of cost allocated to pollution control. The rationale for arriving at this percentage figure must be completely explained.

SECTION VI - Required Exhibits

The required exhibits are an essential part of the application and cannot be omitted.

1. (Exhibit A) - If a pilot plan is not available, a sketch should be made which clearly indicates the location of the claimed facility relative to other plant facilities and identifiable landmarks in the area. The plot plan should be clearly marked to show the location of the claimed facility.
2. (Exhibit B) - Detailed plans which clearly document, describe and identify the claimed facility are absolutely essential. If as-built engineering plans are not available, drawings should be made which clearly and distinctly describe the claimed facility and identify the extent of the facility. Structural details are normally not necessary. Overall plan and profile drawings, cutaway section views and process schematic diagrams are often adequate to fully identify and describe the claimed facility. Photographs are helpful providing they are clearly marked to indicate exactly what portion of the facility shown in the photographs is part of the claimed facility. Photographs without clear marking to show what is claimed are of little value. Normally the plans and descriptive documents are adequate if an individual unfamiliar with the plant can locate the facility and identify exactly which components are part of the claimed facility and which are not.

3. (Exhibit C) - The information contained in this exhibit must be related closely to the plans required as Exhibit B. Materials expended in construction but not made a part of the permanent facility should not be included in the listing required in Exhibit C. Materials which lose their identity when incorporated in the facility should not be listed separately. Component parts which are removable or identifiable in themselves, such as motors, blowers, pumps, etc. should be clearly listed by make, model, serial number and other identifying information.

Examples:

- a. For a concrete tank the itemized listings might be (1) excavation, (2) 10 ft. x 30 ft. x 6 ft. reinforced concrete open-topped tank including form work, reinforcing steel, concrete and labor to install.
- b. For pumping station the itemized listing might be (1) excavation, (2) structure consisting of reinforced concrete wet and dry well pumping station with above-ground control building, (3) two 30 HP vertical waste pumps, Brand Y, Model X, (4) discharge piping (5) pumping control system.
- c. For a baghouse the itemized listing might be (1) Brand X baghouse, Model Y, (2) Brand A fan, Model B, with 30 HP motor Brand D, Serial No. 1234567, (3) Water Deluge System, Brand F, Type G, (4) Ductwork, (5) structural steel and foundation, (6) electrical, (7) labor and engineering.

4. (Exhibit D) - The actual cost of the facility is the total of those costs directly related to the acquisition and installation of the claimed facility and may include engineering fees, legal fees, overhead and other costs directly attributable to the facility. Start-up and operation costs are not considered to be part of the actual cost of the facility.

In a case where the claimed facility is leased, the accountant's certification of cost normally will not be required. The documentation of the actual value of the facility will be provided by the notarized statement from the lessor, which was discussed under Section I, Item 3 of these instructions.

Also, in cases where the total actual cost of the claimed facility is less than \$20,000 and where the costs can be completely and thoroughly documented by copies of invoices, canceled checks, etc., the Department of Environmental Quality may accept copies of such documentation in lieu of the accountant's certificate.

5. (Exhibit E) - Attach copy of document indicating construction approval, as requested in Section IV, Item 3 of the application.
6. (Exhibit F) - Attach a copy of the approved preliminary certification for a pollution control facility, as requested in Section IV, Item 5 of the application.

Any questions relative to the application form or the intent of requested information should be directed to the Department of Environmental Quality. Two copies of the completed five-page application form together with two copies of all exhibits should be mailed to:

State of Oregon
Department of Environmental Quality
Management Services Division
Box 1760
Portland, OR 97207

IMPORTANT

- 1) READ APPLICATION INSTRUCTIONS CAREFULLY,
- 2) SUBMIT TWO (2) COPIES OF APPLICATION AND EXHIBITS TO:

DEPARTMENT OF ENVIRONMENTAL QUALITY
 MANAGEMENT SERVICES DIVISION
 Post Office Box 1760
 Portland, Oregon 97207

For DEQ Use Only
Date Rec'd _____
Application No. _____

**APPLICATION FOR CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR
 TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 et. seq.**

SECTION I IDENTIFICATION OF APPLICANT	(1) Indicate the Type of Facility by Placing Check (✓) in Appropriate Box. <input 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	
	(2) Official Name of Applicant (if corporation, exact name as specified in charter; if partnership or joint venture the names of all partners or principals). _____ style="text-align: center;">official name _____ style="text-align: center;">division identification _____ style="text-align: center;">names of general partners or principals _____ style="text-align: center;">address _____ style="text-align: center;">city, state, zip code	(3) Status of Applicant _____ Lessee _____ Owner _____ Individual _____ Partnership _____ Corporation
	(4) Person Authorized to Receive Certification _____ style="text-align: center;">name _____ style="text-align: center;">title _____ style="text-align: center;">address _____ style="text-align: center;">city zip phone no.	(5) Person to Contact for Additional Details _____ style="text-align: center;">name _____ style="text-align: center;">title _____ style="text-align: center;">address _____ style="text-align: center;">city zip phone no.
	(6) Location of Claimed Facility _____ style="text-align: center;">address _____ style="text-align: center;">city _____ style="text-align: center;">county	(7) Access Directions:
(8) Applicant's IRS Employer Identification Number _____	(9) Applicant's Tax Year _____ style="text-align: center;">beginning date ending date	
SECTION II DESCRIPTION OF OPERATION	(1) Briefly describe the nature of the industrial or commercial process conducted at the plant, and the end product produced.	

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR
TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 et. seq.

(Continued)

SECTION III DESCRIPTION OF CLAIMED FACILITY	<p>(1) Provide a brief technical description of the claimed facility for certification as a pollution control or a waste utilization facility (including model and serial numbers of equipment) and describe the complete function of such facility. Attach additional sheet if necessary.</p>
	<p>(2) Describe the conditions which existed, or would have existed had the claimed facility not been provided, and describe the methods of pollutant or waste disposal which were utilized prior to installation or construction of the claimed facility. Attach additional sheet if necessary.</p>
	<p>(3) Describe the conditions which currently exist as a result of the installation of the claimed facility. How has the impact on the environment been reduced or minimized as a result of the claimed facility? Attach additional sheet if necessary.</p>
	<p>(4) Describe the effectiveness of the claimed facility to reduce pollution and solid waste, quantitative data preferred though not mandatory. Attach additional sheet if necessary.</p>

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR
TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 et. seq.

(Continued)

SECTION IV
SIGNIFICANT DATES AND INFORMATION

(1) Was claimed facility required by the department or any other governmental organization? _____ (Yes or No)
If yes who required facility? _____
_____ (Date)

(2) Did claimed facility replace an existing facility? _____ (Yes or No)

(3) Were plans and specifications or construction approval obtained prior to construction from the department or Regional Air Pollution Authority? _____ If yes attach a copy of approval document. (Exhibit E—Page 5)
(Yes or No)

(4) Was claimed facility constructed according to approved plans and specifications? _____ If no explain deviations on an attached sheet. (Yes or No)

(5) Was a preliminary certification for tax credit obtained from the department for the claimed facility? (ORS 468.175) _____ (Yes or No)
If yes attach a copy of the certification document (Exhibit F—Page 5)

(6) Date erection, construction or installation of claimed facility was started. _____

(7) Date erection, construction or installation of claimed facility was completed. _____

(8) Date claimed facility was placed into operation. _____

(9) Estimated useful life of claimed facility. _____

NOTE: If construction began on a pollution control facility by April 30, 1969, and was substantially complete by June 30, 1971, the applicant may elect to apply the tax relief available under the certification either under the original 1967 act or the 1969 act. (See instructions for explanation of differences).

(10) If applicable, state your election to take relief under the _____ 1967 act or the _____ 1969 act.

(11) Does the claimed facility perform any function other than pollution control? _____ Explain. (Yes or No)

(12)*A—To what extent is the claimed facility used to recover and convert waste products into a salable or usable commodity?

*B—Describe the salable or usable source of power or end product being produced through the recovery and conversion of waste products by the claimed facility; also describe the economic value of the end product.

C—Is the end product, other than a usable source of power, competitive with an end product produced in another state? _____ Explain. (Yes or No)

* Attach additional sheets if necessary.

APPLICATION FOR CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR
TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 et. seq.

(Continued)

SECTION IV
SIGNIFICANT DATES AND INFORMATION

(13) 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 _____

(14) 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 _____

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR
TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 et. seq.

(Continued)

SECTION V
ALLOCATION OF COSTS

(1) Complete the following information regarding costs associated with the claimed facility. (Solid waste, hazardous wastes or used oil utilization facility applicants need only answer a and b of the question.)

a. Actual cost of the claimed facility \$ _____

b. Annual income derived from claimed facility or value of recovered or reclaimed materials \$ _____

c. Annual Operating Expenses

Labor \$ _____

Utilities \$ _____

Maintenance \$ _____

Average Annual Depreciation \$ _____

_____ \$ _____

_____ \$ _____

_____ \$ _____

d. Total Annual Operating Expenses \$ _____

e. Net Annual Profit Before Taxes (b-d) \$ _____

f. Return on Investment Before Taxes (e/a x 100) _____%

What is the lowest acceptable return on an investment, before taxes, which will justify an investment in your particular plant? _____% Please explain and justify on an attached sheet.

(2) What alternative method or facilities were considered for achieving the same pollution, solid waste, hazardous wastes or used oil control objective. Indicate the estimated cost of each and the reasons for selection of the method used.

(3) List any other facts which may be relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, noise or water pollution.

(4) Percent of Cost of Claimed Facility properly allocable to pollution control: _____%
Explain the method used for arriving at this figure.

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR
TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 et. seq.

(Continued)

SECTION VI REQUIRED EXHIBITS	<p>Attach the Following Exhibits to the application:</p> <p>(1) As EXHIBIT A, attach a plot plan or site map which shows the overall plant site and the location within the plant site where the claimed facility is located. The general location and extent of the claimed facility should be clearly marked.</p>
	<p>(2) As EXHIBIT B, attach detailed as built engineering plans which clearly and completely identify and describe the claimed facility. Any other facility shown on the plans which are not claimed should be clearly marked accordingly. Photographs of the claimed facility can also be attached to supplement the plans.</p>
	<p>(3) As EXHIBIT C, attach a listing of the land, material, machinery, and equipment incorporated into the claimed facility together with the associated cost. All items should be grouped into logical units and referenced to the specific unit on the as built plans provided as Exhibit B.</p>
	<p>(4) As EXHIBIT D, attach a statement from an independent public accountant or certified public accountant which gives a breakdown of the actual cost of the claimed facility and certifies that the total cost indicated is a true and correct representation of the actual cost of the facility. Reference should be made to the listing of costs in Exhibit C.</p> <p>NOTE: In cases where the total actual cost of the claimed facility is less than \$20,000 and where the cost can be completely and thoroughly documented by copies of invoices, canceled checks, etc., the Department of Environmental Quality may accept copies of such documentation in lieu of the accountant's certification.</p>
	<p>(5) As EXHIBIT E, if erection, construction or installation of the claimed facility was begun on or after October 5, 1973, attach a copy of the document which indicates that prior to commencing on project a notice of intent to construct was filed with the Department, and that construction was approved.</p>
	<p>(6) As EXHIBIT F, if erection, construction or installation of the claimed facility was begun on or after September 13, 1973, attach a copy of document which indicates that prior to commencing on project a request for Preliminary Certification for Tax Credit was filed with the Department, and that a Preliminary Certification was granted.</p>

IMPORTANT, each item of the application must be completed. If inapplicable explain why. Failure to complete application shall constitute basis for denial of Certification.

I hereby certify that I have completed this application to the best of my ability, and that the information provided herein and in the attached exhibits is true and correct to the best of my knowledge, and that the facility described in this application was erected, constructed, or installed and will be operated to a substantial extent for the purpose of preventing, controlling, or reducing air, noise or water pollution, or solid waste, hazardous wastes or used oil.

SIGNATURE: _____

TITLE: _____

DATE: _____

SECTION VIII

FORM LETTERS

State of Oregon
Department of Environmental Quality
Post Office Box 1760
Portland, Oregon 97207

NOTICE OF APPROVED CONSTRUCTION COMPLETION

To: Owner or Applicant

This form must be filled in and returned within 30 days upon completion of the approved construction.

MAIL TO: Department of Environmental Quality
Post Office Box 1760
Portland, Oregon 97207

Attention: Air Quality Division
 Water Quality Division
 Solid Waste Division

The facility described below was completed on _____,
and was or will be in operation _____.

(signature) (title) (date)

(for DEQ use only - below this line)

Applicant Name _____ Request No. _____

Address _____ File No. _____

City & Zip Code _____

Description of Facility _____

Date Notice Received _____

Assigned for Inspection to _____ by _____ on _____

Date of Inspection Report _____ by _____

Summary of Inspection _____

Date cc to EI _____ Attachments



Department of Environmental Quality

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-

To:

Date:

File Reference:

Department action as indicated below has been taken on your Notice of Intent to Construct and Request(s) for Construction Approval and/or Preliminary Certification for Tax Credit for the proposed facility.

<u>Project</u>	<u>Project Description</u>	<u>Plans & Specifications Identification</u>
----------------	----------------------------	--

PLANS AND SPECIFICATIONS AND CONSTRUCTION APPROVAL

- APPROVED - Subject to the conditions listed on the reverse side.

Plans and Specifications reviewed by: _____

PRELIMINARY CERTIFICATION FOR TAX CREDIT OF A POLLUTION CONTROL FACILITY

- APPROVED - This preliminary certification makes the proposed facility eligible for consideration for tax credit but does not insure that any specific part or all of the pollution control facility will be issued a tax credit certificate.

Tax credit review by: _____

If the Department can be of assistance, or if there are any questions, please contact:

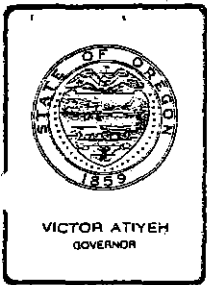
Name: _____ Title: _____ Phone: _____



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PLANS AND SPECIFICATIONS AND CONSTRUCTION APPROVAL CONDITIONS:

1. The construction of the project shall be in strict conformance to approved plans and specifications identified above. No changes or deviations shall be made without prior written approval of the Department of Environmental Quality. (Air contaminant facilities are subject to confirmation by the Environmental Quality Commission.)
2. Granting approval does not relieve the owner of the obligation to obtain required local, state and other permits and to comply with the appropriate statutes, Administrative Rules, Standards, and if applicable, to demonstrate compliance.
3. Please fill out and return the enclosed Notice of Construction Completion form within 30 days upon completion of this approved project.
- 4.



Department of Environmental Quality

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-

To:

Date:

File Reference:

Your Notice of Intent to Construct and Request(s) for:

- Construction Approval

- Preliminary Certification for Tax Credit

was received for the following proposed facility:

<u>Name and Address</u>	<u>Description</u>
-------------------------	--------------------

Unless the Department requests additional information within thirty (30) days of the date of this letter, you will be notified of approval or disapproval within sixty (60) days.

Sincerely,

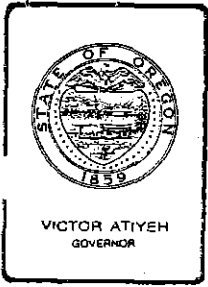


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DEQ-1

DEQ/TC-4-3/78

VIII-5



Department of Environmental Quality

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-

To:

Date:

File Reference:

Further information is required to evaluate your request(s) for:

- Construction Approval

Preliminary Certification for Tax Credit

for the following:

Name and Address	Description
------------------	-------------

Please submit further information within the time specified to: _____,
at _____.

Upon receipt of the requested information, the Department will complete the evaluation and notify you of its findings within sixty (60) days.

Sincerely,



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SECTION IX

TAX CREDIT STAFF REPORT FORMATS

Application No. _____

STATE OF OREGON - DEPARTMENT OF ENVIRONMENTAL QUALITY

Tax Relief Application Review Report

1. Applicant

Company Name
Division (if any)
Address
City, State, Zip Code

The applicant owns (leases) and operates a (describe type of operation, e.g., pulp and paper mill) at (city, state).

Application was made for tax credit for an (air, noise, water) pollution control facility.

2. Description of Claimed Facility

The facility described in this application is (give enough detail about facility to ensure that it won't be confused with other existing or future facilities at the plant site and include a breakdown of costs where appropriate.)

(Choose one of the following statements as appropriate.)

Request for Preliminary Certification for Tax Credit was made (date), and approved (date). (Use if construction commenced on or after September 13, 1975.)

(--or--)

Requirement to file an application for Preliminary Certification was waived by the Commission (date).

(--or--)

Notice of Intent to Construct was made (date), and approved (date). Preliminary Certification for Tax Credit not required. (Use if construction commenced on or after October 5, 1973 and before September 13, 1975.)

(--or--)

Notice of Intent to Construct and Preliminary Certification for Tax Credit not required. (Use if construction commenced before October 5, 1973.)

(--or--)

Request for Preliminary Certification was not made; applicant requests that Commission waive requirements for filing.

(Continue with the following.)

Construction was initiated on the claimed facility (date), completed (date), and the facility was placed into operation (date).

Facility Cost: \$ _____ (Accountant's certification was provided.)

3. Evaluation of Application

(Give brief but complete evaluation of application. Compliance or non-compliance status of the project must be clearly stated and explained, if necessary, relative to treatment standards and/or permit conditions. Briefly describe how percent allocable was derived.)

4. Summation

(Remember that every conclusion of Summation must be supported by information in the report, attached materials, or references.)

A. (Choose one of the following statements as applicable.)

Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification. (Use if construction commenced on or after September 13, 1975.)

(--or--)

Facility was constructed under a certificate of approval to construct issued pursuant to ORS 468.175. (Use if construction commenced after October 5, 1973, and before September 13, 1975.)

(--or--)

Facility was not required to have prior approval to construct or preliminary certification. (Use if construction commenced before October 5, 1973.)

(--or--)

Special circumstances (list in Evaluation) exist which made the filing of an application for preliminary certification unreasonable, and the facility would otherwise be eligible for tax credit. (Use only for facilities constructed on or after October 3, 1979.)

B. (Choose one of the following statements as applicable.)

Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1) (a). (Use for air or water pollution control facilities.)

(--or--)

Facility was constructed on or after January 1, 1977, as required by ORS 468.165(1) (b). (Use for noise pollution control facilities.)

- C. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing (choose one of the following: air pollution, water pollution, noise pollution.)
- D. The facility is necessary to satisfy the intents and purposes of ORS Chapter ____ (fill in blank with one of the following) 468 (air and water) 467 (noise) and the rules adopted under that chapter.
- E. The portion of the facility cost that is properly allocable to pollution control is (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 \$ _____ with (see below) allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number T-_____.

(The second blank space in number five should be filled in with ONE of the following phrases)

- 80 percent or more
- 60 percent or more but less than 80 percent
- 40 percent or more but less than 60 percent
- 20 percent or more but less than 40 percent
- Less than 20 percent

Name of Section Supervisor or Division Head: typist initials
Phone number of above
Date report actually typed

GDLNS

Appl. No. _____

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

1. Applicant

Company Name
Division (if any)
Address
City, State Zip Code

The applicant owns (leases) and operates a (describe type of operation, e.g., pulp and paper mill) at (city, state).

Application was made for tax credit for a (solid waste, hazardous waste, used oil) pollution control facility.

2. Description of Claimed Facility

The facility described in this application is (give enough detail about facility to ensure that it won't be confused with other existing or future facilities at the plant site, and include a breakdown of costs where appropriate.)

(CHOOSE ONE OF THE FOLLOWING STATEMENTS AS APPROPRIATE)

Request for Preliminary Certification for Tax Credit was made (date), and approved (date). (Use if construction commenced on or after September 13, 1975.)

(-or-)

Requirement to file an Application for Preliminary Certification was waived by the Commission (date).

(-or-)

Notice of Intent to Construct was made (date), and approved (date). Preliminary Certification for Tax Credit was not required. (Use if construction commenced on or after October 5, 1973 and before September 13, 1975.)

(-or-)

Notice of Intent to Construct and Preliminary Certification for Tax Credit not required. (Use if construction commenced before October 5, 1973.)

(-or-)

Request for Preliminary Certification was not made; applicant requests that Commission waive requirements for filing.

(CONTINUE WITH THE FOLLOWING)

Construction was initiated on the claimed facility (date), completed (date), and the facility was placed into operation (date).

Facility Cost: \$ _____ (Accountant's certification was provided.)

3. Evaluation of Application

(Give brief but complete evaluation of application. Compliance or non-compliance status of the project must be clearly stated and explained, if necessary, relative to treatment standards and/or permit conditions. Explain how applicant meets requirements of 468.165(1)(c)(A), (B), and (C), and 468.170(8)(b).)

4. Summation

(Remember that every conclusion of the Summation must be supported by information in the report, attached materials, or references.)

A. *(Choose one of the following statements as applicable)*

Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification. *(Use if construction commenced on or after September 13, 1975.)*

(-or-)

Facility was constructed under a certificate of approval to construct issued pursuant to ORS 468.175. *(Use if construction commenced after October 5, 1973 and before September 13, 1975.)*

(-or-)

Facility was not required to have prior approval to construct or preliminary certification. *(Use if construction commenced after January 1, 1973 and before October 5, 1973.)*

(-or-)

Special circumstances *(explain in Evaluation)* exist which made the filing of an Application for Preliminary Certification unreasonable, and the facility would otherwise qualify for tax credit under ORS 468.150 to 468.190. *(Use only for facilities constructed on or after October 3, 1979.)*

B. As required by ORS 468.165, the facility was under construction on or after January 1, 1973 *(solid waste)* OR October 3, 1979 *(hazardous waste or used oil facilities)*, and

- (1) The substantial purpose of the facility is to utilize material that would otherwise be (*solid waste, hazardous waste, or used oil*), by (*USE ONE OF THE FOLLOWING: burning; mechanical process; chemical process; or through the production, processing including presegregation or otherwise, use of materials for their heat content or other forms of energy of or from the material, use of materials which have useful chemical or physical properties and which may be used for the same or other purposes, materials which may be used in the same kind of application as its prior use without change in identity*);
 - (2) The end product of the utilization is a usable source of power or other item of real economic value;
 - (3) The end product of the utilization, other than a usable source of power, is competitive with an end product produced in another state; and
 - (4) The Oregon law regulating solid waste imposes standards at least substantially equivalent to the federal law.
- C. (*Use for facilities commenced after December 31, 1980 and before December 31, 1983. Explain in Evaluation.*)

In addition, the Commission finds that (*use one or more of the following statements*)

The facility is necessary to assist in solving a severe or unusual (*solid waste, hazardous waste, used oil*) problem;

(*and/or*)

The facility will provide a new or different solution to a (*solid waste, hazardous waste, used oil*) problem than has been previously used, or the facility is a significant modification and improvement of similar existing facilities;

(*and/or*)

The Department has recommended the facility as the most efficient method of (*solid waste, hazardous waste, used oil*) control;

(*and/or*)

The Department has recommended the facility as the most environmentally sound method of (*solid waste, hazardous wastes, used oil*) control.

- D. The facility is necessary to satisfy the intents and purposes of ORS Chapter 459, and the rules adopted under that chapter.
- E. The portion of the facility cost that is properly allocable to pollution control is 100%.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$ _____, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application T- _____.

