

12/3/1982

OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS



State of Oregon
Department of
Environmental
Quality

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OREGON ENVIRONMENTAL QUALITY COMMISSION MEETING

December 3, 1982

14th Floor Conference Room
Department of Environmental Quality
522 S. W. Fifth Avenue
Portland, Oregon

AGENDA

9:00 am CONSENT ITEMS

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

APPROVED w/
correction
APPROVED

- A. Minutes of October 15, 1982, EQC meeting.
- B. Monthly Activity Reports for September and October, 1982.

APPROVED*

- C. Tax Credits [*T-1540 was withdrawn]

9:05 am PUBLIC FORUM

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

HEARING AUTHORIZATIONS

APPROVED

- D. Request for authorization to conduct a public hearing on proposed amendments to Pollution Control Bond Fund Rules for Sewerage Projects (OAR Chapter 340, Division 81).

APPROVED w/
corrections

- E. Request for authorization to conduct a public hearing for:
 - (1) Modifying geographic regional rule OAR 340-71-400(2) for the General North Florence Aquifer; and
 - (2) Establishing special water quality protection for Clear Lake and its watershed by adding a special protection clause to the Mid-Coast Basin Water Quality Management Plan (OAR 340-41-270) and establishing a moratorium on new on-site waste disposal systems (OAR 340-71-460(6)(f)).

APPROVED

- F. Request for authorization to conduct a public hearing on general modifications to noise control related rules, OAR 340-35-015, 35-025, 35-030, 35-035, 35-040 and 35-045; and Procedure Manuals, NPC-1, -2, -21 and -35.

APPROVED

- G. Request for authorization to conduct a public hearing concerning proposed changes in the New Source Review, Hot Mix Asphalt Plant, and Volatile Organic Compound Rules in the State Implementation Plan.

APPROVED

- H. Request for authorization to conduct a public hearing to adopt a lead control strategy for the state, and to amend the ambient air quality standard for lead, OAR 340-31-055, as revisions to the Oregon State Implementation Plan.

(MORE)

ACTION AND INFORMATION ITEMS

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

- APPROVED I. Request for an additional extension of a variance from OAR 340-25-315(1)(b), Veneer Dryer Emission Limits, initially granted to Mt. Mazama Plywood Company on March 21, 1980.
- APPROVED J. Request for a variance from OAR 340-21-015(2)(b) Visible Air Contamination Limits, and OAR 340-21-030(2) Particulate Emission Limits for the Oil-Dri Corporation of America, Christmas Valley Plant.
- APPROVED w/ K. Request for a variance from OAR 340-21-025(b) Particulate Emission
ADDED LANGUAGE Limits for a crematorium proposed by the Rajneesh Neo-Sannyas International Commune.
- APPROVED L. Request for a variance from OAR 340-21-030(2) Particulate Emission
Recommendation Limits, and OAR 340-21-060(1) Fugitive Emissions for Diamond
from Addendum International, Bend.
- APPROVED M. Request for approval of non-guideline air quality models for the proposed Alumax Pacific Corporation Primary Aluminum Reduction Plant at Umatilla.
- ACCEPTED N. Informational Report: Progress and status report on passenger car and light truck noise emissions.

WORK SESSION

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

- DISCUSSION O. Discussion of potential alternative uses of Pollution Control Bond Fund to encourage construction of sewerage facilities.
- NO FINAL * P. Final Order Denying Petition to Amend OAR 340-14-025(5) regarding
ACTION hearings in permit matters.

Because of the uncertain length of time needed, the Commission may deal with any item at any time in the meeting except those set for a specific time. Anyone wishing to be heard on any item not having a set time should arrive at 9:00 a.m. to avoid missing any item of interest.

The Commission will breakfast (7:30 a.m.) at the Portland Motor Hotel, 1414 S. W. Sixth Avenue, Portland; and will lunch at DEQ Headquarters, 522 S. W. Fifth Avenue, Portland.

OREGON ENVIRONMENTAL QUALITY COMMISSION

December 3, 1982

BREAKFAST AGENDA

- | | |
|---|-----------------|
| 1. Dates and locations of future EQC meetings | Shaw |
| 2. Proposed changes in EQC deadlines | Young/Gillaspie |

LUNCH AGENDA

- | | |
|------------------------------------|-----------|
| 1. Woodstove certification program | Kowalczyk |
| 2. Legislative progress report | Biles |

1983 CALENDAR

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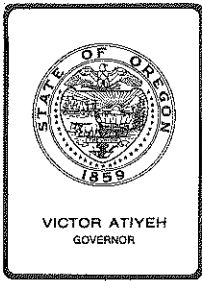
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Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207

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

MEMORANDUM

To: Environmental Quality Commission

From: William H. Young, Director

Date: December 3, 1982

Subject: Mailing of EQC Agenda

Background

When the Commission met on a monthly schedule, the Department established a system of mailing the tentative agenda one week prior to the mailing of the agenda items. This was intended to alert the Commission members and the public to items of interest on the agenda since the meeting schedule was so frequent. When the Commission moved to a six-week meeting schedule, the Department retained the system of mailing an early tentative agenda and lengthened the time to two weeks prior to the mailing of agenda items. Agenda items are mailed to the Commission two weeks prior to the meeting.