Name of Section Supervisor or Division Head: typist initials
Phone number of above
Date report actually typed

(Commission staff reports are needed only to deny a preliminary certification, or to waive filing of an application for preliminary certification)

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY
Preliminary Certification Review Report

1. Applicant

Company Name
Division (if any)
Address
City, State, Zip Code

The applicant owns (leases) and operates a (describe type of operation, e.g., pulp and paper mill) at (city and state).

Preliminary certification is required for an (air, noise, water) pollution control facility.

2. Description of Claimed Facility

The facility described in this application is (give enough detail about facility to ensure that it won't be confused with other existing or future facilities at the plant site and include a breakdown of costs where appropriate).

It is estimated the facility will be placed in operation (date).

The estimated cost of the facility is (dollar amount).

3. Evaluation of Application

(Give a brief but complete evaluation of application)

4. Summation (Provide a list of findings that support one of the following conclusions, and then state the chosen conclusion. Remember that every conclusion in Summation must be supported by information in report, attached materials, or references.)

Special circumstances (listed above) exist which made the filing of an application for preliminary certification unreasonable, and the facility is otherwise eligible for tax credit certification pursuant to ORS 468.155 to 468.190. (Use only for facilities constructed on or after October 3, 1979.)

(--or--)

Erection, construction, or installation of the facility was commenced before a request for Preliminary Certification was filed with the Department pursuant to ORS 468.175(1); therefore the facility is not eligible for tax credit certification.

(--or--)

The Department has determined that the erection, construction or installation does not comply with the applicable provisions of ORS Chapters 454, 467, or 468 and the applicable rules or standards adopted pursuant thereto; therefore the facility is not eligible for tax credit certification.

5. Director's Recommendation

(Choose one of the following.)

Based upon the findings in the summation, it is recommended that the Commission issue an order denying the applicant's request for Preliminary Certification.

(--or--)

Based upon the findings in the summation it is recommended that the Commission waive the filing of an application for Preliminary Certification for the facility proposed.

Responsible manager's name: typist initials
Phone number of above
Date report actually typed

GDLNS

(Commission staff reports are needed only to deny a preliminary certification or to waive filing of an application for preliminary certification.)

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

Preliminary Certification Review Report

1. Applicant

Company Name
Division *(if any)*
Address
City, State Zip Code

The applicant owns *(leases)* and operates a *(describe type of operation, e.g., pulp and paper mill)* at *(city and state)*.

Preliminary Certification is required for a *(solid waste, hazardous wastes, used oil)* pollution control facility.

2. Description of Claimed Facility

The facility described in this application is *(give enough detail about facility to ensure that it won't be confused with other existing or future facilities at the plant site and include a breakdown of costs where appropriate)*.

It is estimated the facility will be placed in operation *(date)*.

The estimated cost of the facility is \$_____.

3. Evaluation of Application

(Give a brief but complete evaluation of application.)

4. Summation

(Provide a list of findings that support one of the following conclusions, and then state the chosen conclusion. Remember that every conclusion in the Summation must be supported by information in this report, attached materials, or references.)

Special circumstances *(explain above)* exist which made the filing of an application for preliminary certification unreasonable, and the facility is otherwise eligible for tax credit certification pursuant to ORS 468.155 to 468.190. *(Use only for facilities commenced on or after October 3, 1979.)*

(-or-)

Erection, construction, or installation of the facility was commenced before a request for preliminary certification was filed with the Department pursuant to ORS 468.175(1); therefore the facility is not eligible for tax credit certification.

(-or-)

The Department has determined that the facility is not eligible for tax credit certification because the erection, construction and installation does not comply with the applicable provisions and applicable rules or standards adopted pursuant to ORS Chapters 459 and 468, including:
(use one or more of the following statements)

The substantial purpose of the facility is not to utilize material that would otherwise be *(solid waste, hazardous waste, used oil)*

(and/or)

The end product of the utilization is not a usable source of power or other item of real economic value.

(and/or)

The end product of the utilization is not competitive with an end product produced in another state.

(After December 31, 1980 and before December 31, 1983, all of the following statements must be used in addition to the above.)

The facility is not necessary to assist in solving a severe or unusual *(solid waste, hazardous waste, used oil)* problem; and

The facility will not provide a new or different solution to a *(solid waste, hazardous waste, used oil)* problem that has been previously used, nor it is a significant modification and improvement of similar existing facilities; and

The Department has not recommended the facility as the most efficient or the most environmentally sound method of *(solid waste, hazardous waste, used oil)* control.

5. Director's Recommendation *(Choose one of the following statements.)*

Based upon the findings in the Summation, it is recommended that the Commission issue an order denying the applicant's request for Preliminary Certification.

(-or-)

Based upon the findings in the Summation, it is recommended that the Commission waive the filing of an application for Preliminary Certification for the proposed facility.

Name of Section Supervisor or Division Head: typist initials
Phone number of above
Date report actually typed

SECTION X

PROCEDURES

PROCEDURES

DIVISION MANAGEMENT SERVICES

SECTION TAX CREDITS

SUBJECT PROCEDURES FOR PROCESSING REQUEST FOR PRELIMINARY CERTIFICATION FOR TAX CREDIT

RESPONSIBILITY

ACTION

DIVISION
OR REGION

Receive Notice of Intent to Construct and Request for Preliminary Certification for Tax Credit (form DEQ/TC-1-10/79).

DIVISION
OR REGION

Acknowledge receipt of notice and request within seven (7) calendar days of receipt. Use form letter DEQ/TC-4-3/78.

DIVISION
OR REGION

If additional information is necessary to evaluate the request, use form letter DEQ/TC-5-3/78 to request the information required. Always specify the date the information is to be submitted by.

DIVISION
OR REGION

Review request and supporting documents and upon approval of the request prepare a "Plan and Specifications and Construction Approval and Preliminary Certification for Tax Credit of a Pollution Control Facility," form DEQ/TC-3-3/78, and forward to requestor. (Enclose "Notice of Approved Construction Completion," DEQ/NC-1-3/78, with approval form.)

POLICY

An applicant may start construction after requesting construction approval and preliminary certification for tax credit. However, if he does, it is at his own risk that the preliminary certification may not later be approved, with the consequent loss of tax credit benefit which the applicant had anticipated (see ORS 468.175(1) and informal Attorney General opinion dated April 27, 1978).

DIVISION
OR REGION

If a denial is recommended for Preliminary Certification for Tax Credit, send denial recommendations (use format dated 10/3/79) to Management Services Division for presentation to EQC. It is the Division/Region responsibility to notify the applicant of a recommendation to the EQC to deny their request for preliminary certification for tax credit.

(MORE)

PROCEDURES

DIVISION MANAGEMENT SERVICES

SECTION TAX CREDITS

SUBJECT PROCEDURES FOR PROCESSING REQUEST FOR PRELIMINARY CERTIFICATION FOR TAX CREDIT

RESPONSIBILITY

ACTION

DIVISION
OR REGION

ORS 468.175(4) states, "If within 60 days of the receipt of plans, specifications or any subsequently requested revisions or corrections to the plans and specifications... the Department fails to issue a preliminary certificate of approval and the Commission fails to issue an order denying certification, the preliminary certificate shall be considered to have been issued." It is therefore important that notification be given to Management Services Division of a recommendation to deny within the 60 day time period from receipt of the request, and in time to request EQC action.

Upon approval of Preliminary Certification for Tax Credit, send a copy of the request and approval to the Region or Division concerned.

PROCEDURES

DIVISION <u>Management Services</u>	
SECTION <u>Tax Credits</u>	
SUBJECT <u>Procedures for Processing Tax Credit Applications for Pollution Control Facilities</u>	
RESPONSIBILITY	ACTION
<u>Management Services Div. (MSD) (Receptionist)</u>	Receive two (2) copies of Application and supporting documents and review for completeness, proper attachments, and number of copies.
<u>MSD (Receptionist) or Division</u>	If considered incomplete, consult with Division to verify and advise applicant of the necessary requirements to complete application.
<u>MSD (Receptionist)</u>	If considered complete, assign application number, and enter date received on application form; also enter date received and processing schedule on log sheet and acknowledge receipt to applicant by letter.
<u>MSD (Receptionist)</u>	Retain one complete copy of the application and supporting documents for the permanent tax credit file; forward one complete set of application and supporting documents to the appropriate division for processing.
<u>Division</u>	Review application and supporting documents, survey facility, and prepare review report within assigned processing schedule (60 days). If Division requests any additional information from the applicant, it is the responsibility of the appropriate division to forward a copy of the request and a copy of the information received to MSD (Receptionist) for placing into the permanent file. Every request for additional information shall require submission by a specific date to allow EQC action on each and every application within the 120 day statutory time limit. If no action is taken within the 120 day period, the application is automatically denied.
<u>Division</u>	Prepare recommendations for EQC review and forward to MSD (Management Assistant) with rough-drafted certificate. (These recommendations must be submitted so that the EQC can act on them within the 120 day statutory time limit.)
<u>MSD (Receptionist)</u>	Send letter to applicant advising of Department's recommendations and the date EQC will review staff recommendations and act upon application.
<u>MSD (Management Asst.)</u>	Prepare Certificate for Commission Chairman's signature as recommended by staff.

PROCEDURES

DIVISION Management Services

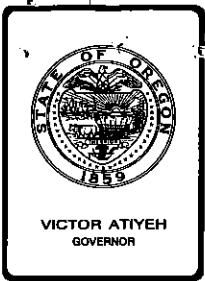
SECTION Tax Credits

SUBJECT Procedures for Processing Tax Credit Applications for Pollution Control Facilities

RESPONSIBILITY	ACTION
<u>Environmental Quality Commission (EQC)</u>	Approve or deny Department recommendations. Issue and sign Pollution Control Certificate or denial letter.
<u>MSD (Receptionist)</u>	If approved, send Pollution Control Certificate to applicant along with two (2) Notice of Tax Election forms (certified mail).
<u>MSD (Receptionist)</u>	If denied, send denial letter to applicant (certified mail)
<u>MSD (Receptionist)</u>	Upon return of Tax Election forms from applicant (within 60 days from date of mailing) send copy of Certificate and Tax Election form to Department of Revenue and County Assessor (if ad valorem credit). File copy of Notice of Election form in master file.
	<p><u>NOTE:</u> If Tax Credit Applications are received directly from applicant by a Region or Division, send complete packet to MSD for receipting and logging.</p>
<u>KEY</u>	<p>Receptionist - 3rd Floor, Anne Doyle Division - AQ, Ray Potts WQ, Larry Patterson SW, Bill Dana NS, John Hector Management Asst. - Carol Spletstaszer</p>

STATE OF OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY STANDARD OPERATING PROCEDURES		NUMBER ISSUED	PAGE 1 of 2 EFFECTIVE
SUBJECT Procedures for preparation of Notice of State Certification to EPA for federal tax relief on pollution control facilities.			
ORIGINATING PROGRAM Management Services		PROGRAM APPROVAL	
SUPERSEDES		NUMBER PAGE DATE	DIRECTOR APPROVAL
<p><u>Background</u></p> <p>Section 169 of the Internal Revenue Code permits 5-year straight-line depreciation of pollution abatement facilities placed in operation on or after January 1, 1969 to abate air or water pollution discharged by plants or properties that were in operation before that date. In order to utilize this depreciation method, taxpayers must file an election in accordance with regulations of the Treasury Department. In addition, two certifications must be presented; one from the appropriate state authority (DEQ), and another from the regional federal authority (EPA Seattle).</p> <p><u>Applicant:</u> An applicant wishing state certification for federal tax relief obtains forms from EPA (Seattle). The applicant completes pages 1-5 of EPA Form 3300-1 (9-71) (Application for Certification of Pollution Control Facility); forwards the <u>original</u> to EPA (Seattle) and <u>copies 1 and 2</u> to DEQ (or in the case of air pollution facilities located in Lane County, to the Lane Regional Air Pollution Authority), along with EPA Form 3300-2 (9-71) (Notice of State Certification). If the applicant has questions regarding these forms, they should be directed to EPA.</p> <p><u>DEQ or LRAPA:</u> It is DEQ's (or LRAPA's) responsibility to certify that the claimed facility: "...is in conformity with State and local programs and requirements for the control of water pollution, air pollution, as required by Section 169 of the Internal Revenue Code of 1954, as amended, and regulations issued thereunder."</p> <p><u>Divisions:</u> Upon receipt of the application for state certification, the Division involved should forward it to the Management Services Division (MSD) for completion. The Division supplies the information requested in section #6 of EPA Form 3300-2 (9-71) (the applicant should have filled out the rest of the form).</p> <p><u>MSD</u> Types in the supplied information, assigns a state certification number, logs in the request, and forwards the certification form to the Director for signature.</p> <p><u>MSD</u> After the Director signs, sends the completed certification form and <u>copy 1</u> of the application to EPA (Seattle); retains <u>copy 2</u> of the application and a copy of the completed certification form.</p>			

STATE OF OREGON		NUMBER	PAGE
DEPARTMENT OF ENVIRONMENTAL QUALITY			2 of 2
STANDARD OPERATING PROCEDURES		ISSUED	EFFECTIVE
SUBJECT			
ORIGINATING PROGRAM		PROGRAM APPROVAL	
SUPERSEDES		NUMBER	PAGE
		DATE	DIRECTOR APPROVAL
<p><u>MSD</u> Files a copy of the application and the certification form with the applicant's state tax credit file (if applicable), and a copy in a separate federal tax credit certification file.</p> <p><u>Note:</u> It is possible that we may be certifying facilities to the federal government which have not applied for tax credit under Oregon law.</p>			



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: New Source Review and Plant Site Emission Limit Rules

The request for authorization to hold a hearing on the New Source Review and Plant Site Emission Limit rules is not on the Agenda for the March 13, 1981 meeting because the discussions with Associated Oregon Industries (AOI) extended beyond the date for submittal of agenda items.

However, since this item was deferred from the January agenda and the comments of AOI have now been received, considered and generally resolved by the staff, the Commission may wish to grant authorization at its March 13, 1981 meeting for the Department to proceed to hearing with these proposed revised rules per the attached staff report and recommendation. If no major problems are identified at the hearing before the EQC, it is hoped that adoption could occur simultaneously so that the Department could rapidly proceed to assume the New Source Review Program from EPA and the SIP can be fully approved.

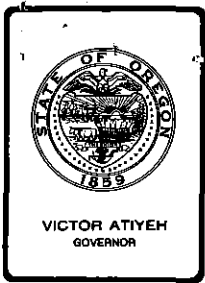
William H. Young

L. Kostow:h
229-5186
March 5, 1981



Contains
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Materials

DEQ-46



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: Unscheduled Item Concerning Deferred Agenda
Items No. F-1 & F-2 from the January 30, 1981
EQC Meeting

Request for Authorization to hold a Public Hearing on
Amendments to the State Implementation Plan regarding Rules
for New Source Review and Plant Site Emission Limits

Background

The Department requested authorization to hold a public hearing on proposed rules for New Source Review and Plant Site Emission Limits at the January 30, 1981 meeting. The Commission deferred action on this item until the March 13, 1981 meeting because of a letter from Associated Oregon Industries requesting more time to review the proposed rules.

The Department conducted meetings with the Medford Chamber of Commerce on February 6, 1981, and with Associated Oregon Industries on February 10, 18, and 27, 1981. During these meetings the Department staff explained the rules and received comments.

Discussion

As a result of these meetings the following revisions were made to the proposed rules.

1. The definition of "actual emissions" was changed to more closely parallel the EPA definition.
2. The definition of "allowable emissions" was replaced with the term "plant site emission limit" for the purposes of establishing offset and banking baselines.
3. The length of time for which emission reductions can be banked was increased from five to ten years.

March 13, 1981

Page 2

4. The minimum bankable reduction was decreased from 25 tons/year to 10 tons/year.
5. The baseline for setting plant site emission limits for existing sources was redefined by adding definitions of "baseline emission rate", "baseline period", and "normal source operation".
6. A provision was added to allow for "bubbling" of emissions under the section titles "Alternative Emission Controls".
7. A provision was added to allow for the temporary use of PSD increments under the section titles "PSD Increment Loan".

The revised proposed rules are attached.

Recommendation

I recommend that a public hearing be authorized to consider amending the New Source Review and Plant Site Emission Limit Rules. I recommend that this hearing be conducted before the Commission at the April 24, 1981 meeting.



William H. Young

- Attachments: 1) Proposed New Source Review Rules
2) Proposed Plant Site Emission Limit Rules

Lloyd Kostow:a
AA901 (1)
229-5186
3/3/81



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 No. F-1, January 30, 1981, EQC Meeting

Request for Authorization to Hold a Public Hearing on
Amendments to the State Implementation Plan Regarding Rules
for New Source Review

Background

On June 8, 1979, the Environmental Quality Commission (EQC) adopted new rules for Special Permit Requirements for Sources Located In or Near Nonattainment Areas (OAR 340-20-190 through 197). Also on that date, the EQC adopted new rules to Prevent Significant Deterioration of Air Quality (OAR 340-31-100 through 195). The rules for nonattainment areas (New Source Review) were submitted to the Environmental Protection Agency (EPA) as a revision to the Oregon State Implementation Plan.

On June 24, 1980, EPA conditionally approved the Oregon State Implementation Plan subject to correction of certain deficiencies. In the area of New Source Review two such deficiencies were identified as follows:

- a) Emission Offsets OAR 340-20-192(1) contains an offset requirement but no offset program was adopted by DEQ. Such a program is needed if offsets are to be employed.
- b) Multiple Sources Under Single Ownership OAR 340-20-192(3) must be modified to satisfy the requirement of Section 173(3) of the act in that a permit to construct or operate a new source in a nonattainment area can be issued if the other sources owned by the same company in the state are in compliance with the act, not just "with applicable requirements of the adopted state plan."

Another development which requires changes in both the New Source Review and Prevention of Significant Deterioration rules is the ruling of the United States Court of Appeals for the District of Columbia Circuit in the case of Alabama Power Company, et al (No. 78-1006). In anticipation of this ruling, the Oregon Prevention of Significant Deterioration rules

were not submitted to EPA for approval and program delegation. The court ruled on December 14, 1979, requiring EPA to amend the Prevention of Significant Deterioration requirements. Some of these required changes also involved the New Source Review provisions for nonattainment areas. On August 7, 1980, EPA promulgated final revisions of the Prevention of Significant Deterioration Rules and the associated requirement for State Implementation Plans for attainment and nonattainment areas.

Statement of Need

The Statement of Need prepared pursuant to ORS 183.335(2) is presented in Attachment 4.

Discussion

The proposed New Source Review rule (Attachment 2) is intended to rectify the deficiencies identified by EPA and to revise those areas affected by the Alabama Power decision. This rule is designed to meet all of the requirements for State Implementation Plans for New Source Review and Prevention of Significant Deterioration in a much simpler rule than that adopted by EPA. Clearly the states are not required to adopt all of the complex regulatory language that EPA was forced to adopt in response to the Court ruling. Instead state rules can provide for the specific needs of a particular state as long as "equivalency" with the EPA requirements can be demonstrated.

The proposed rules will simplify the present Oregon rules by combining all new source requirements under one set of definitions and procedures. This rule would be known as "New Source Review" with the new source requirements of the Prevention of Significant Deterioration included in a section applying to attainment areas. The rules would be listed immediately following the rules for Air Contaminant Discharge Permits making it possible to find all of the permit requirements in one place, whereas the present rules are scattered in four different sections. It is proposed that the present rules be revoked when and if the proposed rule is adopted as summarized in Attachment 1. The rules proposed for revocation are enclosed in Attachment 3.

The replacement of existing rules with the proposed rule will represent a major simplification of the new source requirements. Overall, when combined with the redesignation of certain nonattainment areas to smaller areas, the proposed rule is more flexible and more equitable than the present rules. At the same time, adequate protection for the nonattainment areas is provided. The proposed requirements for attainment areas are equivalent in stringency to the EPA Prevention of Significant Deterioration Rules.

The provisions which have been added to the proposed rule to increase flexibility and provide equity are the following:

1. Definition of "Major source" and "Major Modification"

The emission rate which determines the cutoff between major and minor sources and modifications was remanded to EPA in the Alabama Power decision on two counts. First, the definition of "potential to emit" was changed to mean potential after the application of controls as opposed to before controls under the original EPA definition. Secondly, for modifications any increase greater than a significant amount was deemed "major." EPA resolved the dilemma created by these rulings by defining a set of cutoff criteria for major sources and major modifications as follows:

"Major" size cutoff

I. Nonattainment Areas	
Major Sources	100 tons/year
Major Modification	"Significant" increase
II. Attainment Areas	
Major Sources	100 tons/year for sources in 28 categories
	250 tons/year for all others
Major Modification	"Significant" increase

This definition of "major" has proven to be needlessly complex and confusing to applicants. The proposed rule simplifies the definition of "major" by defining a "significant emission rate increase" for each pollutant after control as the cutoff for both major sources and major modifications. The same cutoff stringency would be applied to new sources and modifications in nonattainment areas.

2. Sources or Modifications Impacting Nonattainment Areas

Under the proposed rule, major sources and major modifications which locate outside of nonattainment areas but have an impact on the nonattainment area are required to mitigate that impact. This mitigation can be accomplished by installing controls better than otherwise required in an attainment area, by providing offsets, or by receiving an allocation of a growth increment. In conjunction with refined nonattainment boundaries, this provision releases some areas from the offset requirement while providing equity for sources inside and outside of nonattainment areas.

3. Exemptions

The proposed rule allows certain exemptions for temporary sources, portable sources, municipal refuse facilities, sources receiving federal orders to switch fuels, and sources in attainment areas that

would not impact a nonattainment area or a Class I area. These exemptions are allowed by the EPA requirements and are also appropriate for Oregon.

4. Growth Increments for Nonattainment Areas

Growth increments may be available in some of the nonattainment areas of the State depending on the degree of reductions obtained through the control strategies. Section OAR 340-20-240(7) has been added for major source growth increments for the Medford-Ashland ozone nonattainment area. As control strategies in other areas are developed growth increments can be adopted, thus releasing additional sources from the offset requirement. In the meantime, offsets are required for new sources or modifications in those nonattainment areas.

5. Banking

Banking of emission reductions would be allowed under the provisions of OAR 340-20-265. Under this proposal the DEQ would operate a statewide bank in which owners or operators of facilities could deposit emission reductions subject to the limitations specified in the rule. Counties or cities that wish to make emissions banking part of a growth management plan may also participate in the emissions bank. Most of the recommendations of the Portland Growth Management Study have been incorporated into this provision.

The proposed banking provision allows only limited banking at this time. It was felt that the air quality in nonattainment areas would be adversely affected by a banking system that allowed banking of "paper" reductions or did not allow for discounting of banked emissions in the event that air quality worsened. EPA is promoting an optional banking program for State Implementation Plans for which draft guidelines are available. The proposed banking provision is consistent with these guidelines.

6. Plant Site Emission Limits

The requirements for plant site emission limits are cross referenced to apply to new sources and modifications. The baseline for computing offset and banking credits will be the plant site emission limits.

7. Protection of Ozone Strategies

A provision has been proposed in these rules under OAR 340-20-280 to protect the options of the Commission in adopting strategies for attainment of the ozone standard in the Portland nonattainment area. The most likely strategies have been locked up so that they cannot be used for offsets or banking.