Problem

In the month after the tentative agenda is distributed to the Commission and interested citizens (about 225), agenda items often change. Additional issues arise that need Commission discussion. Some items do not proceed according to schedule and need more time. This necessitates re-mailing a revised tentative agenda to the interested citizens at an expense of about \$60.

Options

1. Retain present mailing schedule with the tentative agenda mailed to Commission members and interested citizens a month prior to the meeting.
2. Distribute the tentative agenda to Department staff and the Commission only. The final agenda would be distributed to interested citizens at the same time as agenda items are mailed to the Commission--two weeks prior to the meeting.

MEMORANDUM

December 3, 1982

Page 2

Recommendation

Alter the mailing schedule to align the distribution of the final agenda to the public and the mailing of agenda items to the Commission, two weeks prior to the meeting.

Bill

William H. Young

Jan Shaw:k

229-5300

November 30, 1982

MK1485

THESE MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EQC

MINUTES OF THE ONE HUNDRED FORTY-FOURTH MEETING

OF THE

OREGON ENVIRONMENTAL QUALITY COMMISSION

December 3, 1982

On Friday, December 3, 1982, the one hundred forty-fourth meeting of the Oregon Environmental Quality Commission convened at the Department of Environmental Quality, Portland, Oregon. Present were Commission members Mr. Joe B. Richards, Chairman; Mr. Fred J. Burgess; Mr. James Petersen; Mr. Wallace B. Brill; and Mrs. Mary V. Bishop. Present on behalf of the Department were its Director, William H. Young, and several members of the Department staff.

The staff reports presented at this meeting, which contain the Director's recommendations mentioned in these minutes, are on file in the Office of the Director of the Department of Environmental Quality, 522 S.W. Fifth Avenue, Portland, Oregon. Written information submitted at this meeting is hereby made a part of this record and is on file at the above address.

BREAKFAST MEETING

The breakfast meeting convened at 7:30 a.m. at the Portland Motor Hotel in Portland. Commissioners Richards, Petersen, Brill, Burgess, and Bishop were present, as were several members of the Department staff.

The following items were discussed:

1. Robb Haskins, Assistant Attorney General, described for the Commission the LUBA decision on the temporary discharge permit issued to Rancho Rajneesh for a sewage treatment system for their religious festival held last summer. He reported that LUBA found the Department had acted inappropriately in issuing the permit without making findings on state land use planning goals.

Department staff will distribute copies of that decision to the Commission and will report at their next meeting on how the LCDC handles the issues raised by this decision.

2. Dates and locations of future EQC meetings: The Commission decided to meet on the following dates and at the locations listed:

January 14, 1983	Portland
February 25, 1983	Medford
April 8, 1983	Salem
May 20, 1983	Portland

3. Proposed changes in EQC deadlines: The staff proposed, and it was decided to alter the current mailing schedule for the EQC meeting agenda to the public to correspond with the mailing of the staff report packet, which is two weeks prior to the meeting.
4. Several of the EQC members described their recent visits to regional editorial boards.

FORMAL MEETING

Commissioners Richards, Petersen, Burgess, Bishop, and Brill were present for the formal meeting.

AGENDA ITEM A: MINUTES OF THE OCTOBER 15, 1982 MEETING.

It was MOVED by Commissioner Bishop, seconded by Commissioner Burgess, and carried unanimously that the Minutes be approved as submitted but with the language from a breakfast meeting item referring to "curbside pickup program" included originally in Concept #1 of proposed recycling legislation to be omitted in order to make the language broader and to reflect more accurately what the Commission discussed.

AGENDA ITEM B: MONTHLY ACTIVITY REPORT FOR SEPTEMBER & OCTOBER, 1982.

It was MOVED by Commissioner Burgess, seconded by Commissioner Petersen, and passed unanimously that the Director's Recommendations be approved.

AGENDA ITEM C: TAX CREDITS.

It was MOVED by Commissioner Bishop, seconded by Commissioner Brill and passed that the Director's Recommendation be approved. Tax credit application T-1540 was withdrawn with the concurrence of the company and deferred to another meeting.

PUBLIC FORUM: No one chose to appear.

AGENDA ITEM D: REQUEST FOR AUTHORIZATION TO CONDUCT A PUBLIC HEARING ON PROPOSED AMENDMENTS TO POLLUTION CONTROL BOND FUND RULES FOR SEWERAGE PROJECTS (OAR CHAPTER 340, DIVISION 81).

The Pollution Control Bond Fund Rules for Sewerage Projects were recently modified by two separate temporary rule actions in order to advance funds to two projects.

The present rules were written in 1971 to be consistent with federal grant processes. The majority of projects that will now receive financial assistance from the bond fund will not be receiving federal grants. Thus, it is desirable to rewrite and update the rules to reflect present-day needs.

This requests authorization to conduct a public hearing on proposed amendments to the Pollution Control Bond Fund Rules for Sewerage Projects.

Director's Recommendation

Based on the findings in the summation, it is recommended that the Commission authorize the Department to hold a public hearing to consider the adoption of revised rules for use of the bond fund for sewerage works construction (OAR 340-81-005 et. seq.) as set forth in Attachment I.

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

AGENDA ITEM E: REQUEST FOR AUTHORIZATION TO CONDUCT A PUBLIC RULEMAKING HEARING FOR:

- (1) MODIFYING GEOGRAPHIC REGIONAL RULE OAR 340-71-400 (2) FOR THE GENERAL NORTH FLORENCE AQUIFER, AND
- (2) ESTABLISHING SPECIAL WATER QUALITY PROTECTION FOR CLEAR LAKE AND ITS WATERSHED BY ADDING A SPECIAL PROTECTION CLAUSE TO THE MID COAST BASIN WATER QUALITY MANAGEMENT PLAN [OAR 340-41-270 (1)] AND ESTABLISHING A MORATORIUM ON NEW ON-SITE WASTE DISPOSAL SYSTEMS [OAR 340-710460 (6) (f)].

At the December 19, 1980 EQC meeting, the Commission adopted a Geographic Regional Rule, OAR 340-71-400 (2), for the North Florence Dunal Aquifer in Lane County. The purpose of the rule was to provide interim septic tank control measures until an ongoing 208 Groundwater Study was completed. The study was completed in June, 1982 and its recommendations have been formally adopted by Lane County. Based on this action and staff's review of the Study, it appears the current rule can be significantly relaxed, except for those areas within the Clear Lake Watershed where more protective measures are needed.

After the final staff report was sent to the Commission, it was discovered that one section contained a confusing paragraph. The language below reflects the correct changes:

Page 2, No. 3.a.: The 208 Study determined that, on the average, 20 lbs. NO₃-N [per acre] is contributed annually to the aquifer per dwelling unit. [This] The loading rate of 58 lbs. is therefore equivalent to 2.8 single-family dwelling units per acre.

[Bracketed language is deleted; underlined language is added.]

Director's Recommendation

Based upon the Summation, it is recommended that the Commission authorize the Department to conduct a public rulemaking hearing to take testimony on:

1. Whether to establish special water quality protection for Clear Lake and its watershed by adding a special protection clause to the Mid-Coast Basin Water Quality Management Plan (OAR 340-41-270) as set forth in Attachment D, and establish an

on-site sewage disposal moratorium area (OAR 340-71-460 (6) (f) for those lands within the Clear Lake Watershed Boundaries of the North Florence Dunal Aquifer as set forth in Attachment E.

2. Whether to modify the current Geographic Regional Rule 340-71-400(2), for those lands overlaying the North Florence Dunal Aquifer that are located outside of the Clear Lake Watershed Boundaries as set forth in Attachment C.

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

AGENDA ITEM F: REQUEST FOR AUTHORIZATION TO CONDUCT A PUBLIC HEARING ON GENERAL MODIFICATIONS TO NOISE CONTROL RELATED RULES: OAR 340-35-015, 35-025, 35-030, 35-035, 35-040, AND 35-045 AND PROCEDURE MANUALS: NPC-1, 2, 21, AND 35.

Periodically, it is necessary to propose general modifications to DEQ administrative rules. These proposed amendments to the noise control rules are designed to enhance their effectiveness, eliminate misinterpretations, and streamline their implementation. Minor amendments are proposed in each major noise control rule and in four procedure manuals.

Director's Recommendation

Based on the Summation, it is recommended that the Commission authorize public hearings to take testimony on proposed amendments to noise control rules OAR 340-35-015, 35-025, 35-030, 35-035, 35-040, AND 35-045 and the Procedure Manuals NPC-1, 2, 21, and 35 as shown in Attachment 3.

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

AGENDA ITEM G: REQUEST FOR AUTHORIZATION TO HOLD A PUBLIC HEARING CONCERNING PROPOSED CHANGES IN THE NEW SOURCE REVIEW, HOT-MIX ASPHALT PLANT, AND VOLATILE ORGANIC COMPOUND RULES IN THE STATE IMPLEMENTATION PLAN.

The Department is proposing several changes in the New Source Review, Hot-Mix Asphalt Plant, and Volatile Organic Compound rules. These changes are of a minor nature and are required to correct wording problems, to update the rules where changes have been required by EPA, and to streamline Department procedures.

The proposed changes are discussed below and involve revising the following rules:

1. Definition of Nonattainment Area.
2. Language corrections in the Salem Area Ozone and offset rules.
3. Growth margins for volatile organic compounds in Medford and Portland.
4. Stack height regulations.

5. Portable hot-mix asphalt plants.
6. Commission approval for use of non-guideline models.
7. Repeal of redundant "bubble" rule in the Volatile Organic Compound rules.