Summation

1. Adoption of the proposed New Source Review rules will insure approval of the Oregon State Implementation Plan for nonattainment areas.
2. The revised Prevention of Significant Deterioration rules will allow DEQ to assume that program from EPA.

Director's Recommendation

I recommend that the Commission authorize a public hearing for the attached New Source review rule modifications and consider the rules for adoption at the March 13 Commission meeting.

Bill

William H. Young

- Attachments:
1. Summary of Proposed Rule Adoptions and Revocations
 2. Proposed New Source Review Rules
 3. Rules Proposed for Revocation
 4. Notice of Public Hearing and Statement of Need for Rulemaking

LK:s

AQ0042.1

229-5186

January 16, 1981

Summary of Proposed Rule Adoptions and Revocations

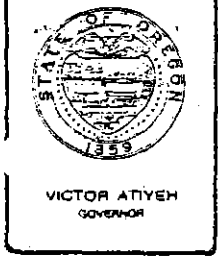
Proposed Adoptions

1. New Source Review--OAR 340-20-220 to 280

Proposed Revocations

1. Special Permit Requirements for Sources Locating In or Near Nonattainment areas--OAR 340-20-190 to 195.
2. Criteria for Approval of New Air Contaminant Sources in the Portland Special Air Quality Maintenance Area--OAR 340-32-005 to 025
3. Specific Air Pollution Control Rules for the Medford-Ashland Air Quality Maintenance Area--OAR 340-30-110 Emission Offsets
4. Prevention of Significant Deterioration--OAR 340-31-105, Definitions 1 to 12, 13 to 14, and 17 to 22 (Definitions 12, 15, and 16 are retained); OAR 340-31-125; and OAR 340-31-135 to 195

AQ0042.1A



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 No. F-2, January 30, 1981, EQC Meeting

Request for Authorization to Hold a Public Hearing on
Amendments to the State Implementation Plan Regarding Rules
for Plant Site Emission Limits

Background

On June 8, 1979, the Commission adopted OAR 340-20-196 to 197 "Emission Limits on a Plant Site Basis" (Attachment 1). This rule was intended to legally and accurately regulate air shed carrying capacity and to provide a means for insuring progress toward attainment of standards. In attainment areas these rules provide a method of allocating Prevention of Significant Deterioration increment.

On April 10, 1980, Medford Corporation filed a petition with the Commission questioning the applicability of Emission Limits on a Plant Site Basis to air conveying systems and veneer dryers. The Commission heard this petition at the May 16, 1980, meeting and subsequently referred the matter to the Department for further consideration.

The Department has evaluated Medford Corporation's petition and has concluded that a revision to the Plant Site Emission Limit Rule is necessary to more fully define the basis upon which Plant Site Emission Limits are to be established.

Discussion

The Federal Clean Air Act requires states to develop and adopt strategies for attainment of Air Quality Standards in nonattainment areas. The Act also requires states to demonstrate reasonable further progress (RFP) toward attainment of standards and to track consumption of and not exceed, Prevention of Significant Deterioration (PSD) increments in all attainment areas of the state.

In order to track progress toward attainment of standards and consumption of PSD increments, accurate baseline emission data must be established and increases and decreases from the baseline must be tracked.

Ambient air quality is primarily a product of meteorological conditions and emissions into an airshed. Total airshed loading is a summation of all of the individual source emissions at any given time.

PSELS are needed to establish an accurate and agreed baseline emission rate from individual sources and to accurately track increases or decreases from that baseline.

The draft Plant Site Emission Limit Rule (Attachment 2) establishes criteria for calculating Plant Site Emission Limits as follows:

New Sources or Modifications - Plant Site Emission limits will be based on the appropriate control technology requirement of the New Source Review Rules or the Air Contaminant Discharge Permit Rules (BACT, LAER, or HBPT).

Existing Sources in Nonattainment Areas - Plant Site Emission Limits will be based on the mass emission rate allowed by a specific source category mass emission limit in the State Implementation Plan and the actual operating level of the plant. If no specific mass emission limit exists in the State Implementation Plan, the Plant Site Emission limit would be based on actual emissions during 1977 or 1978 whichever is more typical of plant operation. Within practical limitations, the Department will endeavor to establish specific mass emission limits for all significant source categories where they do not now exist.

Existing Sources in Attainment or Unclassifiable Areas - The Plant Site Emission limits are proposed to be based on actual emission levels during 1978 as required by the Prevention of Significant Deterioration baseline. Increases or decreases from the baseline could be allowed pursuant to applicable rules.

Recommendation

I recommend that a public hearing be authorized to consider replacing the existing rules, OAR 340-20-196 to 197 "Emission Limits on a Plant Site Basis" with the proposed rules.



William H. Young

- Attachments
- 1) OAR 340-20-196 to 197
"Emission Limits on a Plant Site Basis"
 - 2) Draft Plant Site Emission Limit Rules
 - 3) Notice of Public Hearing and Statement of
Need for Rulemaking

Lloyd Kostow:fn
229-5186
January 14, 1981
AF759 (2)

DRAFT PLANT SITE EMISSION LIMIT RULES

340-20-300 Requirement for Plant Site Emission Limits

Plant site emission limits (PSEL) shall be incorporated in all Air Contaminant Discharge Permits except minimal source permits and special letter permits as a means of managing airshed capacity. All sources subject to regular permit requirements shall be subject to PSELs for all Federal and State regulated pollutants. PSELs will be incorporated in permits when permits are renewed, modified, or newly issued.

The emissions limits established by PSELs shall provide the basis for:

1. Assuring reasonable further progress toward attaining compliance with ambient air standards.
2. Assuring that compliance with ambient air standards and Prevention of Significant Deterioration increments are being maintained.
3. Administering offset, banking and bubble programs.
4. Establishing the baseline for tracking consumption of Prevention of Significant Deterioration Increments.

340-20-305 Definitions

1. "Actual Emissions" means the mass rate of emissions of a pollutant from an emissions source.
 - a. In general, actual emission^s as of the baseline period shall equal the average rate at which the source actually emitted the pollutant during a baseline period and which is representative of normal source operation. The Department shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the source's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.
 - b. The Department may presume that existing source-specific permitted mass emissions for the source are equivalent to the actual emissions of the source if they are within 10% of the calculated actual emissions.
 - c. For any newly permitted emission source which has not yet begun normal operation in the baseline period, actual emissions shall equal the potential to emit of the source.

2. "Baseline Emission Rate" means the average actual emission rate during the baseline period. Baseline emission rate shall not include increases due to voluntary fuel switches or increased hours of operation that have occurred after the baseline period.
3. "Baseline Period" means the average of calendar years 1977 and 1978.
4. "Normal Source Operation" means operations which do not include such conditions as forced fuel substitution, equipment malfunction, or highly abnormal market conditions.
5. "Plant Site Emission Limit (PSEL)" means the total allowable mass emissions per unit time of an individual air pollutant in a permit for a source.

340-20-310 Criteria for Establishing Plant Site Emission Limits

1. For existing sources, PSELs shall be based on the baseline emission rate for a particular pollutant at a source and may be adjusted upward or downward pursuant to Department Rules. Applications to increase PSELs above the baseline emission rate, may be approved only if PSD increments, growth increments, or emission offsets are available.

When the requested emission increase is greater than the significant emission rate specified in OAR 340-20-225(22), the applicant shall provide an assessment of the air quality impact pursuant to procedures specified in OAR 340-20-220 to 280.

2. PSEs shall be established on at least an annual emission basis and a short term period emission basis that is compatible with source operation and air quality standards.
3. PSEs may be established separately within a particular source for process emissions, combustion emissions, and fugitive emissions.
4. Documentation of PSEL calculations shall be available to the permittee.
5. For new sources, PSEs shall be based on application of applicable control equipment requirements and projected operating conditions.
6. PSEs shall not allow emissions in excess of those allowed by any applicable Federal or State regulation or by any specific permit condition unless specific provisions of 340-20-315 are met.

7. PSELS may be changed pursuant to Department rules when:
- a. Errors are found or better data is available for calculating PSELS,
 - b. More stringent control is required by a rule adopted by the Environmental Quality Commission,
 - c. An application is made for a permit modification pursuant to the New Source Review requirements and approval can be granted based on growth increments, offsets, or available Prevention of Significant Deterioration increments.
 - d. The Department finds it necessary to initiate modifications of a permit pursuant to OAR 340-14-040.

340-20-315 Alternative Emission Controls (Bubble)

Alternative emission controls may be used within a plant site such that PSELS established pursuant to these rules are substituted for specific mass emission limit rules provided that:

1. Such substitutions are not specifically prohibited by a permit condition.

2. Net emissions are not increased above the Plant Site Emission Limit.
3. The net air quality impact is not increased.
4. No other pollutants including malodorous, toxic or hazardous pollutants are substituted.
5. Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) where required by OAR 340-20-240 or 245 are not relaxed.
6. Compliance with the PSEL can be readily determined.
7. Application is made for a permit modification and such modification is approved by the Department.

340-20-320 Temporary PSD Increment Allocation

PSELS may include a temporary or time-limited allocation against an otherwise unused PSD increment in order to accommodate voluntary fuel switching or other cost or energy saving proposals provided it is demonstrated to the Department that:

- a. No ambient air quality standard is exceeded.

- b. No applicable PSD increment is exceeded.
- c. No observable or measurable detrimental impact on air quality is created.
- d. No nuisance condition is created.
- e. The applicant's proposed and approved objective continues to be realized.

Such temporary allocation^{of} a PSD increment must be set forth in a specific permit condition issued pursuant to the Department's Notice and Permit Issuance or Modification Procedures.

Such temporary allocations must be specifically time limited and may be recalled under specified notice conditions.

Draft New Source Review

Regulation

Air Quality Division

Department of Environmental Quality

March 4, 1981

Introduction-

The purpose of this proposed regulation is to update the New Source Review provisions of the State Implementation Plan. In addition, the new source requirements of the Prevention of Significant Deterioration provisions have been incorporated into this regulation.

Index

OAR 340-20-220	Applicability
OAR 340-20-225	Definitions
OAR 340-20-230	Procedural Requirements
	1. Required Information
	2. Other Obligations
	3. Public Participation
OAR 340-20-235	Review of New Sources and Modifications for Compliance with Regulations
OAR 340-20-240	Requirements for Sources in Nonattainment Areas
	1. Lowest Achievable Emission Rate
	2. Source Compliance
	3. Growth Increment or Offsets
	4. Net Air Quality Benefit
	5. Alternative Analysis
	6. Special Exemption for the Salem Ozone Nonattainment Area
	7. Growth Increments
OAR 340-20-245	Requirements for Sources in Attainment or Unclassifiable Areas (Prevention of Significant Deterioration)
	1. Best Available Control Technology
	2. Air Quality Analysis
	3. Exemption for Sources Not Significantly Impacting Nonattainment Areas
	4. Air Quality Models
	5. Air Quality Monitoring
	6. Additional Impact Analysis
	7. Sources Impacting Class I Areas
OAR 340-20-250	Exemptions
OAR 340-20-255	Baseline for Determining Credit for Offsets
OAR 340-20-260	Requirements for Net Air Quality Benefit
OAR 340-20-265	Emission Reduction Credit Banking
OAR 340-20-270	Fugitive and Secondary Emissions
OAR 340-20-275	Stack Heights
OAR 340-20-280	Reserved Control Strategies

340-20-220 Applicability

1. No owner or operator shall begin construction of a major source or a major modification of an air contaminant source without having received an Air Contaminant Discharge Permit from the Department of Environmental Quality and having satisfied OAR 340-20-230 through 280 of these Rules.

2. Owners or operators of proposed non-major sources or non-major modifications are not subject to these New Source Review rules. Such owners or operators should refer to the rules for Notice of Construction and Approval of Plans (OAR 340-20-020 to 032) and Air Contaminant Discharge Permits (OAR 340-20-140 to 185) for applicable requirements.

340-20-225 Definitions

1. "Actual emissions" means the rate of emissions of a pollutant from an emissions sources.
 - a. In general, actual emissions as of the baseline period shall equal the average rate in tons per year at which the source actually emitted the pollutant during the baseline period and which is representative of normal source operation.

The Department shall allow the use of a different time period upon a determination that it is more

representative of normal source operation. Actual emissions shall be calculated using the source's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.

- b. The Department may presume that existing source-specific permitted mass emissions for the source are equivalent to the actual emissions of the source if they are within 10% of the calculated actual emissions.
- c. For any newly permitted emission source which has not yet begun normal operation in the baseline period, actual emissions shall equal potential to emit of the source.

- 2. "Baseline Concentration" means that ambient concentration level for a particular pollutant which existed in an area during the calendar year 1978. If no ambient air quality data is available in an area, the baseline concentration may be estimated using modeling based on actual emissions for 1978.

The following emission increases or decreases will be included in the baseline concentration:

- (a) Actual emission increases or decreases occurring before January 1, 1978, and

(b) Actual emission increases from any major source or major modification on which construction commenced before January 6, 1975.

3. "Best Available Control Technology (BACT)" means an emission limitation (including a visible emission standard) based on the maximum degree of reduction of each air contaminant subject to regulation under the Clean Air Act which would be emitted from any proposed major source or major modification which, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such air contaminant. In no event, shall the application of BACT result in emissions of any air contaminant which would exceed the emissions allowed by any applicable new source performance standard or any standard for hazardous air pollutants. If an emission limitation is not feasible, a design, equipment, work practice, or operational standard, or combination thereof, may be required. Such standard shall, to the degree possible, set forth the emission reduction achievable and shall provide for compliance by prescribing appropriate permit conditions.

4. "Commence" means that the owner or operator has obtained all

necessary preconstruction approvals required by the Clean Air Act and either has:

- a. Begun, or caused to begin, a continuous program of actual on-site construction of the source to be completed in a reasonable time, or
 - b. Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed in a reasonable time.
5. "Construction" means any physical change (including fabrication, erection, installation, demolition, or modification of an emissions unit) or change in the method of operation of a source which would result in a change in actual emissions.
 6. "Dispersion Technique" means any air contaminant control procedure which depends upon varying emissions with atmospheric conditions including but not limited to supplementary or intermittent control systems and excessive use of enhanced plume rise.
 7. "Emission Reduction Credit Banking" means to presently reserve, subject to requirements of these provisions, emission reductions for use by the reserver or assignee for future compliance with

air pollution reduction requirements.

8. "Emissions Unit" means any part of a stationary source (including specific process equipment) which emits or would have the potential to emit any pollutant subject to regulation under the Clean Air Act.
9. "Fugitive emissions" means emissions of any air contaminant which escape to the atmosphere from any point or area that is not identifiable as a stack, vent, duct, or equivalent opening.
10. "Good Engineering Practice Stack Height" means that stack height necessary to insure that emissions from the stack do not result in excessive concentrations of any air contaminant in the immediate vicinity of the source as a result of atmospheric downwash, eddies, and wakes which may be created by the source structure, nearby structures, or nearby terrain obstacles and shall not exceed the following:
 - a. 30 meters, for plumes not influenced by structures or terrain;
 - b. $H_G = H + 1.5 L$, for plumes influenced by structures;

Where H_G = good engineering practice stack height,
H = height of structure or nearby structure,
L = lesser dimension (height or width) of the
structure or nearby structure,

- c. Such height as an owner or operator demonstrates, after notice and opportunity for public hearing, is necessary to avoid plume downwash.
11. "Growth Increment" means an allocation of some part of an airshed's capacity to accommodate future new major sources and major modifications of sources.
12. "Lowest Achievable Emission Rate (LAER)" means that rate of emissions which reflects a) the most stringent emission limitation which is contained in the implementation plan of any State for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable, or b) the most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent. In no event, shall the application of this term permit a proposed new or modified source to emit any air contaminant in excess of the amount allowable under applicable new source performance standards or standards for hazardous air pollutants.

13. "Major Modification" means any physical change or change of operation of a major source that would result in a net significant emission rate increase (as defined in definition 22) for any pollutant subject to regulation under the Clean Air Act. This criteria also applies to any pollutants not previously emitted by the source. Calculations of net emission increases must take into account all accumulated increases and decreases in actual emissions occurring at the source since January 1, 1978, or since the time of the last construction approval issued for the source pursuant to the New Source Review Regulations, whichever time is more recent. If accumulation of emission increases results in a net significant emission rate increase, the modifications causing such increases become subject to the New Source Review requirements.

14. "Major source" means a stationary source which emits, or has the potential to emit, any pollutant regulated under the Clean Air Act at a Significant Emission Rate (as defined in definition 22).

15. "Nonattainment Area" means a geographical area of the State which exceeds any State or Federal primary or secondary ambient air quality standard as designated by the Environmental Quality Commission.

16. "Offset" means an equivalent or greater emission reduction which is required prior to allowing an emission increase from a new major source or major modification of a source.
17. "Plant Site Emission Limit" means the total allowable mass emissions per unit time of an individual air pollutant in a permit for a source.
18. "Potential to Emit" means the maximum capacity of a source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable. Secondary emissions do not count in determining the potential to emit of a source.
19. "Reconstruction" of a source or emission unit occurs when the fixed capital cost of the new components exceed 50 percent of the fixed capital cost of a comparable entirely new source or emission unit.
20. "Resource Recovery Facility" means any facility at which municipal solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing municipal solid waste for reuse. Energy conversion facilities

must utilize municipal solid waste to provide 50% or more of the heat input to be considered a resource recovery facility.

21. "Secondary Emissions" means emissions from new or existing sources which occur as a result of the construction and/or operation of a source or modification, but do not come from the source itself. Secondary emissions must impact the same general area as the source associated with the secondary emissions. Secondary emissions may include, but are not limited to:
- a. Emissions from ships and trains coming to or from a facility,
 - b. Emissions from off-site support facilities which would be constructed or would otherwise increase emissions as a result of the construction of a source or modification.
22. "Significant emission rate" means emission rates equal to or greater than the following for air pollutants regulated under the Clean Air Act.

Table 1: Significant Emission Rates for Pollutants Regulated under the Clean Air Act

<u>Pollutant</u>	<u>Significant Emission Rate</u>
Carbon Monoxide	100 tons/year
Nitrogen Oxides	40 tons/year
Particulate Matter*	25 tons/year
Sulfur Dioxide	40 tons/year

<u>Pollutant</u>	<u>Significant Emission Rate</u>
Volatile Organic Compounds*	40 tons/year
Lead	0.6 ton/year
Mercury	0.1 ton/year
Beryllium	0.0004 ton/year
Asbestos	0.007 ton/year
Fluorides	3 tons/year
Sulfuric Acid Mist	7 tons/year
Hydrogen Sulfide	10 tons/year
Total reduced sulfur (including hydrogen sulfide)	10 tons/year
Reduced sulfur compounds (including hydrogen sulfide)	10 tons/year

Any emissions increase less than these rates associated with a new source or modification which would construct within 10 kilometers of a Class I area, and would have an impact on such area equal to or greater than 1 ug/m^3 (24 hour average) shall be deemed to be emitting at a significant emission rate.

- * For the nonattainment portions of the Medford-Ashland Air Quality Maintenance Area, the Significant Emission Rates for particulate matter and volatile organic compounds are defined in Table 2.

Table 2: Significant Emission rates for the Nonattainment Portions of the Medford-Ashland Air Quality Maintenance Area.

<u>Air Contaminant</u>	<u>Emission Rate</u>					
	<u>Annual</u>		<u>Day</u>		<u>Hour</u>	
	<u>Kilograms</u>	<u>(tons)</u>	<u>Kilograms</u>	<u>(lbs)</u>	<u>Kilograms</u>	<u>(lbs)</u>
Particulate Matter (TSP)	4,500	(5.0)	23	(50.0)	4.6	(10.0)
Volatile Organic Compound (VOC)	18,100	(20.0)	91	(200)	--	--

23. "Significant Air Quality Impact" means an ambient air quality impact which is equal to or greater than:

<u>Pollutant</u>	<u>Annual</u>	<u>Pollutant Averaging Time</u>			
		<u>24-hour</u>	<u>8-hour</u>	<u>3-hour</u>	<u>1-hour</u>
SO ₂	1.0 ug/m ³	5 ug/m ³		25 ug/m ³	
TSP	0.2 ug/m ³	1.0 ug/m ³			
NO ₂	1.0 ug/m ³				
CO			0.5 mg/m ³		2 mg/m ³

For sources of volatile organic compounds (VOC), a major source or major modification will be deemed to have a significant impact if it is located within 30 kilometers of an ozone nonattainment area.

24. "Source" means any building, structure, facility, installation or combination thereof which emits or is capable of emitting air contaminants to the atmosphere and is located on one or more contiguous or adjacent properties and is owned or operated by the same person or by persons under common control.

340-20-230 Procedural Requirements

1. Information Required

The owner or operator of a proposed major source or major modification shall submit all information necessary to perform any analysis or make any determination required under these Rules. Such information shall include, but not be limited to:

- a. A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;
- b. An estimate of the amount and type of each air contaminant emitted by the source in terms of hourly, daily, seasonal, and yearly rates, showing the calculation procedure;
- c. A detailed schedule for construction of the source or modification;
- d. A detailed description of the system of continuous emission reduction which is planned for the source or modification, and any other information necessary to determine that best available control technology or lowest achievable emission rate technology, whichever is applicable, would be applied;

- e. To the extent required by these rules, an analysis of the air quality impact of the source or modification, including meteorological and topographical data, specific details of models used, and other information necessary to estimate air quality impacts; and

- f. To the extent required by these rules, an analysis of the air quality impacts, and the nature and extent of all commercial, residential, industrial, and other growth which has occurred since January 1, 1978, in the area the source or modification would affect.

2. Other Obligations

Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to these Rules or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this section who commences construction after the effective date of these regulations without applying for and receiving an Air Contaminant Discharge Permit, shall be subject to appropriate enforcement action.

Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within 18 months of the scheduled time. The Department may extend the 18-month period upon satisfactory

showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan and any other requirements under local, State, or Federal law.

3. Public Participation

- a. Within 30 days after receipt of an application to construct, or any addition to such application, the Department shall advise the applicant of any deficiency in the application or in the information submitted. The date of the receipt of a complete application shall be, for the purpose of this section, the date on which the Department received all required information.
- b. Notwithstanding the requirements of OAR 340-14-020, but as expeditiously as possible and at least within six months after receipt of a complete application, the Department shall make a final determination on the application. This involves performing the following actions in a timely manner.

- A. Make a preliminary determination whether construction should be approved, approved with conditions, or disapproved.
- B. Make available for a 30 day period in at least one location a copy of the permit application, a copy of the preliminary determination, and a copy or summary of other materials, if any, considered in making the preliminary determination.
- C. Notify the public, by advertisement in a newspaper of general circulation in the area in which the proposed source or modification would be constructed, of the application, the preliminary determination, the extent of increment consumption that is expected from the source or modification, and the opportunity for a public hearing and for written public comment.
- D. Send a copy of the notice of opportunity for public comment to the applicant and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: The chief executives of the city and county where the source or modification would be located, any comprehensive regional land use planning agency, any State, Federal Land Manager, or Indian Governing Body whose lands

may be affected by emissions from the source or modification, and the Environmental Protection Agency.

E. Upon determination that significant interest exists, provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source or modification, alternatives to the source or modification, the control technology required, and other appropriate considerations. For energy facilities, the hearing may be consolidated with the hearing requirements for site certification contained in OAR 345, Division 15.

F. Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing(s) in making a final decision on the approvability of the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Department shall consider the applicant's response in making a final decision. The Department shall make all comments available for public inspection in the same locations where the Department made

available preconstruction information relating to the proposed source or modification.

G. Make a final determination whether construction should be approved, approved with conditions, or disapproved pursuant to this section.

H. Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the Department made available preconstruction information and public comments relating to the source or modification.

340-20-235 Review of New Sources and Modifications for Compliance With Regulations

The owner or operator of a proposed major source or major modification must demonstrate the ability of the proposed source or modification to comply with all applicable requirements of the Department of Environmental Quality, including New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants, and shall obtain an Air Contaminant Discharge Permit.

340-20-240 Requirements for Sources in Nonattainment Areas

New major sources and major modifications which are located in designated nonattainment areas shall meet the requirements listed below.

Any proposed emissions unit which would in and of itself constitute a major source and any modification of a source or emissions unit (including reconstructions) which would in and of itself constitute a major modification shall be subject to these requirements regardless of emission reductions occurring elsewhere within the source.

1. Lowest Achievable Emission Rate

The owner or operator of the proposed major source or major modification must demonstrate that the source or modification will comply with the lowest achievable emission rate (LAER). In the case of a major modification, the requirement for LAER shall apply only to each new or modified emission unit. For phased construction projects, the determination of LAER shall be reviewed at the latest reasonable time prior to commencement of construction of each independent phase.

2. Source Compliance

The owner or operator of the proposed major source or major modification must demonstrate that all major sources owned or operated by such person (or by an entity controlling, controlled

by, or under common control with such person) in the State are in compliance or on a schedule for compliance, with all applicable emission limitations and standards under the Clean Air Act.

3. Growth Increment or Offsets

The owner or operator of the proposed major source or major modification must demonstrate that the source or modification will comply with any established emissions growth increment for the particular area in which the source is located or must provide emission reductions ("offsets") as specified by these rules. A combination of growth increment allocation and emission reductions may be used to demonstrate compliance with this section. Those emission increases for which offsets are available shall not be eligible for a growth increment allocation.

4. Net Air Quality Benefit

For cases in which emission reductions or offsets are required, the applicant must demonstrate that a net air quality benefit will be achieved in the affected area as described in OAR 340-20-260 (Requirements for Net Air Quality Benefit) and that the reductions are consistent with reasonable further progress toward attainment of the air quality standards.

5. Alternative Analysis

An alternative analysis must be conducted for new major sources or major modifications of sources emitting volatile organic compounds or carbon monoxide locating in nonattainment areas.

This analysis must include an evaluation of alternative sites, sizes, production processes, and environmental control techniques for such proposed source or modification which demonstrates that benefits of the proposed source or modification significantly outweigh the environmental and social costs imposed as a result of its location, construction or modification.

6. Special Exemption for the Salem Ozone Nonattainment Area

Proposed major sources and major modifications of sources of volatile organic compounds which are located in the Salem Ozone nonattainment area shall comply with the requirements of Sections 1 and 2 of OAR 340-20-240 but are exempt from all other sections of this rule.

7. Growth Increments

a. Medford-Ashland Ozone Nonattainment Area

The ozone control strategy for the Medford-Ashland nonattainment area establishes a growth increment for new major sources or major modifications which will emit volatile

organic compounds. The cumulative volatile organic compound growth increment may be allocated as follows:

<u>year</u>	<u>cummulative volatile organic compound growth increment</u>
1980 to 1982	185 tons of VOC
1983	388
1984	591
1985	794
1986	997
1987	1200

No single owner or operator shall receive an allocation of more than 50% of any remaining growth increment in any one year. The growth increment shall be allocated on a first come-first served basis depending on the date of submittal of a complete permit application.

340-20-245 Requirements for Sources in Attainment or Unclassified Areas
(Prevention of Significant Deterioration)

New Major Sources or Major Modifications locating in areas designated attainment or unclassifiable shall meet the following requirements:

1. Best Available Control Technology

The owner or operator of the proposed major source or major modification shall apply best available control technology (BACT) for each pollutant which is emitted at a significant emission rate (OAR 340-20-225 definition 19). In the case of a major

modification, the requirement for BACT shall apply only to each new or modified emission unit which increases emissions. For phased construction projects, the determination of BACT shall be reviewed at the latest reasonable time prior to commencement of construction of each independent phase.

2. Air Quality Analysis

The owner or operator of the proposed major source or major modification shall demonstrate that the potential to emit any pollutant at a significant emission rate (OAR 340-20-225 definition 22), in conjunction with all other applicable emissions increases and decreases, would not cause or contribute to air quality levels in excess of:

- a. Any State or National ambient air quality standard, or
- b. Any applicable increment established by the Prevention of Significant Deterioration requirements (OAR 340-31-110),
or
- c. An impact on a designated nonattainment area greater than the significant air quality impact levels (OAR 340-20-225 definition 23).

Sources or modifications with the potential to emit at rates greater than the significant emission rate but less than 100 tons/year, and are greater than 50 kilometers from a

nonattainment area are not required to assess their impact on the nonattainment area.

If the owner or operator of a proposed major source or major modification wishes to provide emission offsets such that a net air quality benefit as defined in OAR 340-20-260 is provided, the Department may exempt such source or modification from the requirements of OAR 340-20-245 section 2.

3. Exemption for Sources Not Significantly Impacting Designated Nonattainment Areas.

A proposed major source is exempt from OAR 340-20-220 to 280 if:

- a. The proposed source does not have a significant air quality impact on a designated nonattainment area, and
- b. The potential emissions of the source are less than 100 tons/year for sources in the categories listed in Table 3 or less than 250 tons/year for sources not in the categories listed in Table 3.

Major modifications are not exempted under this section.

Owners or operators of proposed sources which are exempted by this provision should refer to OAR 340-20-020 to 032 and OAR 340-20-140 to 185 for possible applicable requirements.

Table 3: Source Categories

1. Fossil fuel-fired steam electric plants of more than 250 million BTU/hour heat input
2. Coal cleaning plants (with thermal dryers)
3. Kraft pulp mills
4. Portland cement plants
5. Primary Zinc Smelters
6. Iron and Steel Mill Plants
7. Primary aluminum ore reduction plants
8. Primary copper smelters
9. Municipal Incinerators capable of charging more than 250 tons of refuse per day
10. Hydrofloric, sulfuric and nitric acid plants
11. Sulfuric acid plants
12. Nitric acid plants
13. Petroleum Refineries
14. Lime plants
15. Phosphate rock processing plants
16. Coke oven batteries
17. Sulfur recovery plants
18. Carbon black plants (furnace process)
19. Primary lead smelters
20. Fuel conversion plants
21. Sintering plants

22. Secondary metal production plants
23. Chemical process plants
24. Fossil fuel fired boilers (or combinations thereof) totaling more than 250 million BTU per hour heat input
25. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels
26. Talconite ore processing plants
27. Glass fiber processing plants
28. Charcoal production plants

4. Air Quality Models

All estimates of ambient concentrations required under these Rules shall be based on the applicable air quality models, data bases, and other requirements specified in the "Guideline on Air Quality Models" (OAQPS 1.2-080, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, April 1978). Where an air quality impact model specified in the "Guideline on Air Quality Models" is inappropriate, the model may be modified or another model substituted. Such a change must be subject to notice and opportunity for public comment and must receive approval of the Commission and the Environmental Protection Agency. Methods like those outlined in the "Workbook for the Comparison of Air Quality Models" (U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park,

N.C. 27711, May, 1978) should be used to determine the comparability of air quality models.

5. Air Quality Monitoring

- a. The owner or operator of a proposed major source or major modification shall submit with the application, subject to approval of the Department, an analysis of ambient air quality in the area of the proposed project. This analysis shall be conducted for each pollutant potentially emitted at a significant emission rate by the proposed source or modification. As necessary to establish ambient air quality levels, the analysis shall include continuous air quality monitoring data for any pollutant potentially emitted by the source or modification except for nonmethane hydrocarbons. Such data shall relate to, and shall have been gathered over the year preceding receipt of the complete application, unless the owner or operator demonstrates that such data gathered over a portion or portions of that year or another representative year would be adequate to determine that the source or modification would not cause or contribute to a violation of an ambient air quality standard.

Air quality monitoring which is conducted pursuant to this requirement shall be conducted in accordance with 40 CFR

58 Appendix B, "Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring" and with other methods on file with the Department.

The Department may exempt a proposed major source or major modification from monitoring for a specific pollutant if the owner or operator demonstrates that the air quality impact from the emissions increase would be less than the amounts listed below or that the concentrations of the pollutant in the area that the source or modification would impact are less than these amounts.

Carbon monoxide - 575 ug/m^3 , 8 hour average

Nitrogen dioxide - 14 ug/m^3 , annual average

Total suspended particulate - 10 ug/m^3 , 24 hour average

Sulfur dioxide - 13 ug/m^3 , 24 hour average

Ozone - Any net increase of 100 tons/year or more of volatile organic compounds from a source or modification subject to PSD is required to perform an ambient impact analysis, including the gathering of ambient air quality data.

Lead - 0.1 ug/m^3 , 24 hour average

Mercury - 0.25 ug/m^3 , 24 hour average

Beryllium - 0.0005 ug/m^3 , 24 hour average

Fluorides - 0.25 ug/m³, 24 hour average

Vinyl chloride - 15 ug/m³, 24 hour average

Total reduced sulfur - 10 ug/m³, 1 hour average

Hydrogen sulfide - 0.04 ug/m³, 1 hour average

Reduced sulfur compounds - 10 ug/m³, 1 hour average

- b. The owner or operator of a proposed major source or major modification shall, after construction has been completed, conduct such ambient air quality monitoring as the Department may require as a permit condition to establish the effect which emissions of a pollutant (other than nonmethane hydrocarbons) may have, or is having, on air quality in any area which such emissions would affect.

6. Additional Impact Analysis

- a. The owner or operator of a proposed major source or major modification shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification. The owner or operator may be exempted from providing an analysis of the impact on vegetation having no significant commercial or recreational value.

- b. The owner or operator shall provide an analysis of the air quality concentration projected for the area as a result of general commercial, residential, industrial and other growth associated with the major source or modification.

7. Sources Impacting Class I Areas

Where a proposed major source or major modification impacts or may impact a Class I area, the Department shall provide notice to the Environmental Protection Agency and to the appropriate Federal Land Manager of the receipt of such permit application and of any preliminary and final actions taken with regard to such application. The Federal Land Manager shall be provided an opportunity in accordance with OAR 340-20-230 Section 3 to present a demonstration that the emissions from the proposed source or modification would have an adverse impact on the air quality related values (including visibility) of any Federal mandatory Class I lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increment for a Class I area.

340-20-250 Exemptions

1. Resource recovery facilities burning municipal refuse and sources subject to federally mandated fuel switches may be exempted by

the Department from requirements OAR 340-20-240 Sections 3 and 4 provided that:

- a. No growth increment is available for allocation to such source or modification, and
- b. The owner or operator of such source or modification demonstrates that every effort was made to obtain sufficient offsets and that every available offset was secured.

(Such an exemption may result in a need to revise the State Implementation Plan to require additional control of existing sources.)

2. Temporary emission sources, such as pilot plants, portable facilities, and emissions resulting from the construction phase of a new source or modification must comply with OAR 340-20-240(1) and (2) or OAR 340-20-245(1), whichever is applicable, but are exempt from the remaining requirements of OAR 340-20-240 and OAR 340-20-245 provided that the source or modification would impact no Class I area or no area where an applicable increment is known to be violated.
3. Proposed increases in hours of operation or production rates which would cause emission increases above the levels allowed in an Air Contaminant Discharge Permit may be exempted from the

requirement of OAR 340-20-245(1) (Best Available Control Technology) provided that the increases cause no exceedances of an increment or standard and that the net impact on a nonattainment area is less than the significant air quality impact levels.

4. Also refer to OAR 340-20-245(3) for exemptions pertaining to sources smaller than the Federal Size-cutoff Criteria.

340-20-255 Baseline for Determining Credit for Offsets

The baseline for determining credit for emission offsets shall be the Plant Site Emission Limit established pursuant to OAR 340-20-300 to 320 or, in the absence of a Plant Site Emission Limit, the actual emission rate for the source providing the offsets. Sources in violation of air quality emission limitations may not supply offsets from those emissions which are or were in excess of allowable emission rates. Offsets, including offsets from mobile and area source categories, must be quantifiable and enforceable before the Air Contaminant Discharge Permit is issued and must be demonstrated to remain in effect throughout the life of the proposed source or modification.

Offsets may not be provided from the amount of emission reduction required by an air quality regulation or air quality attainment

strategy that has been reserved by the Environmental Quality Commission (OAR 340-20-280).

340-20-260 Requirements for Net Air Quality Benefit

Demonstrations of net air quality benefit must include the following.

1. A demonstration must be provided showing that the proposed offsets will improve air quality in the same geographical area affected by the new source or modification. Offsets for volatile organic compounds or nitrogen oxides shall be within the same general air basin as the proposed source. Offsets for total suspended particulate, sulfur dioxide, carbon monoxide and other pollutants shall be within the area of significant air quality impact.
2. For new sources or modifications locating within a designated nonattainment area, the emission offsets must provide reductions which are equivalent or greater than the proposed increases. The offsets must be appropriate in terms of short term, seasonal, and yearly time periods to mitigate the impacts of the proposed emissions. For new sources or modifications locating outside of a designated nonattainment area which have a significant air quality impact (OAR 340-20-225 definition 23) on the nonattainment area, the emission offsets must be sufficient to reduce impacts to levels below the significant air quality impact

level within the nonattainment area. Proposed major sources or major modifications which emit volatile organic compounds and are located in or within 30 kilometers of an ozone nonattainment area shall provide reductions which are equivalent or greater than the proposed emission increases.

3. The emission reductions must be of the same type of pollutant as the emissions from the new source or modification. Sources of fine particulate must be offset with particulate in a similar size range. In areas where atmospheric reactions contribute to pollutant levels, offsets may be provided from precursor pollutants if a net air quality benefit can be shown.

4. The emission reductions must be contemporaneous, that is, the reductions must take effect prior to the time of startup but not more than one year prior to the submittal of a complete permit application for the new source or modification.

This time limitation may be extended as provided for in OAR 340-20-265 (Emission Reduction Credit Banking). In the case of replacement facilities, the Department may allow simultaneous operation of the old and new facilities during the startup period of the new facility provided that net emissions are not increased during that time period.

340-20-265 Emission Reduction Credit Banking

The owner or operator of a source of air pollution who wishes to reduce emissions by implementing more stringent controls than required by a permit or by an applicable regulation may bank such emission reductions. Cities, counties or other local jurisdictions may participate in the emissions bank in the same manner as a private firm. Emission reduction credit banking shall be subject to the following conditions:

1. To be eligible for banking, emission reduction credits must be in terms of actual emission decreases resulting from permanent continuous control of existing sources. The baseline for determining emission reduction credits shall be the actual emissions of the source or the Plant Site Emission Limit established pursuant to OAR 340-20-300 to 320.
2. Emission reductions may be banked for a specified period not to exceed ten years unless extended by the Commission, after which time such reductions will revert to the Department for use in attainment and maintenance of air quality standards or to be allocated as a growth margin.
3. Emission reductions which are required pursuant to an adopted rule or those that are reserved for control strategies pursuant to OAR 340-20-280 shall not be banked.

4. Permanent source shutdowns or curtailments other than those used within one year for contemporaneous offsets as provided in OAR 340-20-260(4) are not eligible for banking by the owner or operator but will be banked by the Department for use in attaining and maintaining standards. The Department may allocate these emission reductions as a growth increment.

5. The amount of banked emission reduction credits shall be discounted without compensation to the holder for a particular source category when new regulations requiring emission reductions are adopted by the Commission. The amount of discounting of banked emission reduction credits shall be calculated on the same basis as the reductions required for existing sources which are subject to the new regulation. Banked emission reduction credits shall be subject to the same rules, procedures, and limitations as permitted emissions.

6. The amount of banked emission reduction credits may be uniformly discounted by action of the Commission if it is established that reasonable further progress toward attainment of air quality standards is not being achieved and no other control strategy is available.

7. Emission reductions must be in the amount of ten tons per year or more to be creditable for banking. In the Medford-Ashland AQMA emission reductions must be at least in the amount specified in Table 2 of OAR 340-20-225(22).

8. Requests for emission reduction credit banking must be submitted to the Department and must contain the following documentation:
 - a. A detailed description of the processes controlled,
 - b. Emission calculations showing the types and amounts of actual emissions reduced,
 - c. The date or dates of such reductions,
 - d. Identification of the probable uses to which the banked reductions are to be applied,
 - e. Procedure by which such emission reductions can be rendered permanent and enforceable.

9. Requests for emission reduction credit banking shall be submitted to the Department prior to or within the year following the actual emissions reduction. The Department shall approve or deny requests for emission reduction credit banking and, in the case of approvals, shall issue a letter to the owner or operator defining the terms of such banking. The Department shall take steps to insure the permanence and enforceability of the banked emission reductions by including appropriate conditions in Air Contaminant Discharge Permits and by appropriate revision of the State Implementation Plan.

10. The Department shall provide for the allocation of the banked emission reduction credits in accordance with the uses specified by the holder of the emission reduction credits. When emission reduction credits are transferred, the Department must be notified in writing. Any use of emission reduction credits must be compatible with local comprehensive plans, Statewide planning goals, and State laws and rules.

340-20-270 Fugitive and Secondary Emissions

Fugitive emissions shall be included in the calculation of emission rates of all air contaminants. Fugitive emissions are subject to the same control requirements and analyses required for emissions from identifiable stacks or vents. Secondary emissions shall not be included in calculations of potential emissions which are made to determine if a proposed source or modification is major. Once a source or modification is identified as being major, secondary emissions must be added to the primary emissions for purposes of these rules.

340-20-275 Stack Heights

The degree of emission limitation required for any air contaminant regulated under these rules shall not be affected in any manner by so much of the stack height as exceeds good engineering practice or by any other dispersion technique. This section shall

not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before that date.

340-20-280 Reserved Control Strategies

The following categories of volatile organic compound sources are hereby reserved in the Portland ozone nonattainment area for possible use in standards attainment plans and shall not be used for offsets or emission reduction credit banking until such time as the ozone SIP is adopted.

- 1 - Annual Automobile Inspection Maintenance Program
- 2 - Architectural Coatings
- 3 - Gasoline Service Stations, Stage II
- 4 - Barge and Vessel loading of gasoline and other light petroleum products
- 5 - Paper coating in manufacturing
- 6 - Petroleum Base (Stoddard) Dry Cleaners

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

TO: Environmental Quality Commission

DATE: February 27, 1981

FROM: *Bob Gilbert Bob*

SUBJECT: Public Forum Complaint, January 30, 1981, Pollution of Deep Creek
Clackamas County

Background

At the January 30, 1981 Environmental Quality Commission meeting, Mrs. Mabel Johnson of Boring, Oregon, presented a report on Deep Creek which covered a calendar span from January 1980 through January 1981. Mrs. Johnson also submitted a container of contaminated creek water. The water sample was analyzed and contained mostly wood fibers with some sediment particles, organic debris and algae material.

The Department has studied two problems which impose major impacts upon the quality of the North Fork of Deep Creek.

The major visual impact is caused by Vanport Mfg. Co., which is located in the City of Boring. This sawmill is positioned on both sides of the creek. Rain water runoff carries mud and wood particles down the roadways into the creek. Yard traffic grinds up the bark which is always dropped on the roads during log hauling. In 1977 Vanport hired Smith-Monroe Engineers, Inc., to develop a program to correct the problems. A three-phase construction plan was initiated to stabilize the soil which is covered with years of bark accumulation (see attached drawing). The work at this time is 3/4 completed and improvements have been made (as shown by orange marking on the drawing). At this time, Vanport has been affected by depressed lumber markets and presently is faced with financial difficulties which have impeded its efforts to complete the corrective actions. The company has requested additional time to complete the project. The Department is presently working with Vanport to resolve this matter.

The second problem is also found in the City of Boring. It is associated with sewage disposal deficiencies in the central business and industrial areas. An areawide sewer study was conducted by DEQ with the help of Clackamas County in 1978. Boring is currently served by septic tank and drainfield installations. A high proportion of the total number of individual systems have been identified as near or actual failures. These failures are caused by poor soil quality and smaller lot size. There are several businesses downtown on the south side which are directly discharging into Deep Creek above the bridge.

Pollution of Deep Creek
February 27, 1981
Page 2

A technical memorandum titled "Boring Neighborhood Improvement Plan" was completed in October of 1980. It was prepared by Clackamas County Department of Environmental Services, Planning Division. This memorandum has recommended that a small sewage treatment plant be installed to correct the sewage discharges. Meetings were conducted by the Clackamas County Planning Division but more public support is needed to include the sewage treatment plant in the plan.

Hopefully, the STP will be reconsidered this spring and will be included in the Neighborhood Improvement Plan.

Mrs. Johnson has routinely provided assistance to the Department by advising the NWR of observed problems in Deep Creek. The region has maintained regular contact with Mrs. Johnson to keep her updated with our efforts and will continue to do so in the future.

RC96

cc: Northwest Region, DEQ
Water Quality, DEQ
Regional Operations, DEQ

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

TO: W.H. Young

DATE: March 12, 1981

FROM: R.E. Gilbert *RG*

SUBJECT: Open Burning Update

Since the EQC reaffirmed the ban on backyard burning, the efforts of the staff have been to develop a hardship burning permit program and to meet with local governmental officials and explain the air quality impacts, yard debris survey results, and alternatives available to the public and municipalities. Local governments contacted include Portland, Beaverton, Lake Oswego, Multnomah County, Washington County, Clackamas County, Troutdale, Hillsboro, and Oregon City. An indication of the concern about the issue can be expressed by the following tabulation of phone calls we have received.

<u>Time Interval</u>	<u>No. of Telephone Calls</u>
Dec. 19 - Dec. 31, 1980	50
Jan. 1 - Jan. 31, 1981	75
Feb. 1 - Feb. 28, 1981	125
March 1 - March 9, 1981	<u>950</u>
Total	1200

Fewer than 10 phone calls have supported the burning prohibition. Many people have been confused about the boundaries. Most have been disturbed that the ban was imposed without adequate alternatives being available. Most have felt the DEQ should have provided and/or implemented the alternatives.

As displayed above, the telephone calls increased tremendously in March when the spring burning season began for those outside of the ban boundaries. On March 2, 1981, the Department received between 300-350 telephone calls.

Fire departments have also been impacted by the ban. On March 1, 1981, Multnomah County Fire District #10 received 400-500 calls which tied up their telephone lines, hampering their communication systems. Similar experiences have occurred at the other fire departments. Some of the departments have continued to average 60-80 calls per day.

Another indication of public concern is that we have answered 27 letters for the Governor's office since the January 30, 1981, EQC meeting. We have also answered 15 separate letters that have been addressed directly to the Department.

Hardship Burning Permits

Since January 30, 1981, the NWR has received 131 requests for hardship permit applications. As of March 10, 1981, 29 applications have been received. Seventeen permits have been issued and seven denied. Because of the \$30 fee and the sensitivity of this issue, staff have given priority to this program. Service has been given within 1-2 days of receipt of the application.