It is requested that a public hearing be authorized concerning these proposed rule changes.

Director's Recommendation

Based upon the above Summation, it is recommended that a public hearing be authorized concerning these proposed changes in the New Source Review, Hot-Mix Asphalt Plant, and Volatile Organic Compound rules as shown in Attachment 3.

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

AGENDA ITEM H: REQUEST FOR AUTHORIZATION TO HOLD A PUBLIC HEARING TO ADOPT A LEAD CONTROL STRATEGY FOR THE STATE, AND TO AMEND THE AMBIENT AIR QUALITY STANDARD FOR LEAD, OAR 340-31-055, AS REVISIONS TO THE OREGON STATE IMPLEMENTATION PLAN.

This was a request to hold a hearing before the Commission at its January 14, 1983, meeting on the proposed Statewide Control Strategy for Lead. Attainment of the ambient air standard for lead is projected by the end of 1983 due to federally-mandated reductions of gasoline lead levels. The lead strategy would become a revision to the State Implementation Plan. Adoption would also be requested at the January 14, 1983, EQC meeting as EPA has requested expeditious action on this SIP revision as the result of a recent court case action.

The Department is also requesting a hearing to consider changing the state lead standard to the more stringent EPA standard.

Director's Recommendation

Based on the Summation, the Director recommends that the EQC authorize a public hearing to be held at the January 14, 1983 EQC meeting to consider adoption of the proposed lead control strategy and revision of the state lead standard as revisions of the State Implementation Plan.

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

AGENDA ITEM I: REQUEST FOR AN ADDITIONAL EXTENSION OF A VARIANCE FROM OAR 340-25-315 (1) (b), DRYER EMISSION LIMITS, BY MT. MAZAMA PLYWOOD COMPANY.

This item was a request by Mt. Mazama Plywood Company for an additional time extension on a variance from veneer dryer emission standards for their mill located in Sutherlin. The company gave the reason that their

unfavorable financial position has not improved since the initial variance was issued in July, 1981. They indicated that expenditures for dryer pollution control equipment at this time would result in shutdown of the mill.

Based on information received, the Department has identified and analyzed four variance alternatives.

Director's Recommendation

Based on the Summation, it is recommended that the Commission grant an extension to the incremental progress step which requires submitting a control strategy subject to the following conditions:

1. By March 1, 1983, submit a final control strategy in the form of detailed plans and specifications which are acceptable for construction approval by the Department.
2. By March 1, 1983, the Company shall submit a financial statement which documents the current profit and loss position of Mt. Mazama Plywood Company.
3. A Department report be made at the April 1983 Commission meeting for the Commission to consider appropriate further scheduling of progress and a final compliance date.

James Klein, Manager of Mt. Mazama Plywood Company, reported to the Commission that there are no alternatives to a shutdown of the plant if they are required to comply now with permit conditions.

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

AGENDA ITEM J: REQUEST FOR A VARIANCE FROM OAR 340-21-015(2) (b) VISIBLE AIR CONTAMINANT LIMITS AND OAR 340-21-030(2) PARTICULATE EMISSION LIMITS FOR THE OIL-DRI CORPORATION OF AMERICA, CHRISTMAS VALLEY PLANT.

Oil-Dri Corporation of America purchased in 1979 and now operates a diatomaceous earth processing plant near Christmas Valley. While progress has been made in improving process problems and reducing air emissions, the company has been unable to complete two previously negotiated compliance schedules and currently is requesting a variance from Visible Air Contaminant Limits and Particulate Emission Limits.

Director's Recommendation

Based upon the findings of the Summation, it is recommended that the Commission grant a variance from OAR 340-21-015(2) (b) and OAR 340-21-030(2) until April 1, 1984 for the wet scrubber at the Oil-Dri Corporation diatomaceous earth processing facility at Christmas Valley, Oregon, subject to the following conditions:

1. The company shall meet the compliance schedule contained in the Summary.
2. If the Commission determines that the scrubber emissions cause a nuisance to persons or property, this variance may be revised or revoked.

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

AGENDA ITEM K: REQUEST FOR A VARIANCE FROM OAR 340-21-025 (B) PARTICULATE EMISSION LIMITS FOR A CREMATORIUM PROPOSED BY THE RAJNEESH NEO-SANNYAS INTERNATIONAL COMMUNE.

The Rajneesh Neo-Sannyas International Commune proposes to construct and operate a crematorium unit to dispose of the bodies of deceased residents of their ranch. The crematorium would allow the burning body to be viewed by the communal followers as part of a religious experience. The crematorium should meet opacity regulations and not cause nuisance conditions but may not meet the particulate emission limit. Because of limited use and remote location, the crematorium should not cause any measurable air quality problems if the variance is granted.

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Commission grant a variance from OAR 340-21-025(2) (b) for the crematorium proposed by the Rajneesh Neo-Sannyas International Commune, subject to the following conditions:

1. Visible emissions from the crematorium shall not exceed standards specified in OAR 340-21-015(2).
2. The variance may be revised or revoked by the Commission if the Commission determines that the crematorium emissions cause a nuisance.
3. The variance shall apply only to this specific location and the crematorium shall be available only to the deceased followers residing at the Ranch.