At first, the responsibility for reviewing the hardship applications was placed with one staff person. However, on March 2, 1981, we received a request for over 100 applications. Because we anticipated these applications to be submitted all at approximately the same time, we have divided up the work load among three staff members. We expected the turnaround time for a decision on an application to be no more than one week after receipt. If the past several weeks continue as far as public contacts are concerned, we would anticipate that 3-4 FTE out of our Portland office of the Northwest Region would be involved with the backyard burning issue.

Some of the public has perceived this program only as an effort by the Department to generate income and further tax the public. A number of comments and letters to the editor have chastised the Department for implementing a program which says "burning is bad, but if you pay \$30, it is all right."

Metro Demonstration Project

Metro did receive an EPA grant of \$265,000 for a Yard Debris Demonstration Project. Two meetings with the local governmental jurisdiction have taken place. Basically, the demonstration project will consist of an aggressive educational and promotional campaign to let the residents of the metropolitan area know what is considered yard debris and alternatives to landfilling it. It is expected that the educational material will be developed by March 15, 1981, and be ready for distribution by April 1, 1981. The Department issued the attached news release on March 5, 1981.

Meanwhile, approximately 3 to 4 sites throughout the metropolitan area will be selected as short-term collection sites to promote "yard debris cleanup weeks" in the spring, summer and fall. At these sites, woody waste will be measured, quantified and processed to several different forms and uses, in order to test the marketability of the different products.

The first cleanup week is scheduled for May 16 through May 24, 1981. Metro is proceeding with an amendment to its Landfill Dumping Fee Ordinance to reduce the fee for segregated yard debris throughout the cleanup week. Hopefully, this would provide incentives for public participation and private hauling companies to promote the program and provide for special hauling of woody waste during the cleanup weeks.

Open Burning Update
March 12, 1981
Page 3

The City of Beaverton has launched its own Project Clean Sweep Week of March 9-14. This is the third year in a row the city has done such a project. A description is included in the Valley Times article attached.

Editorials--Letters to the Editor

Both the Oregonian and Oregon Journal, as well as all of the local community newspapers, have had numerous letters to the editor and editorial page comments. Some of these comments have been attached.

RC103

Department of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Janet A. Gillaspie
229-6488

NEWS RELEASE

FOR IMMEDIATE RELEASE

DEBRIS DISPOSAL OPTIONS OUTLINED

(Portland, Or. March 5, 1981) -- The return of good spring weather has Portlanders beginning their yard and garden work to clean-up the winter litter and prepare for the coming growing season. With a ban on backyard burning in effect in the greater Portland/Metropolitan area, many are wondering what to do with the resulting debris.

DEQ, METRO and other local jurisdictions are working to establish special sites around the region for yard debris disposal. A \$265,000 grant from the federal Environmental Protection Agency will allow METRO to chip collected debris and develop markets for its use. METRO will also use the funding to coordinate regionwide clean-up weeks during the spring and summer. METRO will announce further details on the clean-up weeks as they are organized.

A detailed survey conducted by the DEQ found that over two-thirds of the Portland area residents were already using non-burning methods for debris disposal before the ban. The survey showed these residents used a variety of disposal options -- chipping, hauling to landfills, and composting -- to dispose of yard debris without burning. All green debris -- leaves and grass clippings -- can be easily composted on the property. Detailed information about composting techniques is available from the Recycling Switchboard at 229-5555.

Larger materials can be chipped and mulched. Increases in the cost of raw materials has many residents using chippers to produce their own bark dust from yard debris. Larger sized commercial chippers are also available for rent in cooperative neighborhood clean-up and chipping efforts. Sharing

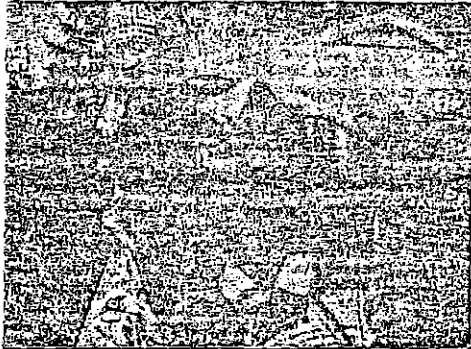
(more)

the cost among many households brings the expense down considerably. Small amounts of yard debris can usually be collected by the local garbage hauler.

A special area has been set aside at the St. John's Landfill for yard debris. Leaves and grasses cannot be accepted. METRO will turn this debris into a useable product such as hogged boiler fuel, nursery mulch, or bark dust. Rossman's and Lavelle's landfills will both accept yard debris for landfilling.

#

Clean sweep week signals spring cleaning



Beaverton residents will be able to begin spring cleaning early this year, with the help of Clean Sweep Week March 9-14.

During that week, city employees, local clubs and volunteers will pick up litter on city streets and sidewalks. On Saturday, the last day of the city-sponsored event, drop boxes will be provided at two sites for the free disposal of yard debris and unwanted household items.

Drop boxes will be available from 8 a.m. to 4:30 p.m. Saturday, March 14 in the parking lots of Filizon School, 13800 SW Brockman Road, and the Handyman store, 4053 SW Western Ave.

City employees will volunteer assistance at the drop boxes. No kitchen garbage, car bodies or tires will be accepted.

The drop boxes will be provided by the Washington County Garbage Haulers Association.

Last year, approximately 360 cars and trucks dumped yard debris and household items, filling 23 boxes. The effort represented removal of approximately 570 square yards of trash from the city.

Volunteer litter pickup will be the other major part of the third annual Clean Sweep Week. Throughout the week, community clubs, city employees and other volunteers will help pick up litter along Beaverton streets and sidewalks.

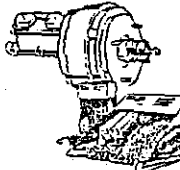
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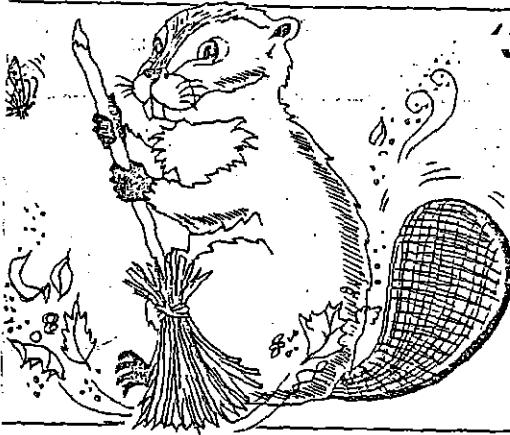
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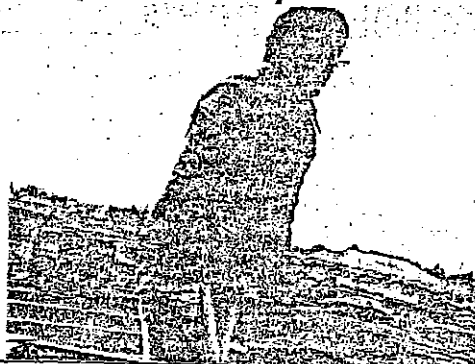
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The Oregonian

1850: Established as a daily Feb. 4, 1861. Sunday Oregonian established Dec. 4, 1881. Published daily by the Oregonian Publishing Co., Oregonian Bldg., 1320 SW Broadway, Portland, Oregon 97201.

FRED A. STICKEL, President and Publisher

J. RICHARD NOKES, Editor

RICHARD K. MILLISON,

PATRICK L. MARLTON, C

SATURDAY, MARCH 7, 1981

The backyard no-burning situation

FEBRUARY



MARCH



APRIL



The Oregonian

Editorials

Founded Dec. 4, 1850. Established as a daily Feb. 4, 1861. Sunday Oregonian established Sunday by the Oregonian Publishing Co., Oregonian Bldg., 1320 SW Broadway, F

FRED A. STICKEL, President and Publisher

J. RICHARD NOKES, Editor

ALBERT L. McCREADY, Managing Editor

ROBERT M. LANDAUER, Senior Associate Editor

MONDAY, MARCH 9, 1981

Lift burning ban, but not forever

It is too bad that when the Environmental Quality Commission banned backyard burning for the Portland area, it couldn't magically ban the whole yard debris disposal problem, too, or at least offer some alternate solutions.

Since that didn't happen, and the commission stands firm, Oregon Senate Bill 327, with modifications, ought to be looked at for the logical interim remedy — lifting the ban. Backyard burning probably will have to end sometime in the Portland area, but the timing of the current ban to start earlier this year simply was premature. The region has no good solutions yet for non-burning alternatives with the yard debris. It may well have them within a few years.

By late 1984, the Metropolitan Service District hopes to open its Oregon City resource recovery plant to burn most of the region's garbage for steam fuel production. The service district should have various recycling programs and a new landfill under way by then. Sometime in that period seems a much wiser time to consider the ban.

Meanwhile, irate and debris-laden citizens are going to burn the stuff anyway, and in fact can do so legally in fireplaces or barbecues. Debris will accumulate at roadsides and on vacant lots, creating fire hazards and rodent shel-

ters. And the machinery used to shed or chip the debris may itself pollute the atmosphere.

The Department of Environmental Quality and the Metropolitan Service District started working a few weeks ago under a \$265,000 federal grant to explore backyard burning alternatives. But the money appears too little and too late to deal with a ban that is already spawning debris. Local officials asked to supply temporary yard debris disposal sites as part of the grant program are very reluctant or apathetic about doing so, the district reports. Hundreds of residents are already headed for the area's landfills with their debris, polluting the air with their cars as they go.

But Senate Bill 327, to be really helpful, must not merely lift the ban and let the matter go into a perpetual limbo. The bill has to have a sunset clause so that the pressure will remain to find real solutions. The necessity of its provision to allow backyard burning of paper and cardboard also is questionable.

The Legislature should not indiscriminately override important actions of the Environmental Quality Commission. Neither should it perpetually extend deadlines for solving burning issues. But in this case, burning makes more sense than banning.

Local officials fuel fight against trash burning ban

Elected officials from the metropolitan area told Portland Mayor Frank Ivancie Monday they support his drive to ban the ban on backyard burning.

Actually, the mayor isn't taking credit for Senate Bill 327, which would allow the Environmental Quality Commission to regulate domestic open burning. That credit goes to the three state senators and four representatives sponsoring the bill.

But a beaming Ivancie assured about 30 mayors and county officials from the Tri-County area he will present their sentiments on the burning ban at a hearing on SB 327 Tuesday night in Salem.

"I think we're agreed here that open backyard burning should be allowed," within reason and under certain weather conditions, Ivancie told local officials after they had their collective say.

"I think burning is kind of a fun experience, when you talk about campfires and wieners," said the smiling mayor at the start of the meeting, obviously recalling some happy childhood adventures.

Ivancie, on a more serious note, said open backyard burning accounts for only 1.2 percent of the Portland area's air pollution. By comparison, he said, road dust creates 58 percent of the pollution, indus-

try 19 percent and wood heating stoves 12 percent.

City and county officials provided Ivancie with all the fuel he needed to attack the burning ban.

"I think we should have two seasons a year for our constituents to burn (yard clippings and debris)," said Milwaukie Mayor Joy Burgess, who urged her fellow elected officials to unite so legislators will hear their concerns.

But Mayor Al Myers of Gresham said he and his city's officials would support "year-around burning as long as it meets DEQ standards." Several other city officials echoed Myers' sentiments.

Troutdale officials said residents in the East Multnomah County community already are complaining about trash, clippings and other debris being dumped alongside the roads.

Oregon City Mayor Don Anderson said the ban on backyard burning will fill up the Rossman Landfill that much faster. He said the city has had to cut its trash pickup program because voters recently rejected a levy which provides that service.

Richard Butts, fire marshal for Washington County Fire District 1, said his district receives about 75 to 80 calls daily

from residents who angrily oppose the burning ban.

Another speaker suggested that the burning ban may prompt residents to bring their tree branches, clippings and other debris indoors and burn them in their fireplaces, which he said would greatly increase the chances of house fires.

Several city officials supported one suggestion that alternate odd-even days be established for backyard burning, on either a city-to-city or a neighborhood-to-neighborhood basis, depending on weather conditions and wind patterns.

Senate Bill 327 would prevent the EQC from imposing blanket prohibition of all backyard burning without consideration of atmospheric conditions.

Metro councilor Jane Rhodes found herself defending the regional agency from some pointed attacks.

She said Metro is looking for alternatives to open burning of tree clippings and outdoor debris. She said both the cities of Beaverton and Troutdale have identified sites for wood chippers.

But she said Metro is still trying to find markets for chipped wood and other processed tree and grass clippings.

Oregon Journal
3-10-81

Metropolitan Wastewater Management Commission

J

COMMISSION MEMBERS
Don Carter—Springfield Councilperson
Vance Freeman—Lane County Commissioner
Pat Hocken—Eugene Lay Representative
Betty Smith—Eugene Councilperson
Steve Allen—Springfield Lay Representative
Mark Westling—Eugene Lay Representative
Gary Wright—Lane County Lay Representative

899 PEARL STREET — P.O. BOX 1463 — PEOPLES BANK BUILDING — EUGENE, OR 97401 — PHONE (503) 687-3974

March 13, 1981

Mr. Joe B. Richards
Chairman, Environmental
Quality Commission
522 S.W. 5th Avenue
Portland, OR 97204

Dear Mr. Richards:

SUBJECT: SEGMENTING OF WATER QUALITY PROJECTS INTO DIFFERENT PRIORITIES

The Metropolitan Wastewater Management Commission adopted a facilities plan in February 1972. This plan consisted of a regional wastewater treatment facility, a large interceptor sewer which would combine two cities' collection systems, a pump station which would pump the sewage from the interceptor to the regional treatment facility, a rehabilitation program which was designed to remove illicit water from the cities' collection systems, a DEQ-mandated seasonal industrial waste system, and a sludge management system.

When the regional waste treatment system was designed, consideration was given to the removal of the industrial load which was to be handled by separate seasonal industrial waste treatment facilities. Additionally, results of the rehabilitation program of the sewer systems were anticipated and capacities in the interceptor and the regional treatment facilities were reduced accordingly. In order that this treatment facility become operational, provisions for sludge handling facilities must be also operational.

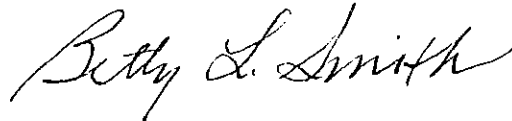
The wastewater treatment project that is being constructed in the Eugene-Springfield area has been funded by EPA/DEQ grants to approximately 40 percent of completion. If the project is to face a change in administrative rules which would create different priority numbers for various portions of the adopted facilities plan, it is important that the Environmental Quality Commission realize that until completed, the Eugene-Springfield regional program can have no effect on an improvement in water quality in the Willamette River.

The MMMC is the only project on the DEQ Priority List which has portions of its facilities plan assigned different priority ranking. The MMMC

Mr. Joe B. Richards
March 13, 1981
Page 2

would have to, under the rules, seek administrative relief by proving that various portions of the project are, in fact, interdependent. This would appear to be a time consuming and expensive exercise for both the Department of Environmental Quality staff in a review posture and the Metropolitan Wastewater Management Commission staff in preparing the documentation necessary to prove the point. We, the Commission, representing Lane County, Eugene, and Springfield in this most important public project, hope that you will weigh very carefully the administrative rule that is being proposed for passage today. Thank you for your consideration.

Sincerely yours,



BETTY SMITH
Commission President



GARY WRIGHT
Commission Member

WVP:mjb
cc:EQC Members
Bill Young, Director, DEQ

Open to burning

*at EQC
Young
Gillaspie
Bisphan*



CITY OF OREGON CITY
INCORPORATED 1844

P. O. Box 631

February 19, 1981

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
FEB 27 1981

Environmental Quality Commission
Box 1760
Portland, Oregon 97207

Dear Commissioners:

The Oregon City Commission at its regular meeting on February 13, 1981, held discussion regarding the burning ban imposed on our jurisdiction by the action of your Commission.

We strongly protest the implementation of this ban without providing adequate and reasonable alternatives for the collection and disposal of backyard debris. We also protest the fact that the added financial burden of accomplishing this disposal has been left up to the City to address without provision for adequate funds to accomplish this disposal.

We were given to believe, from a discussion with Rick Gustafson, Executive Officer of METRO, that the proposed ban on burning would not be imposed on the people of the metropolitan area at least for the first six months of 1981. Under this assumption we naively thought it would not be necessary to attend the Environmental Quality Commission public hearing on this subject. Apparently we were wrong in our interpretation and it is our understanding that approximately a dozen people convinced the Commissioners that the ban should be implemented and your subsequent action to do so.

We strongly request that you reconsider your actions and that we be given an opportunity to appear before your group to plead our case.

Yours very truly,

Don Andersen

DON ANDERSEN
Mayor

DA:rl

cc: Mayor Frank Ivancie, Portland
Mayor Joy Burgess, Milwaukie
Mayor Alan Brickley, West Linn
Mayor H. Wade Byers, Gladstone
Mayor Harold Campbell, Lake Oswego

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED

FEB 27 1981

OFFICE OF THE DIRECTOR

EQC
Gillasp
Bispha

13032 S E Ramona St
Portland, Oregon 97236
February 27, 1981

Department Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Attention: Environmental Quality Commission
Re: BURNING BAN - MULTNOMAH COUNTY

Gentlemen:

Don't you really enjoy the fragrant smell of apple and cherry tree limbs while burning them? We are told this kind of material causes only 1% or less of our pollution.

Don't you love the beauty of Portland because we do annually trim our trees and bushes? We have owned our property in this same location since 1936 and have planted all the fruit trees and bushes on our 2 1/2 acre plot.

We understand, via the news media, there is a possibility that you are planning to charge us a fee if you allow us to burn the trimmings on our own property. This seems that would be just absolutely too much bureaucracy.

If we were allowed to burn when the material is dry, you know too that it will all burn quickly. Instead the DEQ always waited to open the burning season until it had started raining and everything was water soaked which naturally caused unnecessary smoke.

Has anyone serving on this Commission happened to drive from Gresham to Portland via Powell Blvd., following a TRI-MET bus along the bike path where one can not pass? NOW THAT IS 100% POLLUTION and we are not hearing about that horrible problem!

We trust your group will reconsider our plight and not deny us this privilege of annually caring for and beautifying our own property.

Just One of your Senior Citizen Taxpayer Friends,

Mrs. Herman Fabner
Mrs. Herman Fabner.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
MAR 3 1981

OFFICE OF THE DIRECTOR



✓ EQC
Young
Gillaspie
Weatherbe

CITY OF LAKE OSWEGO

March 6, 1981

Environmental Quality Commission
c/o William Young, Director, D.E.Q.
522 S.W. 5th Avenue
Portland OR 97204

Dear Commissioners,

The City Council of Lake Oswego by unanimous vote at its regular meeting Tuesday, March 3, 1981, moved that the State EQC revise its open burning regulations which in effect prohibit open "backyard" burning of vegetative yard debris in the Portland Metropolitan Area.

Available statistics show that backyard burning accounts for only a miniscule amount of the region's air pollution and it is presently the only practical, cost-effective method of disposing of this type of waste. Any alternatives so far advanced would have substantial and unacceptable cost consequences to our already overburdened citizens, and are likely to result in other problems more critical than backyard burning's minimal impact on the environment.

Were burning to be permitted throughout the year on any day the airshed could accept minimal input of this sort, the results would be far less noticeable than that which has resulted from the previous practice of concentrating the burning to two short periods annually.

Respectfully,

C. Herald Campbell, MAYOR

By order of the City Council

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
MAR 9 1981

OFFICE OF THE DIRECTOR

Mr. Joe Richards, Chairman
Oregon Environmental Quality Commission
Department of Environmental Quality
522 S. W. 5th Avenue
Portland, Oregon 97204

Dear Mr. Richards:

The Board of Directors of the Portland Rose Society has asked that I express their objection to the action of last December in which the Commission placed a ban on the further practise of the controlled burning of woody wastes from trees and shrubs in the Portland Metropolitan Area.

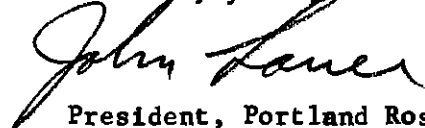
The Portland Rose Society has a primary mission of fostering and encouraging the culture of roses in the Portland area. Recent professional studies of Portland's Rose Festival have shown that the Festival would not be a viable public function without the Society's Rose Show, which was the sprout from which the annual festival grew. The maintenance of a healthy and vigorous culture of roses by private individuals is necessary if Portland is to keep the title of "The City of Roses". Many other cities are ready, willing and anxious to u/surp that title if Portland fails to maintain its pre-eminence.

Rose culture requires care and husbandry; a vital part of which involves the burning of woody materials infected by diseases, especially those of viral and bacterial organisms. Alternate methods of wood waste disposal, such as hauling to central locations, burial, chipping or leaving it to rot in place or in piles, all have the serious objections of energy consumption, noise, pest propagation, disease recycling, water pollution and landscape distress.

In our examination of data on the DEQ's Pollution Particle Index and carbon monoxide content of the atmosphere during the last burning period (graphs enclosed), we find no evidence that the burning made any detrimental contribution to atmospheric conditions.

Consequently, it is our request that the Commission reconsider its prohibition of the controlled burning disposal of woody wastes and thereby assist in the enhancement of the artistic culture of roses in the Portland Metropolitan Area.

Sincerely yours,

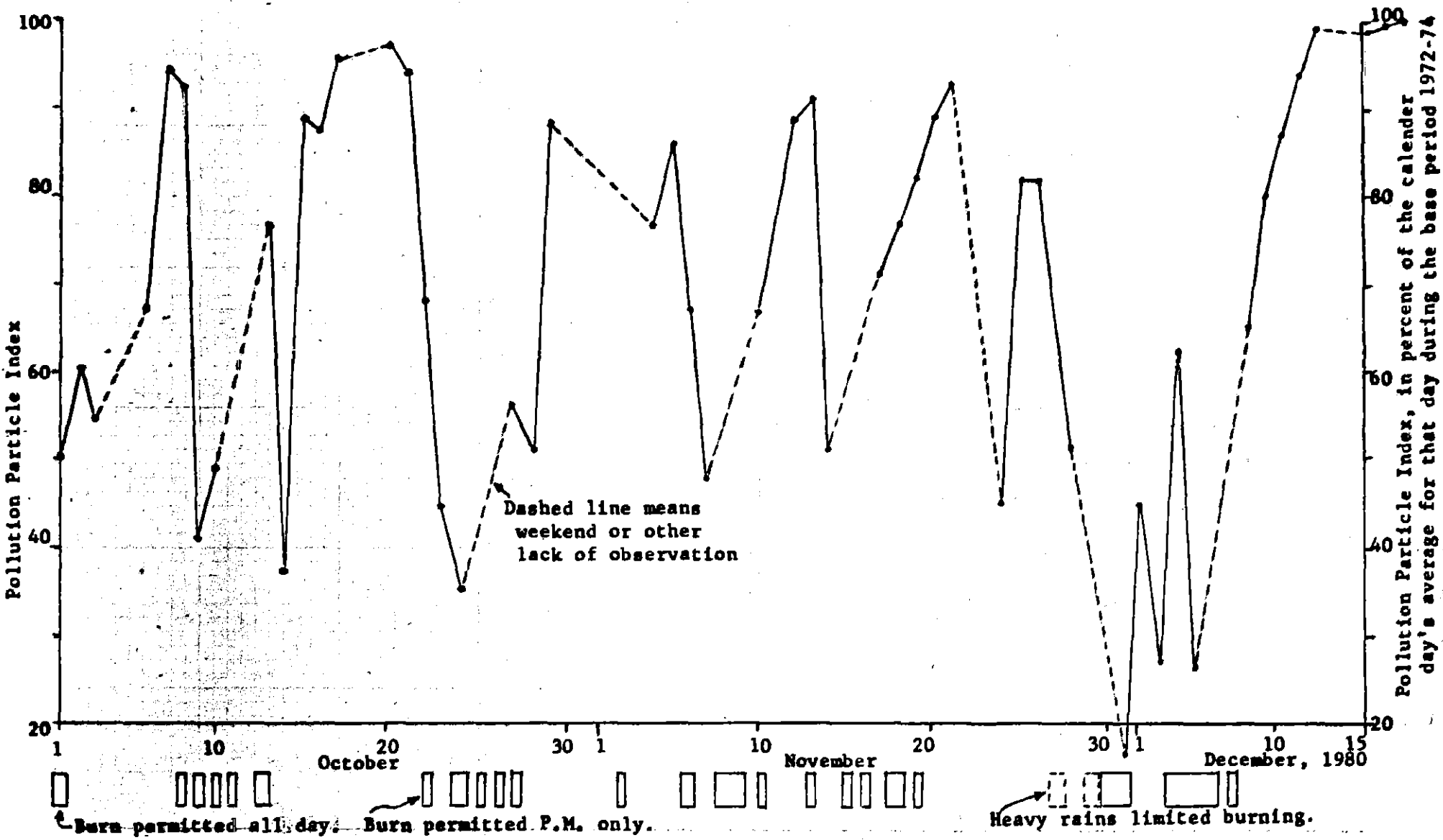


President, Portland Rose Society

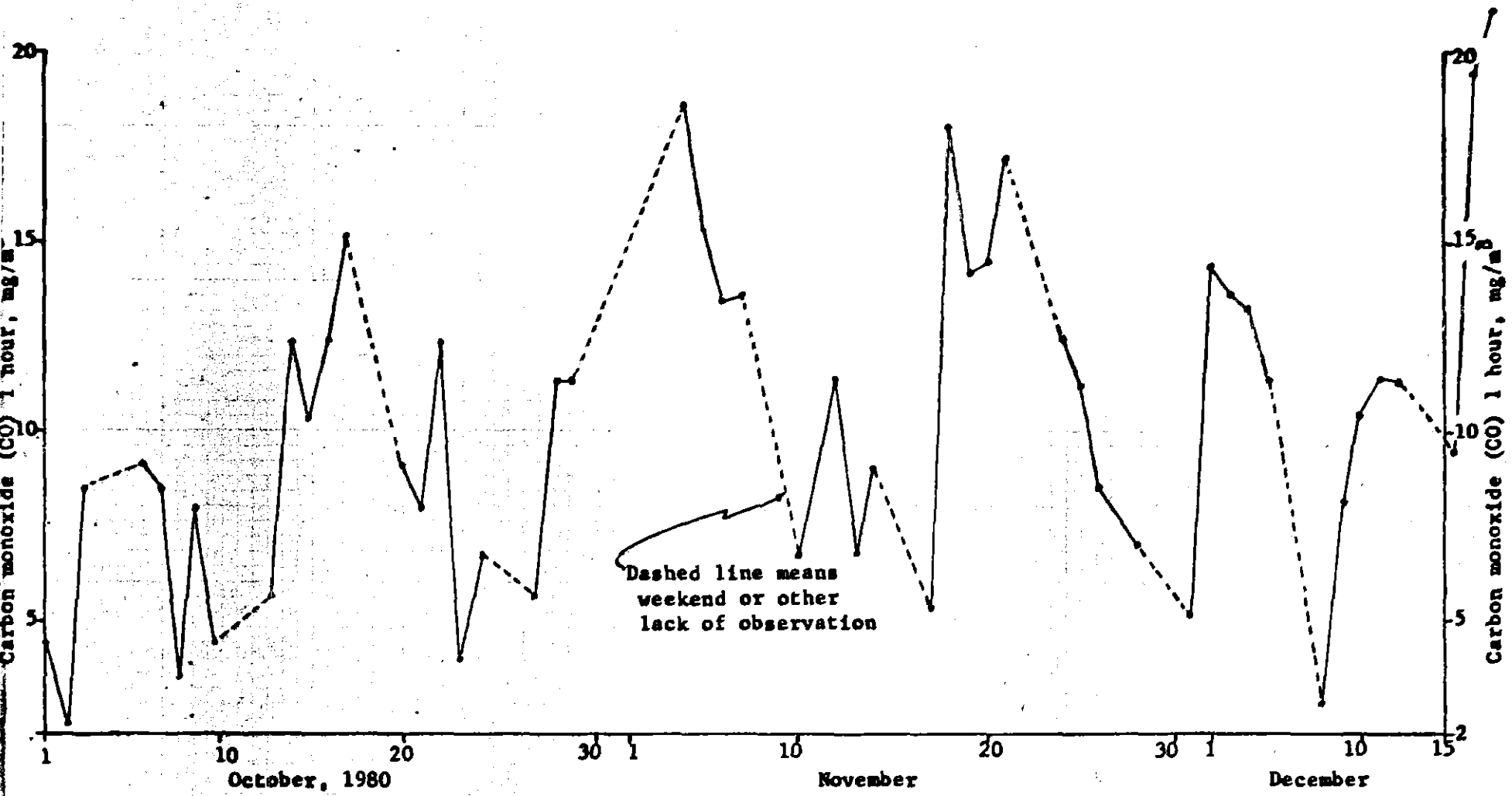
CC: DEQ Director
Enclosure: Graphs of PPL and Co.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
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MAR 11 1981

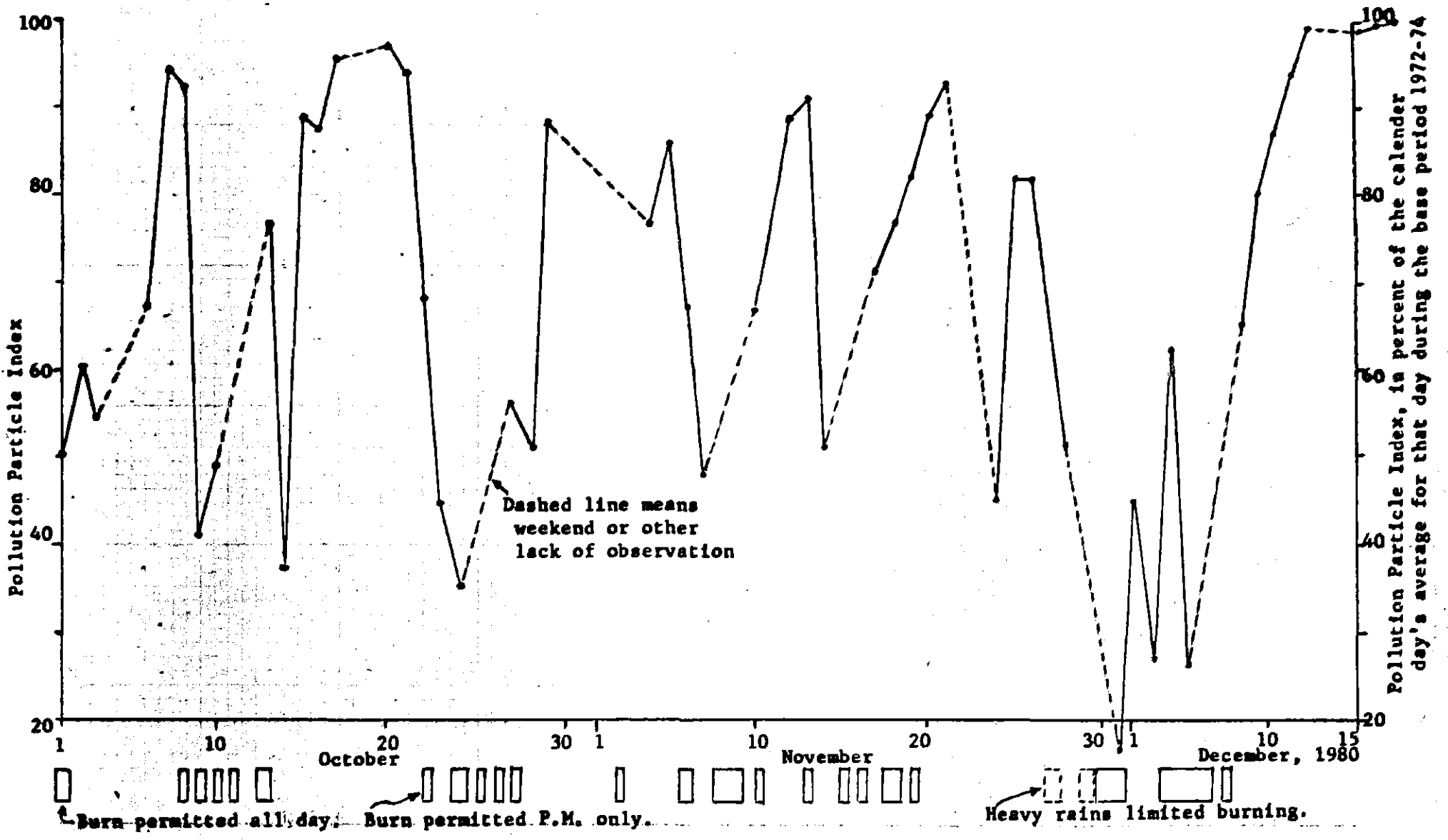
OFFICE OF THE DIRECTOR



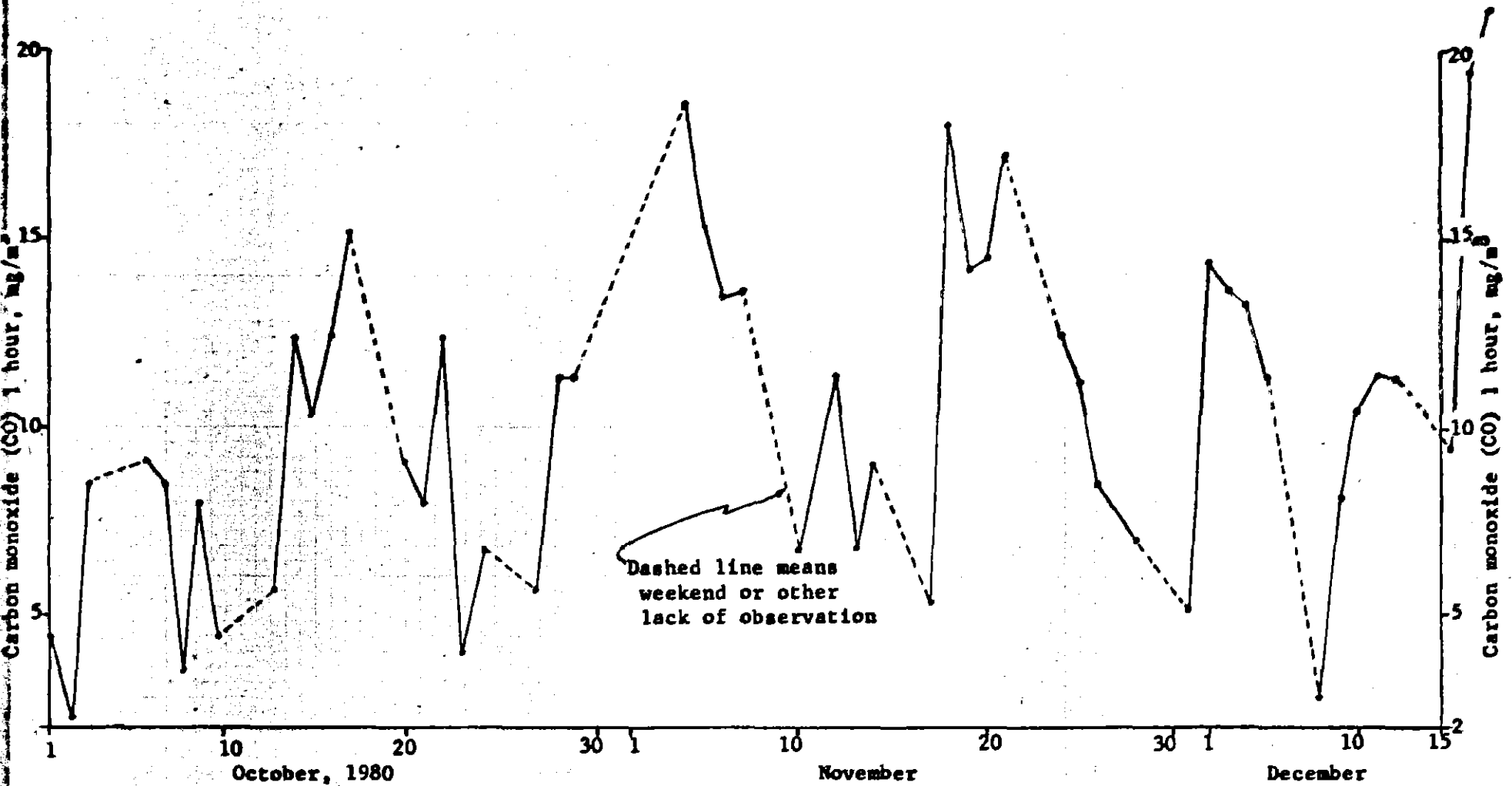
Graph of the Air Pollution Particle Index and the permitted backyard burning in Metropolitan Portland, Oregon, October-December, 1980 (Data from DEQ)



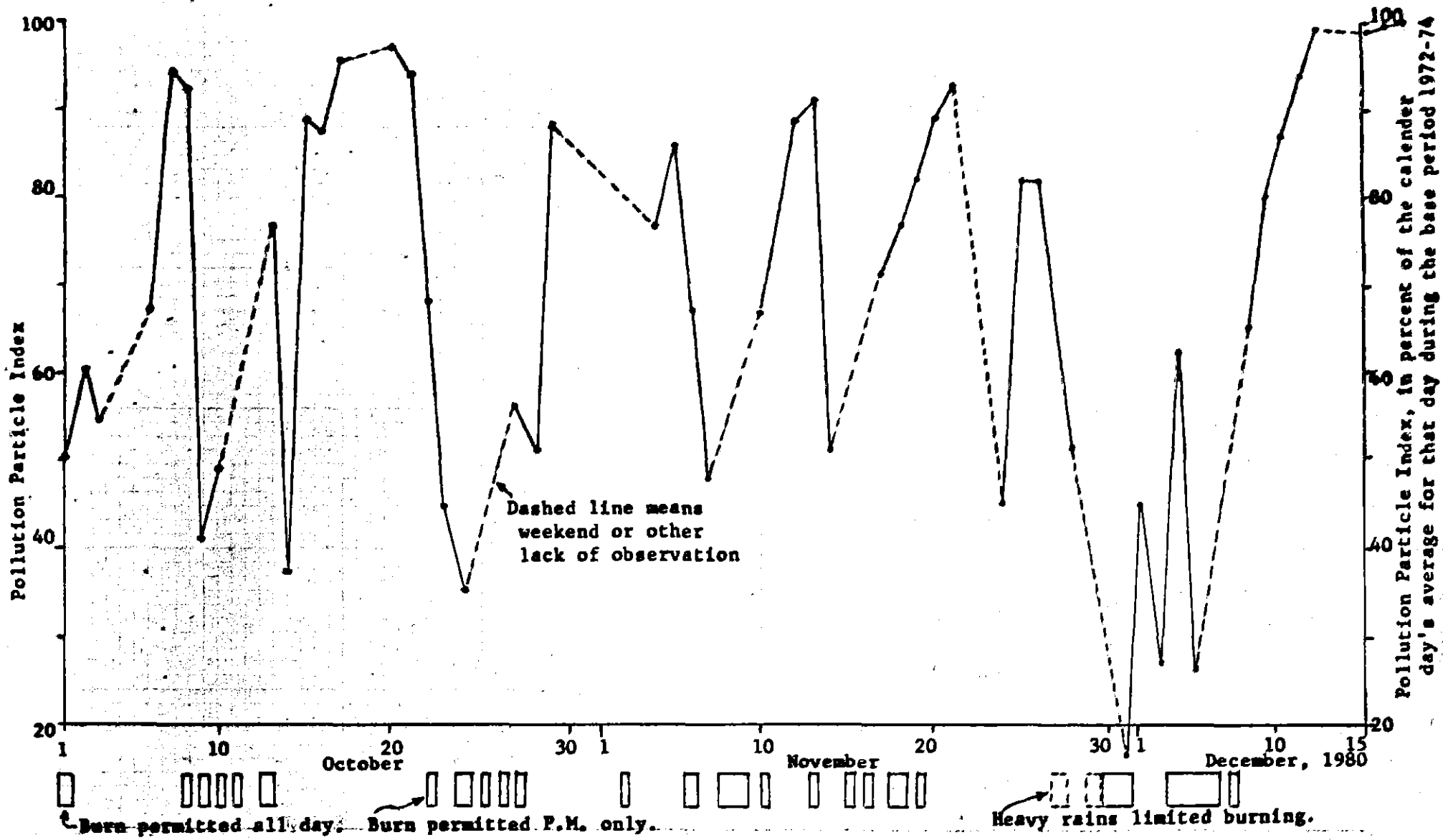
Graph of the atmospheric carbon monoxide and the permitted backyard burning in Metropolitan Portland, Oregon, October-December, 1980. (Data from DEQ).



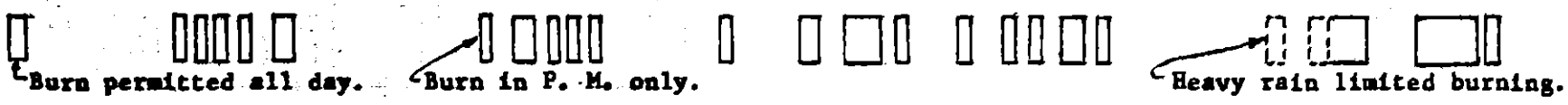
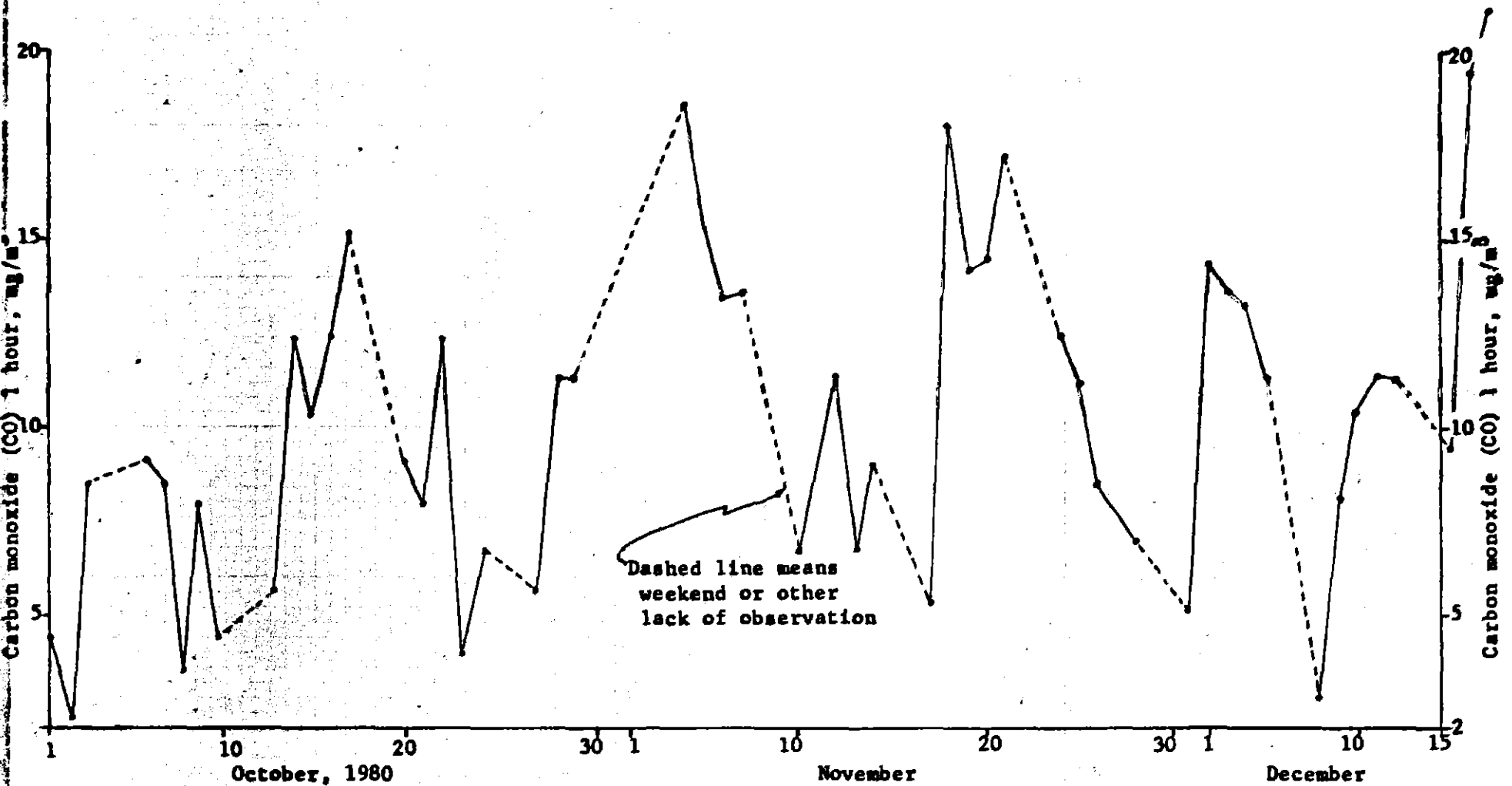
Graph of the Air Pollution Particle Index and the permitted backyard burning in Metropolitan Portland, Oregon, October-December, 1980 (Data from DEQ)



Graph of the atmospheric carbon monoxide and the permitted backyard burning in Metropolitan Portland, Oregon, October-December, 1980. (Data from DEQ).



Graph of the Air Pollution Particle Index and the permitted backyard burning in Metropolitan Portland, Oregon, October-December, 1980 (Data from DEQ)



Graph of the atmospheric carbon monoxide and the permitted backyard burning in Metropolitan Portland, Oregon, October-December, 1980. (Data from DEQ).

RT1 Box 559
Monroe Oregon 97456
25 Feb 81

Department of Environmental Quality
Air Quality Division, Field Burning
1244 Walnut St.
Eugene, Oregon 97403

Dear Sirs

I would like to offer my comments for your hearing. I only raise about 200 acres of grass seed, but I would like you to consider my problems at your hearing. I think I plow under more than my share of straw but I have to do some burning. I do all my work myself except for burning. To get my burning done, I rely on having a neighboring farmer help me out with both equipment and personnel.

I read that one thing you are considering is limiting ones burn time once the permit is issued. This could be a real problem with my operation as it often takes me a long time to get things coordinated. It would also seem that by putting a time limit on a burn, you would be forcing a person to take chances that he normally wouldn't want to.