It was MOVED by Commissioner Bishop, seconded by Commissioner Burgess, and passed unanimously that the Director's Recommendation be approved as amended below:

"...for the crematorium proposed by the Rajneesh Neo-Sannyas International commune, subject to the following conditions and in compliance with all other applicable state laws and regulations:"

No. 3:

"...the crematorium shall be available only to followers residing at the Ranch who are deceased."

[Underlined language is added.]

AGENDA ITEM L: REQUEST FOR A VARIANCE FROM OAR 340-21-030(3), PARTICULATE EMISSION LIMITS, AND OAR 340-21-060(1), FUGITIVE EMISSIONS, FOR DIAMOND INTERNATIONAL, BEND.

There has been a nuisance problem in the neighborhoods around the Diamond International/Willamette Industries wood product mills in Bend for a number of years. Staff has identified the sanderdust handling system at Diamond's sawmill as the cause of the nuisance condition. The company had requested a variance until December, 1984, and due to the environmental impact of the sanderdust emissions, the Department had recommended that the request be approved with a final compliance date of December, 1983.

Director's Recommendation

Based upon the findings in the Summation, as amended, it is recommended that the Commission grant a variance from OAR 340-21-030(2) and OAR 340-21-060(1) until June 15, 1984 for the sanderdust handling system at the Diamond International Bend sawmill, subject to the following condition:

1. The company shall meet the compliance schedule contained in the Summation, as amended.

John McCafferty, Diamond International, responded to questions from the Commission.

It was MOVED by Commissioner Petersen, seconded by Commissioner Bishop, and passed unanimously that the Director's Recommendation above, taken from an addendum to the staff report, be approved.

AGENDA ITEM M: APPROVAL OF NON-GUIDELINE AIR QUALITY MODELS FOR THE PROPOSED ALUMAX PACIFIC CORPORATION PRIMARY ALUMINUM REDUCTION PLANT IN UMATILLA.

The Department has received an Air Contaminant Discharge Permit Application from Alumax Pacific Corporation to construct a Primary Aluminum Reduction Plant. This proposed facility would be located approximately four miles east of Umatilla on the bank of the Columbia River. The plant would be the second largest aluminum plant in the Northwest and would be capable of producing 220,000 tons of aluminum per year.

Alumax has conducted air quality modeling for the proposed facility using non-guideline models. These models have not been formally incorporated into the EPA Guideline on Air Quality Models. In order to approve the use of these models, the Department must obtain the written approval of EPA and the concurrence of the Commission, as required by Department rules.

EPA has provided written approval in a letter dated November 3, 1982. The Department is now requesting Commission approval for the use of these models.

Under a separate agenda item (Item G), the Department is requesting authority to approve the use of non-guideline models in the future without having to seek Commission approval.

Director's Recommendation

Based on this Summation, it is recommended that the BLP model and the Short-Z model be approved for use by Alumax for modeling aluminum plant emissions for their proposed Umatilla plant.

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

AGENDA ITEM N: INFORMATIONAL REPORT: PROGRESS AND STATUS REPORT ON PASSENGER CAR AND LIGHT TRUCK NOISE EMISSIONS.

In 1980, the Commission rescinded the 75 decibel noise emission standard for autos and light trucks and left the 80 decibel limit as the final step in this new product noise regulation. However, the Commission required that a progress report be submitted to evaluate the necessity of further regulations or control strategies for auto and light-truck noise. This report provides the status of progress toward development of new test procedures needed for further emission controls. The report also discusses the need to enhance enforcement of noise laws designed to correct excessive vehicle noise from modified or deteriorated exhaust systems.

Director's Recommendation

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

1. Continue to monitor the efforts of the automobile industry to develop new noise emission testing procedures.
2. Encourage and assist the development of a national motor vehicle noise control strategy that considers various control methods including new vehicle certification and in-use vehicle enforcement.
3. Continue the Department's efforts to control excessive automobile noise due to exhaust system modification and deterioration by assisting appropriate state and local enforcement agencies.

The report was accepted by the Commission as submitted.

AGENDA ITEM O: DISCUSSION OF ALTERNATIVE METHODS FOR SECURING LOANS FROM THE POLLUTION CONTROL BOND FUND.

By letter dated October 25, 1982, Senator Jack Ripper and Representative Tom Throop, Co-Chairmen of the JOINT INTERIM TASK FORCE ON MANAGING AND FINANCING GROWTH, recommended that the Environmental Quality Commission consider a proposal of the League of Oregon Cities that:

"The Department of Environmental Quality, with appropriate safeguards, should use the proceeds of the Pollution Control Fund to support more creative local financing than just the purchase of general obligation bonds, as in the past."

This agenda item was intended to provide background information and highlight major policy issues for EQC consideration.

Director's Recommendation

It is recommended that the Commission discuss these and related issues during the Work Session at this meeting.