Also it seems to me that there are many days

that it appears conditions will permit some burning, you wait too long to release burning. You will run a 10 or 11 o'clock test burn when there is very little wind. This is a time when fields could be burned much faster as one could light them with a minimum of backfiring. By the time you decide to release burning, which seems to usually be 1 o'clock or later, the wind is much stronger and therefore a field has to be backfired several feet to assure containment. Often the wind has increased to the point where it is unsafe to burn at all. I think this is especially true in our area as many of our fields are bordered by timbered hills or brushy creek bottoms.

I feel that being able to burn a field safely is just as if not more important as smoke management.

Sincerely,
John Benninghoven



OREGON ENVIRONMENTAL COUNCIL

2637 S.W. WATER AVENUE, PORTLAND, OREGON 97201 / PHONE: 503/222-1963

TESTIMONY REGARDING PROPOSED FIELD BURNING REGULATIONS

The Oregon Environmental Council, a statewide coalition of 70 organizations and 2,600 individuals, many of whom live in the Willamette Valley, supports DEQ's proposed field burning rule revisions.

Though reduction of burn acreage is probably the best way to cut smoke pollution, these revisions are a step in the right direction.

Anyone who lives or even travels through the Willamette Valley during the burn season knows that field burning is a contributor of smoke to the airshed. Last year, 1183 field burning complaints were filed by the public, and 13 field notices issued totalling \$18,000 in civil fines. DEQ estimates that acreage burned last year was 35% over the amount reported to the Department.

Though enforcement is only part of the solution, we support DEQ's proposals to establish a specific penalty schedule for violations and to authorize DEQ to suspend burning privileges of repeat violators. We also support DEQ's proposal to require mapping of registered acreage on master maps. This would surely help both monitoring and enforcement.

DEQ's proposal to issue limitations on an area basis more restrictive than those in the regulations (when needed for air quality reasons) also has our support.

We agree with DEQ's proposed selective requirement of fluffing treatments, and the deadline of Jan. 1, 1983 for fluffing of all perennial grass seed fields. Mechanical fluffing techniques reduce smoke by allowing the fuel to dry more quickly before burning, and making for quicker burns

ALTERNATIVE FUTURES, Tigard
AMERICAN INSTITUTE OF ARCHITECTS
Portland Chapter
AMERICAN SOCIETY OF LANDSCAPE
ARCHITECTS
Oregon Chapter
ASSOCIATION OF NORTHWEST STEELHEADERS
ASSOCIATION OF OREGON RECYCLERS
AUDUBON SOCIETY
Central Oregon, Corvallis, Portland, Salem
BAY AREA ENVIRONMENTAL COUNCIL
Coos Bay
B.R.I.N.G.
CENTRAL CASCADES CONSERVATION COUNCIL
CHEMEKETANS, Salem
CITIZENS FOR A BETTER GOVERNMENT
CITIZENS FOR A CLEAN ENVIRONMENT
CLATSOP ENVIRONMENTAL COUNCIL
CONCERNED CITIZENS FOR AIR PURITY
Eugene
DEFENDERS OF WILDLIFE
ECO-ALLIANCE, Corvallis
ENVIRONMENTAL ACTION CLUB
Parkrose High School
EUGENE FUTURE POWER COMMITTEE
EUGENE NATURAL HISTORY SOCIETY
GARDEN CLUBS of Cedar Mill, Corvallis,
McMinnville, Nehalem Bay, Scappoose
GRANT COUNTY CONSERVATIONISTS
H.E.A.L., Azalea
LAND, AIR, WATER, Eugene
LEAGUE OF WOMEN VOTERS
Central Lane, Coos County
McKENZIE GUARDIANS, Blue River
NORTHWEST ENVIRONMENTAL DEFENSE
CENTER
OBSIDIANS, Eugene
1,000 FRIENDS OF OREGON
OREGON ASSOCIATION OF RAILWAY
PASSENGERS
OREGON BASS AND PANFISH CLUB
OREGONIANS COOPERATING TO PROTECT
WHALES
OREGON FEDERATION OF GARDEN CLUBS
OREGON GUIDES AND PACKERS
OREGON HIGH DESERT STUDY GROUP
OREGON LUNG ASSOCIATION
Portland, Salem
OREGON NORDIC CLUB
OREGON NURSES ASSOCIATION
OREGON PARK & RECREATION SOCIETY
Eugene
OREGON ROADSIDE COUNCIL
OREGON SHORES CONSERVATION COALITION
O.S.P.I.R.G.
PLANNED PARENTHOOD ASSOCIATION INC
Portland
PORTLAND ADVOCATES OF WILDERNESS
PORTLAND RECYCLING TEAM, INC.
RECREATIONAL EQUIPMENT, INC.
SANTIAM ALPINE CLUB
Salem
SIERRA CLUB
Oregon Chapter
Columbia Group, Portland
Klamath Group, Klamath Falls
Many Rivers Group, Eugene
Mary's Peak Group, Corvallis
Mt. Jefferson Group, Salem
Rogue Valley Group, Ashland
SOLV
SPENCER BUTTE IMPROVEMENT ASSOCIATION
STEAMBOATERS
SURVIVAL CENTER
University of Oregon
THE TOWN FORUM, INC.
Cottage Grove
TRAILS CLUB OF OREGON
UMPQUA WILDERNESS DEFENDERS
WESTERN RIVER GUIDES ASSOCIATION, INC.
WILLAMETTE RIVER GREENWAY ASSOCIATION

with better plume development, smoke dispersion and use of short periods of good ventilation.

OEC also supports the proposed regulations for burning along Interstate 5. Labor Day weekend last year was especially dangerous, with holiday traffic inching through dense smoke. The requirement of a minimum margin west of the I-5 right-of-way seems like a minimal safety measure. DEQ and local grass seed growers should develop additional measures to reduce the amount of smoke crossing the highway, especially on high traffic days.

Smoke management can never completely eliminate the environmental, health, safety and aesthetic impacts of field burning. Eventually, reduction of burn acreage may be needed. But in the meantime, the proposed revisions to the field burning regulations are **necessary**, and we **support** them.

Bill Cook

Bill Cook,
Legal Intern

Rec 3/12/81

09/10/74

TESTIMONY OF TOM DONACA
FOR THE AOI AIR QUALITY COMMITTEE

SB 327

Our historic position regarding backyard burning in the Portland area is that ultimately it must be banned, but not until a solid waste disposal system is in place and reasonably available to most of the people in the area. This position was premised on the environmentally sound idea that you should not solve one pollution problem at the expense of another. For those of you familiar with the Portland situation, there is a critical shortage of sanitary landfills and only promises in sight as solutions.

Our position has changed, because the facts have changed -- or as another famous lobbyist has stated, "The playing field isn't level." What changed? E.P.A. changed and they placed air quality ahead of solid waste. Perhaps not intentionally, but the result is the same. How did this occur? In the clean air act amendments of 1977 non-attainment areas such as Portland must achieve attainment of secondary air quality standards by 1987 and by this July our DEQ must submit amendments to the State Implementation Plan (SIP) that will provide a plan to attain standards by that time.

Further, during the period from 1981 to 1987 the plan must provide for Reasonable Further Progress (RFP) toward attainment.

What that all means is we are currently using by EPA standards, more than 100% of the capacity of the airshed and this must be reduced. It further means that industrial activity in the area probably will be constrained both in attracting new industries which have some activities which pollute as well as restrain the growth of existing industry.

(more)

The Advisory Committee to the DEQ for the Portland AQMA spent a number of months in determining the available solutions. When they looked at industrial contribution they found that from 1971 when the DEQ emission inventory indicated 15,000 tons per year of particulate emissions, that by 1979 this was down to 5,500 tons. They further concluded that industry was meeting the standards of the DEQ and found that the Portland AQMA was RACT (reasonably available control technology) and essentially was BACT (best available control technology). Since industry could provide little if any movement toward RFP; and because any major new source or modification of an existing plant locating in the Portland AQMA must offset their emissions of particulates by greater than one for one, industry must continue to carry the laboring oar of meeting standards.

The advisory committee's solutions for particulate matter and which meet RFP and finally attainment, are founded on control of sources, so-called non-traditional sources, which are not the subject of direct control by DEQ, such as:

Having the city, county and state buy clean sand for road sanding operations and eliminate the river silt which continues to blow around long after the icy conditions are gone;

Suggesting that persons burning wood burn only dry wood and always keep the damper open to provide good combustion;

Pave roads; and

Stop backyard burning.

(more)

The 450 tons of particulate is small, really, only about 8% of industrial emissions, but that is a reasonable margin of growth for industry and the expected population growth.

If the ban is lifted it will fall squarely on industry for only industry is directly controlled by DEQ. We would urge you to reconsider this issue and seek a different solution than proposed in SB 327.



G

STATE OF OREGON

INTEROFFICE MEMO

O/D

229-5300

DEPT.

TELEPHONE

TO: EQC/Underwood

DATE: March 3, 1981

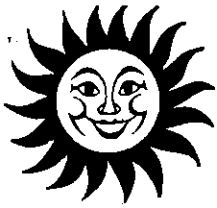
FROM: Jan Shaw

SUBJECT: Agenda Item G, March 13 EQC meeting:
Adoption of proposed rules governing on-site sewage disposal, OAR 340-71-100 to 71-600, to replace rules governing subsurface and alternative sewage disposal, OAR 340-71-005 to 71-045, 340-72-005 to 72-030, 340-74-004 to 74-025, and 340-75-010 to 75-060.

Attached is additional written testimony submitted recently to the Department. Please make it a part of your copy of the staff report.

JAS

cc: Young
Downs
Osborne



Sunrise Investment Co.

February 24, 1981

Mr. Jack Osborne
Dept of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
FEB 26 1981

OFFICE OF THE DIRECTOR

Dear Mr. Osborne

We are in receipt of a letter from the Linn County Dept of Health Services that the DEQ is proposing a rule that would require an annual inspection of all holding tanks with a beginning fee of \$40.00.

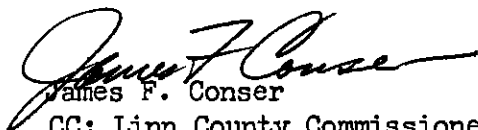
I think the intent of the ruling for an inspection periodically would be good to assure compliance with health rules. However, to require an annual inspection is too often and too costly. If an inspection was every 36 months then we could live with that.

In the last election the voters are trying to get a message to local, state, and federal agencies that they want less regulation not more. This proposed rule, in its present form, is just the very thing voters were trying to reduce or eliminate. Take heed, and lets either reduce or eliminate the annual inspection.

Once a rule is implemented it, like its fee is never eliminated but often increased or expanded.

Thank you for giving us an opportunity to provide input on this proposed ruling.

Sincerely,


James F. Conser

CC: Linn County Commissioners
Linn County Department of Health Services

State of Oregon
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WATER QUALITY CONTROL

NORDSTRAND CEDAR PRODUCTS, INC.

33435 BREWSTER ROAD
LEBANON, OREGON 97355
(503) 451-1661

Feb. 26, 1981

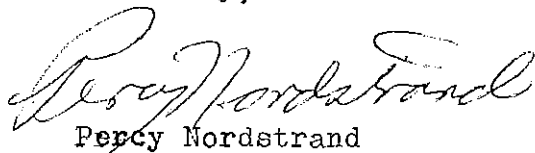
Mr. Jack Osborne
Dept. of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Dear Mr. Osborne,

This letter is in reference to your proposal to owners of property with sewage holding tanks. We feel this proposal is completely unreasonable. To begin with the holding tank has to be inspected by the D.E.Q. during installation, all the rules are set by the D.E.Q. and must be followed to receive a permit. It only stands to reason that we would keep the tank in proper working order.

We see no reason to pay an extra \$40.00 per year to have the D.E.Q. tell us our tank is okay, and if it were not okay I'm sure we could tell. Also the pumping company is seeing our tank at least once a month and they certainly would be able to notice any problems should they arise.

Sincerely,


Percy Nordstrand

President, Nordstrand Cedar Pro. Inc.

PAN/cc

State of Oregon
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MAR 2 1981

WATER QUALITY CONTROL

plywood components inc.



February 27, 1981

Mr. Jack Osborne
Department of Environmental Quality
PO Box 1760
Portland, OR 97207

Dear Sir:

It is my understanding that the DEQ is proposing a new rule regarding the annual inspection of holding tanks. I see absolutely no reason for the forming of another agency, burdening the County with additional manpower expenditures, or forcing those with holding tanks to pay a \$40.00 inspection fee.

At the time our tank was installed the regular County inspectors were extremely stringent as to how the tank was to be installed and maintained. Inspection of the installation was thorough, as have been subsequent inspections. In addition, the firm that pumps the tank inspects it each time it is pumped for any signs of leakage, etc. Documentation as to frequency of pumping and the amounts pumped are readily available per their invoices.

When all requirements have been and are currently being met, must we be faced with yet another ruling, another inspection, and fee?

In my opinion this is a waste of time, energy and the taxpayer's money.

Sincerely,

PLYWOOD COMPONENTS, INC.

Robert J. Headrick
President

RH/kg

cc: Richard Swenson, R.S. Director
Environmental Health Services
Albany, Oregon

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
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State of Oregon
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MAR 2 1981

WATER QUALITY CONTROL

MIDWAY PLUMBING, INC.
2428 SE Three Lakes Road
Albany, Oregon 97321

February 18, 1981

Mr. Jack Osborne
Dept. of Environmental Quality
P. O. Box 1760
Portland, OR 97207

Dear Mr. Osborne:

We have received notification of a rule proposed by the Department of Environmental Quality requiring annual inspection of holding tanks along with a \$40.00 fee.

We disagree with such a rule. Holding tanks are inspected when they are installed and should no longer be a concern of the DEQ.

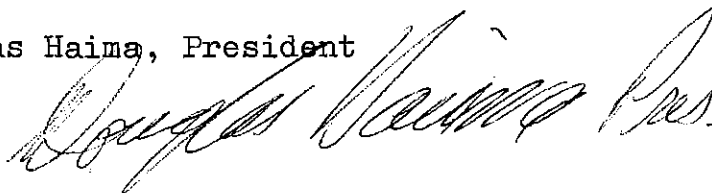
The national trend now is to get away from additional government red tape; not to create more at a cost to us and the consumer.

Therefore, our vote is against any more regulation.

Sincerely,

Douglas Haima, President

DH:da



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FEB 26 1981

OFFICE OF THE DIRECTOR

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
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FEB 23 1981

WATER QUALITY CONTROL

Wimer Logging Co.

L. L. WIMER D. L. WIMER
PHONE 928-8585 • 600 GOLDFISH FARM RD.
ALBANY, OREGON 97321


Mr. Jack Osborne
Dept. of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Dear Sir;

We have recently heard of your proposal to add yet another inspection of those that we already have.

As far as the inspection is concerned, I suppose it could be justified but certainly not the \$40.00 Annual fee. There are already people on the counties staff's to do this work and should be able to do so with little inconvenience to their jobs they now do. At any rate, \$40.00 is an excessive amount to determine wheter a holding tank is operating properly. Unless these people do more than a visual inspection, I think your cost figure is yet another way to keep inflation rolling along.

Sincerely,


Don L. Wimer
Wimer Logging Co.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
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WATER QUALITY CONTROL

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
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OFFICE OF THE DIRECTOR



Keep Oregon Green

City of Albany

801 Pacific Boulevard S.E. • Albany, OR 97321 • (503) 967-4321



February 25, 1981

State of Oregon
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State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
FEB 27 1981

OFFICE OF THE DIRECTOR

WATER QUALITY CONTROL

Mr. Jack Osborne
Dept. of Environmental Quality
P.O. Box 1760
Portland, OR 97207

Dear Mr. Osborne:

Have you not heard that the country is currently in the midst of a national drive to eliminate unnecessary bureaucratic controls and expenses of tax revenues? Your proposal to annually inspect holding tanks for a \$40 fee is certainly contrary to current guidelines.

Allow me to acquaint you with our situation. We installed a holding tank last fall to accommodate gray water only generated by a softball concession booth in a fifty acre river bottom park inaccessible to sewer lines. The tank was installed under OAR 340-71-037(3) guidelines; it has both an audible and visible alarm; and we shall maintain accurate records. Now you want to inspect the tank annually and charge another inspection fee. The tax paupers must support this unnecessary inspection by paying the D.E.Q. inspector's wages and the inspection fee charged for the annual inspection.

Such blanket assessment of inspections and fees is unwarranted and irresponsible. I, too, am a bureaucrat but I strive to serve this community by ascertaining that our revenues are wisely spent and that my employees are gainfully employed at meaningful work rather than unnecessary tasks. I am strongly opposed to the D.E.Q. decision that all holding tanks be inspected annually. Certainly there may be some problem situations requiring such a vigil by the D.E.Q., but our holding tank in Bryant Park is clearly not posing such a problem situation. As civil servants, we must do what we can to restrict unwarranted spending of tax dollars.

Sincerely,

Dick Conolly
Park Maintenance Superintendent

mew

pc: Richard H. Swanson, R.S.
Environmental Health Director
Linn County Dept of Health Services

RECEIVED
FEB 27 1981

Water Quality Division
Dept. of Environmental Quality

The City of Albany is an
Equal Opportunity Employer

NORDSTRAND CEDAR PRODUCTS, INC.

33435 BREWSTER ROAD
LEBANON, OREGON 97355
(503) 451-1661

Feb. 26, 1981

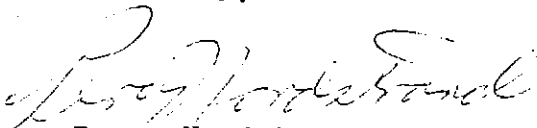
Mr. Jack Osborne
Dept. of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Dear Mr. Osborne,

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We see no reason to pay an extra \$40.00 per year to have the D.E.Q. tell us our tank is okay, and if it were not okay I'm sure we could tell. Also the pumping company is seeing our tank at least once a month and they certainly would be able to notice any problems should they arise.

Sincerely,



Percy Nordstrand
President, Nordstrand Cedar Pro. Inc.

PAN/cc

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

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MAR 3 1981

OFFICE OF THE DIRECTOR

MAR 3 1981

WATER QUALITY CONTACT

March 6, 1981

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED

MAR 11 1981

Item G
EQC
Young
Down
Underwood
Osborne

Mr. Jack Osborne
Department of Environmental Quality
Post Office Box 1760
Portland, OR 97207

WATER QUALITY CONTROL

Dear Mr. Osborne:

A letter from the Linn County Department of Health advised me of a proposed rule for mandatory annual inspection of holding tanks and assessing the owner of such tanks \$40 per year per tank for the inspection.

I was invited to comment and direct such a response to you. I do not object to such a program if you feel it is a safeguard of the public health, but I do strenuously object to attaching a fee to such inspections.

There are presently so many fees, licenses, permits, and other costs that are charged to business by the many layers of bureaucracy in the name of "public" interest and safety. These costs are discouraging development and promotion of new facilities and consequently hurting our economic growth and recovery.

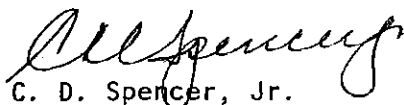
President Carter and now Ronald Reagan have been telling the American public that we are going to see a reduction in the Federal, State and County governments' regulation over all forms of business. I have yet to see any sign of this happening. Where one is eliminated somehow ten others spring up to take its place. This translates into added cost. It is easy to say "pass it along", just as this proposal is doing by assessing the tank owners \$40. We all know it will increase to \$60 next year, \$80 the next, etc.

I recognize each agency feels their program is essential and their requests are important, but where do we stop this "big brother" act?

My vote is a conditional "yes". The condition is: If you feel it is in the interest of public health and you can carry it out within your present budget, go ahead with the inspection. Make a charge for violators, but don't charge those in conformance or with properly working tanks.

Thank you for the opportunity to express my views.

Very truly yours,


C. D. Spencer, Jr.

C. D. Spencer, Jr.
Spencer Mountain
1338 N. Albany Rd. N.W.
Albany, Oregon 97321

CDS:b1

cc: Richard H. Swenson



STATE OF OREGON

INTEROFFICE MEMO

by Young

EQC Underwood

TO: JAN SHAW

DATE: March 3, 1981

FROM: *[Signature]* JACK OSBORNE

SUBJECT: AGENDA ITEM "G", MARCH 13, 1981, EQC MEETING

Jan, the following person called in to protest the proposed holding tank inspection fee:

Dean Schrock, Owner
Dean Schrock Warehouse
Albany, Oregon

Mr. Schrock's grass seed warehouse is served by a holding tank, thus he would be impacted by the proposed fee.

TJO:ds



Contains Recycled Materials

B1-125-1387

SP*75683-125

Dimensional Lumber
 Rough Beams
 Decking
 Cedar Fencing
 Treated Posts
 Cedar Decking
 Stakes
 CDX Plywood
 AC Plywood
 CCPT & S Plywood
 Particle Board
 Birch Plywood
 Hardwoods
 Prem T1-11 Siding
 Asphalt Sheathing
 Sound Board
 MDO Plywood
 Bulk Nails
 Galvanized Roofing
 Fiberglass Panels
 Galvanized 4-K Gutter
 Plastic Gutter
 Sheetrock
 Fire Stop Sheetrock
 Water Board Sheetrock
 Sheetrock Corner
 Galvanized Flashings
 Portland Cement
 Concrete Mix
 Mortar Mix
 Roofing Mastics and Tars
 Fiberglass Insulation
 Pre-hung Mahogany Doors
 Pre-hung Birch Doors
 Insulated Aluminum Windows
 Insulated Bronze Windows
 Bird® 235# 3-tab Roofing
 Bird® Vinyl Siding
 Cedar Channel
 Cedar Bevel
 Redwood Bevel
 #101 Reproduction Siding
 #105 Reproduction Siding
 Olympic Stains
 Paint Brushes
 Paint Thinner
 Paint Lacquer
 Wood Fillers
 Putty Sticks
 Sheetrock Tape
 Joint Compound
 Per-Rock
 Fix-all
 Sandpaper
 Varathane Stains
 & Plastic Coatings
 Z-Brick®
 Ruffin®
 ABS Pipe and Fittings
 PVC Pipe and Fittings
 Plumbing Accessories
 Toilets
 Sinks
 Electrical Wire
 Electrical Accessories
 Earth Stoves®
 Stove Accessories
 Pre-formed Hearths & Walls
 Skill Power Tools®
 Rockwell Power Tools®
 Stanley Hand Tools®
 Bulk Bolts
 Masonry Tools
 Drywall Tools
 Panel Nails
 Duofast® Staples
 Bostich® Staples
 Staplers
 Rope and Cordage
 Construction Adhesive
 Caulkings
 Contact Cement
 Floor Tile Adhesive
 Epoxy Glue
 Decorative Hardware
 Address Numbers & Letters
 Security Devices
 Kwikset® Locks
 Builder's Hardware
 Hinges
 Bolts
 Hasps
 Angle Iron
 Threaded Rod
 Tube Aluminum
 Angle Aluminum
 Aluminum Edgings & Trims
 Shelf Brackets
 Thresholds
 Closet Rods
 Metalbestos Chimney Systems
 Interior Wall Paneling
 Hardboard
 Pegboards
 Pre-finished Mouldings
 Hemlock Mouldings
 Pine Shelving
 Particle Board Shelving
 Built Nose Stepping
 Redwood Wiggle
 Picture Frame Moulding

VALLEY LUMBER

33690 Highway 99E • Tangent, Oregon 97389
 Retail Counter 926-8658 Contractor Office 928-6465

*EQC
 Young
 Downs
 Underwood
 Osborne*

March 6, 1981

Mr. Jack Osborne
 Department of Environmental Quality
 P.O. Box 1760
 Portland, Oregon 97307

Re: Holding Tank Inspection Fee Proposal

Dear Mr. Osborne:

In response to your notice of February 17, 1981, concerning your desire to enact a \$40.00 fee and subsequent inspection of holding tanks, I would like to respond as follows:

1. Why the concern and singling out of holding tanks for inspection when they are simply a septic tank without a drainfield. If they fail they are no worse a polluter. I believe if you are proposing to do it right you should inspect all septic facilities including the holding tanks, septic tanks and sewage treatment facilities for a fee.
2. At a time when the government is having a difficult time making ends meet, why are new areas of responsibility trying to be established. I am sure you are aware that more sophistication and money saving programs is what the public mandated in November 1980.
3. I will assume businesses are the primary users of holding tanks. Location of tanks around businesses make it unlikely there is any worse neglect of holding tanks than septic tanks. In fact, I would suspect the opposite, holding tanks, because of their exposure, are watched and maintained more carefully than a majority of septic tank systems.