Howard Rankin, Department bond counsel, answered questions from the Commission and talked generally regarding bonds and appropriate security.

The Commission discussed this matter but took no action.

AGENDA ITEM P: FINAL ORDER DENYING PETITION TO AMEND OAR 340-14-025(5) REGARDING HEARINGS IN PERMIT MATTERS.

At the October 1982 meeting, the Commission rejected a petition proposing amendment of an administrative rule regarding hearings in permit matters.

Department's counsel drafted an order reflecting the Commission's action and the basis for it. The proposed order, and petitioner's response to it, was sent to the Commission.

The Commission is now required to take formal action to memorialize its October decision.

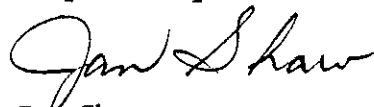
The Commission asked staff to revise the proposed final order to avoid implication of anything petitioners may have intended by their petition and submit the final order to Commissioners for changes or approval.

There being no further business, the meeting was adjourned.

LUNCH MEETING

1. Legislation status: Stan Biles, Assistant to the Director, reported on the status of the Department's legislative proposals. John Charles, OEC, discussed legislation that his organization will be supporting. Tom Donaca, AOI, reported that his board is supporting woodstove legislation.
2. Budget status: Mike Downs, Management Services Administrator, reported on the status of the Department's 83-85 budget request.
3. Woodstove certification program: John Kowalczyk, Air Quality, presented a slide show and written report on a potential woodstove certification program.

Respectfully submitted,



Jan Shaw
EQC Assistant

MINUTES OF THE ONE HUNDRED FORTY--THIRD MEETING

OF THE

OREGON ENVIRONMENTAL QUALITY COMMISSION

October 15, 1982

On Friday, October 15, 1982, the one hundred forty-third meeting of the Oregon Environmental Quality Commission convened at the Department of Environmental Quality, Portland, Oregon. Present were Commission members Mr. Joe B. Richards, Chairman; Mr. Fred J. Burgess; Mr. James Petersen, Mr. Wallace B. Brill; and Mrs. Mary V. Bishop. Present on behalf of the Department were its Director, William H. Young, and several members of the Department staff.

The staff reports presented at this meeting, which contain the Director's recommendations mentioned in these minutes, are on file in the Office of the Director of the Department of Environmental Quality, 522 S.W. Fifth Avenue, Portland, Oregon. Written information submitted at this meeting is hereby made a part of this record and is on file at the above address.

BREAKFAST MEETING

The breakfast meeting convened at 7:30 a.m. at the Portland Motor Hotel in Portland. Commissioners Richards, Petersen, Brill, Burgess and Bishop were present, as were several members of the Department staff.

The following items were discussed:

1. Field Burning Season Wrap-up: Sean O'Connell, Field Burning Manager, reviewed the field burning season for the Commission.
2. Recycling Legislative Concepts: Bob Brown, Solid Waste Division, provided a handout and reviewed it for the Commission, and Bill Bree, Recycling, responded to questions. Roger Emmons, Oregon Sanitary Service Institute, commented on the proposals. Chairman Richards commented that he favored source separation. The Commission seemed generally to favor Concept #1 but suggested eliminating the reference to "curbside collection program" in order to leave the language broader.
3. Two recent additions to the agenda were discussed, and the staff reports were distributed to the Commission at the beginning of the formal meeting.
4. Job Climate Task Force Letter: Stan Biles, Assistant to the Director, reviewed the draft letter with the Commission.

FORMAL MEETING

Commissioners Richards, Petersen, Burgess, and Bishop were present for the formal meeting. Commissioner Brill was temporarily absent.

AGENDA ITEM A: MINUTES OF THE AUGUST 27, 1982 MEETING.

It was MOVED by Commissioner Petersen, seconded by Commissioner Bishop, and carried unanimously that the Minutes be approved as submitted. Commissioner Brill was temporarily absent.

AGENDA ITEM B: MONTHLY ACTIVITY REPORT FOR JULY AND AUGUST, 1982.

It was MOVED by Commissioner Burgess, seconded by Commissioner Bishop, and passed unanimously that the Director's Recommendations be approved. Commissioner Brill was present but abstained.

AGENDA ITEM C: TAX CREDITS.

Joe Smith, ESCO Corporation Manager of Environmental Services, answered some questions from the Commission regarding his company's claim of constructive notice for certain projects claimed for tax credit.

It was MOVED by Commissioner Burgess, seconded by Commissioner Bishop, and passed that the Director's Recommendation be approved. Commissioner Petersen voted no.

PUBLIC FORUM: No one chose to appear.

AGENDA ITEM D: MR JOHN MULLIVAN - APPEAL OF SUBSURFACE VARIANCE DENIAL.

This item was withdrawn at the request of the appellant.

AGENDA ITEM E: MR. PHIL YOUSO AND MR. ROBERT CAMPBELL - APPEAL OF SUBSURFACE VARIANCE DENIAL.