Because of the previously mention ideas, I would suggest that the proposed fees and inspections are more of a tax in disguise than a protection of the public.

Respectfully submitted,

Donald R. Ramsay

Donald R. Ramsay
 Property Owner
 27536 Pearl Street
 Brownsville, Oregon 97327

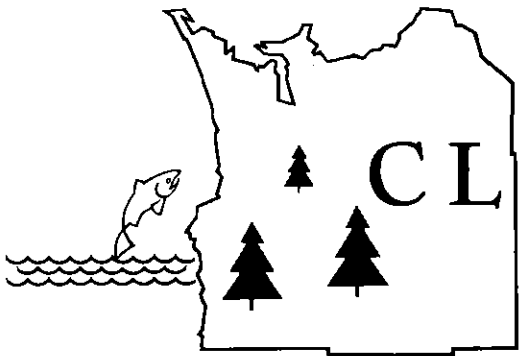
State of Oregon
 DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
 MAR 9 1981

State of Oregon
 DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
 MAR 9 1981

WATER QUALITY CONTROL

OFFICE OF THE DIRECTOR

*EQC
Young
Osborne*



CLATSOP COUNTY

Courthouse Astoria, Oregon 97103

March 9, 1981

Mr. Joe Richards, Chairman
Environmental Quality Commission
Box 1760
Portland, Oregon 97207

Re: Hearing Item No. G, Adoption of Revised and Amended Subsurface
Sewage Disposal Rules

Dear Mr. Richards:

The Clatsop County Board of Commissioners has received and reviewed the attached letter from the Clatsop Plains "208" Groundwater Study Public Involvement Committee. We agree with the Committee's letter and especially that you use extreme caution in the implementation of the low pressure distribution system. We feel that more testing and analysis is necessary before the rule is adopted and especially at the one-half acre density.

Thank you for providing this opportunity to comment on these important rules.

Very truly yours,
Bob Westerberg
Bob Westerberg, Chairman
Board of County Commissioners

CJS/BW/slw
enc.

cc: Bill Young, Director, D.E.Q.
Curt Schneider, Planning Director

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
MAR 10 1981
OFFICE OF THE DIRECTOR

*EQC
Young
Osborne*

Public Involvement Committee
Clatsop Plains "208" Groundwater Study
Bill Berg, Chairman
P.O. Box 54
Gearhart, Oregon 97138

17 February 1981

Chairman
Environmental Quality Commission
P.O. Box 1760
Portland, Oregon 97207

Subject: Proposed On-Site Sewage Disposal Rule, OAR 340-71-275

Dear Mr. Chairman:

The new on-site sewage disposal rule, OAR 340-71-275, proposed by the Oregon Department of Environmental Quality, is of concern to the members of the Public Involvement Committee of the Clatsop Plains 208 Study. It is our understanding that if the new regulations are put into effect, pressurized distribution systems will be required for installations in soil with rapid permeability. This requirement would be applicable to nearly all of the Clatsop Plains area, particularly the area west of Highway 101.

We understand the operation and theory of treatment associated with pressure distribution systems, and recognize that these systems are preferable to on-site disposal for many applications. However, we believe the required use of pressurized distribution in areas with soils of high permeability imposes an unjustified financial burden on the residents of the Clatsop Plains.

Installing pressure distribution systems would add at least \$1,000 per property to the initial cost of residential on-site disposal systems. In addition, operating, maintenance, and repair costs would be increased while system reliability is decreased because of the pressure distribution system's dependence on electrical power and mechanical operation.

The medium-fine sand soil typical of the Clatsop Plains area is ideal for septic tank effluent treatment and is a recommended fill material for fill, mound, and sand filter treatment/disposal systems. Septic tank failures in the sandy soils of the Clatsop Plains are rare. Failures that do occur are generally the result of improper tank pumping and maintenance practices, or conditions that will be unaffected by the requirement for pressure distribution.

The proposed regulations also permit an increase in subsurface loading rates for pressure distribution systems. The present allowable loading of one residence per acre has been increased to allow the equivalent of one residence for each one-half acre. We have been told by DEQ staff that the basis for the increased loading allowance (i.e. increased residential density) is data collected as part of DEQ's experimental on-site disposal evaluation program, as well as data published by other investigators, which indicate that sand filters with pressure distribution systems have an effluent nitrogen concentration approximately one-half that of standard subsurface disposal systems.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
FEB 20 1981

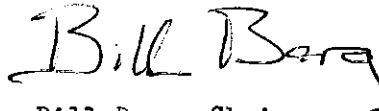
OFFICE OF THE DIRECTOR

The impact upon land use of the proposed lot size reduction in non-sewered areas is significant and irreversible. Hence, we urge caution in the implementation of such a change without benefit of more complete and longer-term data than are presently available.

Accordingly, the 208 Public Involvement Committee has voted unanimously to request that you postpone consideration of proposed OAR 340-71-275 until the Clatsop Plains 208 Study, with attendant data and recommendations, has been completed.

If, however, you decide for some reason to approve OAR 340-71-275 before considering the pertinent results of the 208 Study, we propose that, rather than dictate a single solution to on-site disposal in the area, EQC give consideration to continued acceptance of standard residential subsurface disposal units on one-acre lots, and allow the option of one-half acre density for lots developed using a pressure distribution system. This option would permit development of one-acre lots without the extra burden of a pressure distribution system, and, according to DEQ's own data, without affecting the nitrate loading to the aquifer.

Sincerely,

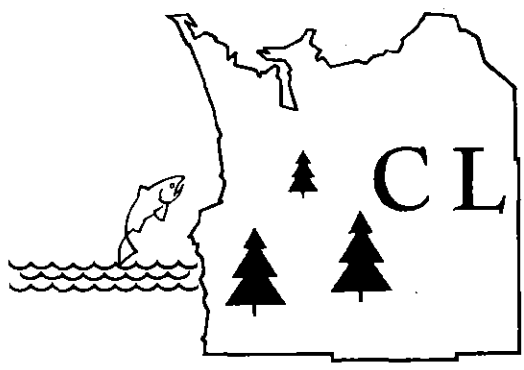
A handwritten signature in cursive script that reads "Bill Berg".

Bill Berg, Chairman

Cc.: Clatsop County Board of Commissioners

H

*EQC
Young*



CLATSOP COUNTY

Courthouse Astoria, Oregon 97103

March 9, 1981

Mr. Joe Richards, Chairman
Environmental Quality Commission
Box 1760
Portland, Oregon 97207

Re: Hearing Item No. H, Amending Clatsop Plains Rule

Dear Mr. Richards:

The Board of Clatsop County Commissioners has reviewed the D. E. Q. staff report on this agenda item. We wish to reaffirm our request for the change as submitted and as presented by Mr. Lou Larson and Clatsop County staff personnel at the public hearing held in Astoria on January 16, 1981.

Thank you for your consideration.

Very truly yours,

A handwritten signature in cursive script that reads "Bob Westerberg".

Bob Westerberg, Chairman
Board of County Commissioners

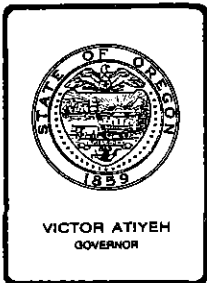
CJS/BW/slw

cc: Bill Berg, Chairman
CP 208 Groundwater Public Involvement Committee

Bill Young, D.E.Q.
Jack Osborne, D.E.Q.
Curt Schneider, Planning Department

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
MAR 10 1981

OFFICE OF THE DIRECTOR



Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207

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

March 12, 1981

TO: Environmental Quality Commission
FROM: Linda K. Zucker, ^{LKZ}Hearings Supervisor
SUBJECT: Russell B. Stoppleworth Appeal to Court of Appeals

Russell B. Stoppleworth's appeal to the Oregon Court of Appeals has been dismissed on jurisdictional grounds. Mr. Stoppleworth failed to make a timely filing of the Notice of Appeal with the court because he misdirected the notice to the Department of Justice. He has requested reconsideration of the court's decision, but it is highly unlikely that the court will change its position.

This appeal concerns non-attorney representation in contested case matters, a recurring issue. At a future meeting I would like to briefly discuss this matter with the Commission.

ahe

ROBERT A. MANSETH *Consulting Engineer*

Phone 997-3677
88493 Highway 101 North
Florence, OR 97439

13 March 1981

Environmental Quality Commission
Salem OR

Existing site approval for Indian Forest, Inc.
Dunal Aquifer Area--Priority One
Florence OR

Gentlemen;

In 1974 a site inspection #74-261 approved the site for a sewage disposal system.

In 1975 a construction permit \$507-75 was issued for 1800 gal. per day (12 bedrooms) for apartments or mobile home units.

The site inspection and construction permits were issued under DEQ Jan. 1, 1974 rules.

The construction permit expired, but is renewable at any time.

Before your Dec. 19, 1980 meeting on the Florence Dunal Aquifer, I was concerned with the wording in the proposed rules restricting new development in the Priority one area.

I made a request at your Dec. 18th meeting that all drainfield site approvals made between 1 Jan. 1974 and prior to the moratorium on development in the Priority one area, be honored. This Commission approved my request.

I have since applied to Lane County for a subdivision of 4 lots out of 37 acres. I received conditional approval from the Lane County staff on 24 Feb. 1981 and from Western Lane Planning Commission on March 11, 1981. The main condition of approval is that I receive a construction permit for the septic tank and drainfield.

A Lane County staff member, Roy Burns, says that the DEQ rules prevent the County from issuing a construction permit because there was no preliminary planning approval prior to Oct, 1980.

In a telephone conversation with Gary Menser (DEQ) two days ago, he indicated that the DEQ was only interested in sewage loading.

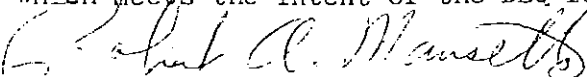
Apparently, under DEQ rules, I could construct a 7 unit mobile home park, a 5 unit apartment building, but not 4 individual homesites.

The drainfield site is next to hwy. 101, which is the dividing line between the Priority one and Priority 2 areas. Indian Forest property should not have been included in the Priority one area, but hwy. 101 made a convenient political boundary.

I have determined that the groundwater elevation of the drainfield site is lower than the elevation of Clear Lake, indicating no groundwater flow towards Clear Lake.

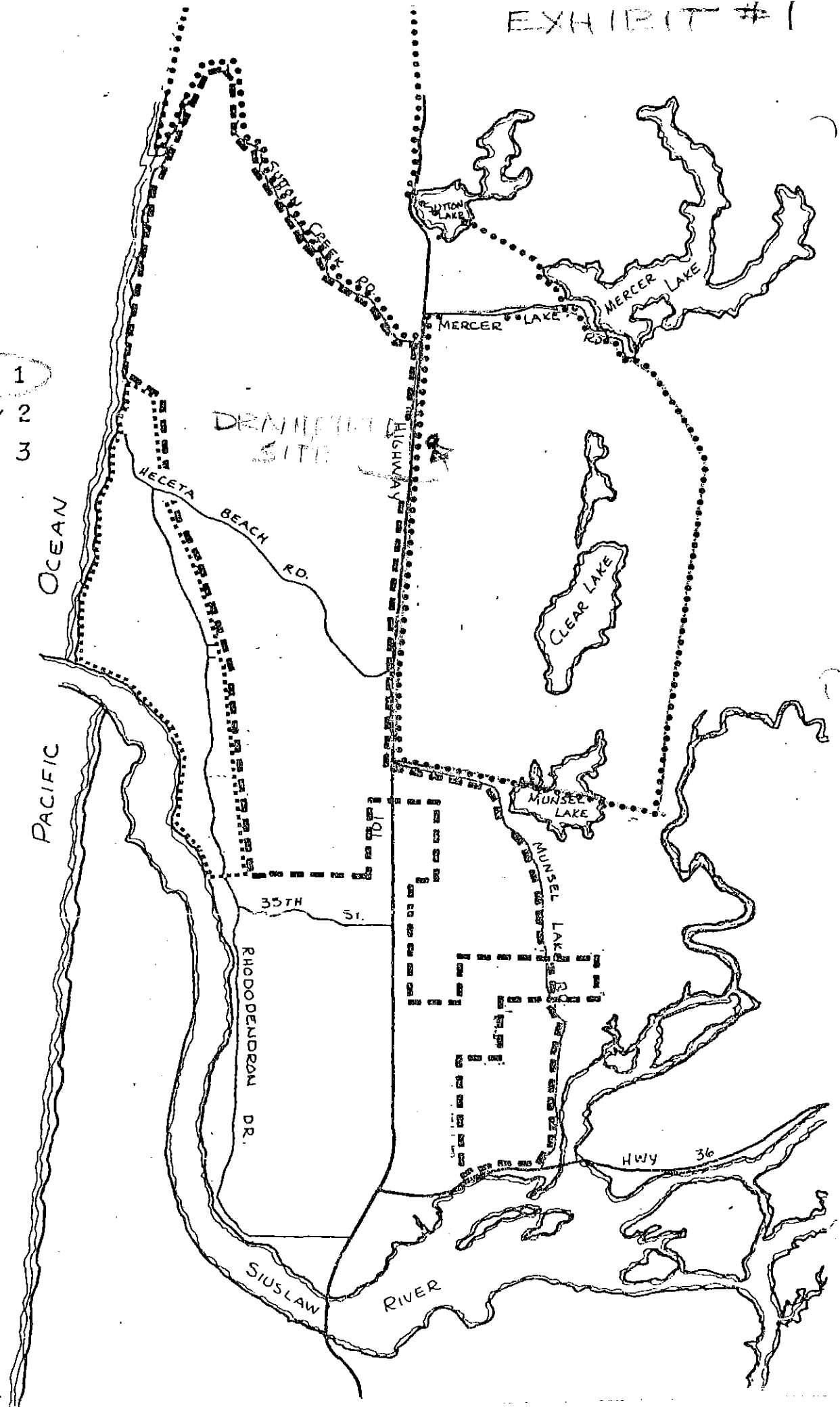
The drainfield would be essentially a single system serving four lots.

I request that this conflict be resolved so that this 4 lot subdivision, which meets the intent of the DEQ rules, may proceed as planned.



Robert A. Manseth
Pres. Indian Forest, Inc.

- PRIORITY 1
- - - - PRIORITY 2
- PRIORITY 3



ROBERT A. MANSETH *Consulting Engineer*

Phone 997-3677
88493 Highway 101 North
Florence, OR 97439

13 March 1981

Environmental Quality Commission
Salem OR

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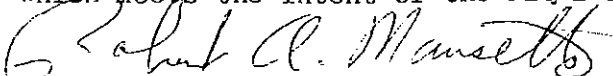
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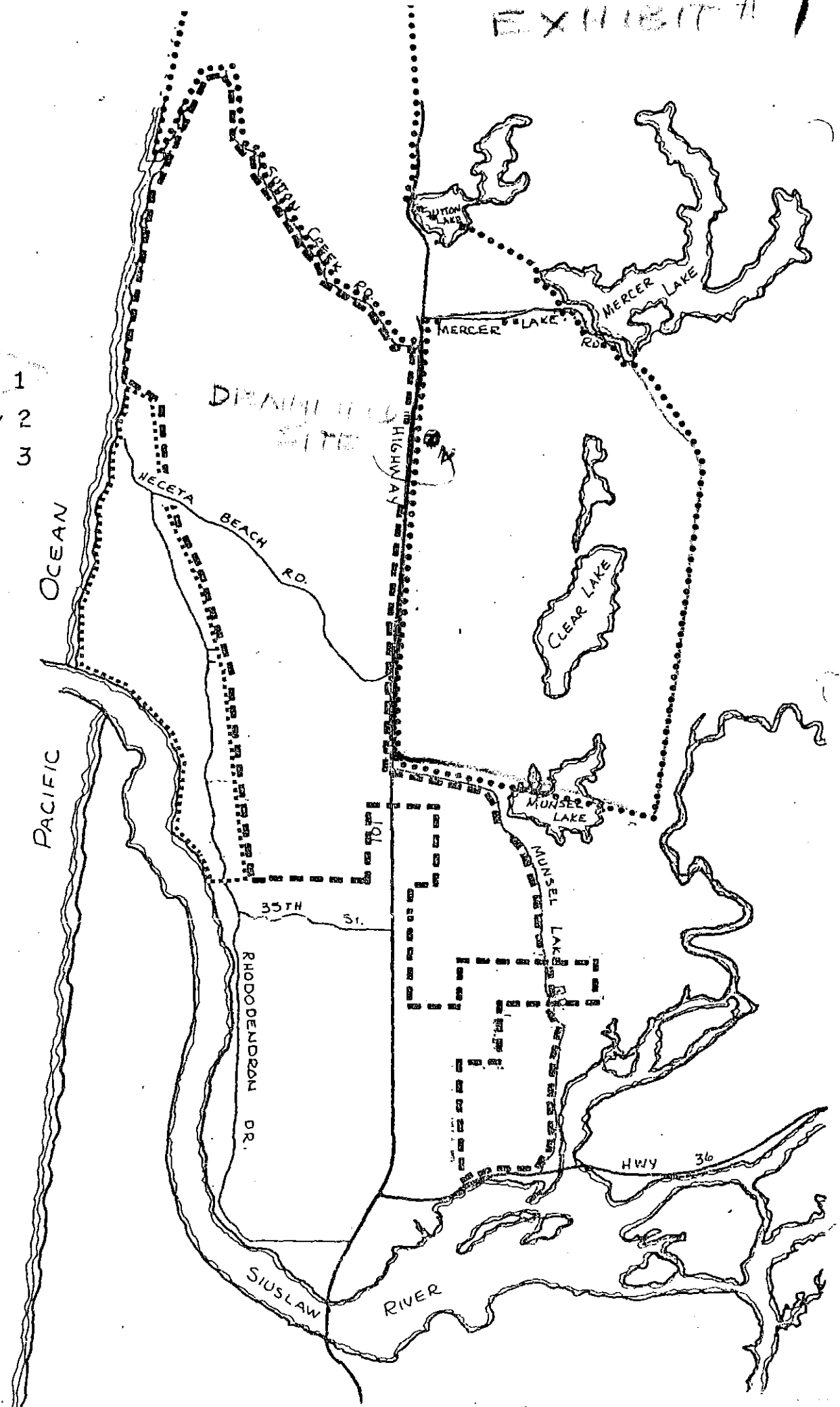
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Pres. Indian Forest, Inc.

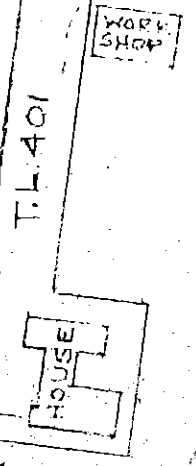
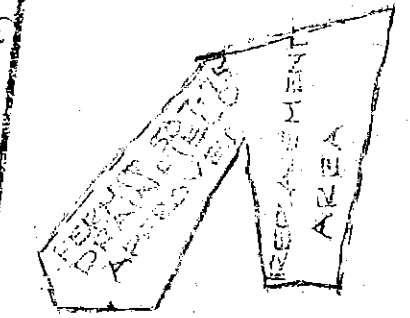
- PRIORITY 1
- - - - - PRIORITY 2
- PRIORITY 3



PROPOSED CHIEF JOSEPH SUBDIVISION
OWNER - INDIAN FOREST, INC.
ENGINEER - ROBERT MANSBETH
SCALE 1"=100' JAN. 1982

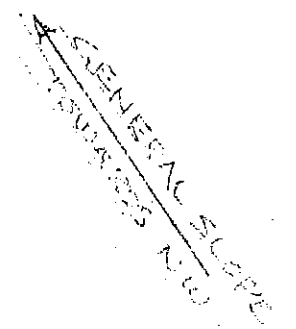
SCALE
1"=100'

PRIORITY #2
PRIORITY #1
US
US



INDIAN WILDLIFE
BUFFALO & DEER

T.L. 400 14.4 ACRES
T.L. 800 19.8 ACRES



TOURIST COMMERCIAL RRI



TOURIST COMMERCIAL RRI

T.L. 201
2 ACRES

T.L. 201
1/2 ACRES

FOUNDING DURING WINTER
MARCH (LOT 1 NEEDS FILL UNDER HOUSE)

T.L. 900	200'	209'	209'	209'
1 ACRE	1 ACRE	1 ACRE	1 ACRE	1 ACRE

WATER MAIN, ELECT, TEL, TV 101

PROCEEDING CHIEF JUSTICE SUPERIOR COURT
OWNER - INDIAN FOREST, INC.
ENGINEER - ROBERT HANCOCK
SCALE - 1"=100'

SCALE
1"=100'

PRIORITY #2 PRIORITY #2

RESIDENTS
ADMINISTRATIVE
OFFICES
RECREATION
AREA

WORK
SHOP

T.L. 401

HOUSE

STREET

JOHN

OUTDOOR DISPLAY

ARTS & CRAFTS
BUFFALO & DEER

T.L. 400 14.4 ACRES

T.L. 800 19.8 ACRES

T.L. 201
2 ACRES

T.L. 201
2 ACRES

WELL
PUMP

T.L. 201
1/2 ACRES

TOURIST COMMERCIAL

GENERAL STORE
15000 SQ. FT.

ROADWAY DURING CONSTRUCTION
WATER ELECT. NEEDS FOLLOWING ROAD

T.L. 900 200' TOURIST COMMERCIAL 209' 209'

U.S. HWY 101

LEGISLATIVE INVITEES

TO

EQC LUNCH
(March 13, 1981)

Heard
~~Leham~~
Smith
Hartung
~~Levy~~
Fadley
✓ Mallock?
~~Powell~~
~~Ripper~~
~~Campbell~~
~~Grannett - no~~
Kafoury
~~VanLecuwen~~

✓ Myers
~~Kerans~~
✓ Hanneman
~~Fawbush~~
✓ Throop
✓ Anderson
~~Bauman~~ Mary Luber
Bellamy
~~Lindquist~~
~~Jongs~~
✓ Potts
Gardner
~~Hannon~~
Lombard
~~DeBoer~~ Elaine Zablocki
Johnson

Also invited:

~~Lee Johnson~~
✓ Pat Amedeo

✓ = accepted
— = attended