Mr. Youso and Mr. Campbell appealed the decision of Mr. Sherman Olson, a Department Variance Officer, to deny their request for variance from the On-Site Sewage Disposal Rules.

Robert Campbell, appellant, spoke to the Commission in some detail regarding his appeal in this case.

Stanley Petrasek, Lane County Planning and Community Development Department, also spoke before the Commission.

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Commission adopt the findings of the variance officer as the Commission's findings and uphold the decision to deny the variance.

It was MOVED by Commissioner Bishop, seconded by Commissioner Petersen, and passed that the Director's Recommendation be approved. Commissioners Brill and Burgess voted no.

AGENDA ITEM F: MR. DALE MOORE - APPEAL OF SUBSURFACE VARIANCE DENIAL.

Mr. Dale Moore appealed the decision of Mr. Sherman Olson, a Department Variance Officer, to deny his request for variance from the On-Site Sewage Disposal Rules.

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Commission adopt the findings of the variance officer as the Commission's findings and uphold the decision to deny the variance.

Steve Wilson, Cascade Earth Sciences, Ltd., spoke on behalf of Dale Moore and disputed several claims made by the Variance Officer.

It was MOVED by Commissioner Brill, seconded by Commissioner Burgess, and passed that the Director's Recommendation be approved. Commissioner Richards voted no.

AGENDA ITEM G: REQUESTS BY CLATSOP COUNTY, CANNON BEACH SANITARY SERVICE AND SEASIDE SANITARY SERVICE FOR EXTENSIONS OF VARIANCES FROM RULES PROHIBITING OPEN-BURNING DUMPS. OAR 340-61-040(2).

A series of variances have been granted to solid waste disposal sites at Cannon Beach, Elsie and Seaside in Clatsop County to allow continued open burning of refuse. The most recent variances were granted in October 1981 and will expire on November 1, 1982. The disposal sites cannot be operated in compliance with the Department's rules and there is currently no alternative disposal site available. Accordingly, the operators (Clatsop County, Cannon Beach Sanitary Service, and Seaside Sanitary Service) have requested another extension of the variance.

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Commission grant an extension of variances to OAR 340-61-040(2), until November 1, 1983, to Clatsop County, Cannon Beach Sanitary Service and Seaside Sanitary Service, subject to the following conditions.

1. The county continues to actively pursue a regional landfill site and supplies the Department with a progress report and time schedule for siting a regional landfill by December 15, 1982.
2. The county investigates the feasibility of converting the Elsie Disposal Site to a transfer station.

Roger Emmons, Director of the Oregon Sanitary Services Institute, addressed the Commission on this matter.

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

AGENDA ITEM P: PROPOSED ADOPTION OF AMENDMENT TO ON-SITE SEWAGE DISPOSAL RULES, AS APPLIED TO THE CLATSOP PLAINS (A CONTINUATION OF A PROPOSED ACTION PRESENTED TO THE COMMISSION ON AUGUST 27, 1982, AS AGENDA ITEM O).

At the August 27 meeting, staff presented the Commission with a report that addressed a groundwater protection plan for the Clatsop Plains. The plan included proposed amendments to the On-Site Sewage Disposal Rules that would allow installation of on-site systems within the Clatsop Plains. During discussion, an issue was raised with respect to developments and clustered lot subdivisions. The Commission decided to further consider this issue at the next scheduled meeting and asked staff to return with specific rule language.

Director's Recommendation

Based upon the Summation, it is recommended the Commission adopt the proposed amendment to the On-Site Sewage Disposal Rules, OAR 340-71-400(5), as set forth in Attachment "A".

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

AGENDA ITEM H: REQUEST FOR A VARIANCE BY FMC CORPORATION, PORTLAND, FROM OAR 340-22-170, SURFACE COATING IN MANUFACTURING, VOLATILE ORGANIC COMPOUND (VOC) EMISSION LIMITS.

In September 1980, the EQC adopted VOC regulations which required surface coating operations to meet specific emission limits by December 31, 1982.

FMC Corporation, which is a major rail car manufacturing facility located in Portland, has advised the Department that, in spite of efforts to comply, it has been unable to develop the coating which would both comply with the new emission limits and also meet the industry requirements. The Company has therefore requested a variance until December 31, 1986.

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Commission grant a variance with the following conditions:

1. FMC Corporation shall proceed to control the emissions from the painting facility in accordance with the schedules cited in Summation Item No. 4.
2. Should compliance coatings and the necessary process equipment become available at an earlier date, FMC shall implement the use of compliance coatings and process equipment at the earliest possible date.
3. By January 1 of each year during the period of the variance, FMC shall submit a written progress report summarizing the previous 12 months' efforts in the coating development program and new compliance coating facility.
4. The variance shall terminate December 31, 1986.
5. The variance may be terminated by written notice from the Department that it has made a finding that the company has failed to make reasonable progress towards complying with the schedule increments and attainment of final compliance.

It was MOVED by Commissioner Burgess, seconded by Commissioner Petersen, and passed unanimously that the Director's Recommendation be approved with the following added language:

- "5. Subject to an opportunity for hearing before the Commission, the variance may be..."

[underlined language to be added]

AGENDA ITEM I: REQUEST FOR A VARIANCE FROM OAR 340-22-170 (4) (D) CAN END-SEALING COMPOUND VOC LIMIT, FOR CARNATION COMPANY OF HILLSBORO.

The Carnation Company, Can Division, of Hillsboro is asking the Commission for a three-year variance from an OAR. They are within 3.9 tons/yr of being in compliance, so the variance will have almost no effect on the airshed's ozone attainment strategy.

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Commission grant a variance to Carnation Company, Can Division, Hillsboro plant, from OAR 340-22-170(a) (D), VOC limitation in end-sealing compound, until a satisfactory compound is available which will meet the rule but not to exceed December 31, 1985 and require Carnation to submit an annual report detailing progress made toward meeting compliance.

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

AGENDA ITEM J: REQUEST FOR A VARIANCE FROM OAR 340-21-015(2) (b) VISIBLE AIR CONTAMINANT LIMITS AND OAR 340-21-030(2) PARTICULATE EMISSION LIMITS FOR THE CHAMPION INTERNATIONAL CORPORATION, DEE HARDBOARD PLANT CYCLONES.

OAR 340-21-015(2) (b) and 340-21-030(2) limit visible emissions and concentration of particulate matter from certain sources. As the result of changing manufacturing equipment from a knife planer to an abrasive planer, the waste material transfer cyclones have been unable to continuously comply with the visible emission standards.

The company has requested a variance from both the visible and concentration standard until January, 1984, when an emission control system will be operating. The company cites the negative cash flow corporation-wide and from this particular facility caused by the depressed wood products market as justification for the request.

Based on the submitted facts and existing wood products market conditions, the Department is recommending the Commission grant the variance and adopt the proposed compliance schedule.

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Commission grant a variance from OAR 340-21-015(2) (b) and OAR 340-21-030(2) until January 1, 1984 for the four cyclones at the Champion International hardboard facility at Dee, Oregon, subject to the following conditions:

1. Achieve compliance by meeting the following increments of progress:
 - a. By no later than January 1, 1983, the permittee shall submit a Notice of Construction, including plans and specifications, to the Department for review.
 - b. By no later than July 1, 1983, the permittee shall issue purchase orders for major work and components.
 - c. By no later than August 1, 1983, the permittee shall begin construction.
 - d. By no later than December 1, 1983, the permittee shall complete construction.
 - e. By no later than January 1, 1984, the permittee shall demonstrate compliance.

2. If the Department determines that the cyclone emissions cause a nuisance to persons or property, this variance may be revised or revoked.

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

AGENDA ITEM K: APPROVAL OF LRAPA KRAFT MILL RULE AND LRAPA PETITION FOR TRANSFERRING JURISDICTION OVER KRAFT PULP MILLS IN LANE COUNTY FROM DEQ TO LRAPA.

Lane Regional Air Pollution Authority has petitioned the Commission for jurisdiction over kraft pulp mills in Lane County. LRAPA also recently adopted a rule, identical to the Department's, regulating air contaminants emitted from existing kraft pulp mills. This rule has also been sent to the Commission for approval.

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the LRAPA kraft mill rule 33-070 be approved and that the petition be granted to transfer jurisdiction for air pollution control of kraft pulp mills in Lane County from the EQC to LRAPA; and that LRAPA rules for kraft pulp mills be submitted to EPA as a SIP revision with a request to delegate the program for this source class in Lane County to LRAPA.

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

AGENDA ITEM L: STATUS REPORT ON WATER QUALITY STIPULATED CONSENT ORDERS AND APPROVAL OF REVISED ORDERS FOR THE FOLLOWING:
(A) CITY OF COQUILLE (WATER FILTRATION PLANT)
(B) CITY OF CANNON BEACH (SEWAGE TREATMENT PLANT).

At the July EQC meeting, the staff gave status report on the outstanding water quality stipulated consent orders. This is a followup to that report. The stipulated orders for Cannon Beach and Coquille have been revised and are ready for Commission approval. Others are still being negotiated. For example, the City of Happy Valley has directed their engineer to prepare a work plan for defining and correcting their problems. The work plan is to be submitted to the City at its November 1, 1982, meeting. As soon as that work plan is adopted, a new stipulated order can be prepared for Happy Valley.

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Commission approve revised stipulated consent orders for Coquille and Cannon Beach, provided they have been accepted by the cities prior to the Commission meeting.

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

AGENDA ITEM M: PETITION TO AMEND OAR 340-14-025 (5).

Friends of the Earth has filed a Petition to Amend our Administrative Rules to allow any person dissatisfied with the terms of a permit issued by the Department to obtain a hearing before the Commission.

The Commission must act either by denying the request or by initiating formal rulemaking proceedings.

Director's Recommendation

We recommend that the rule not be changed as proposed.

Steven Karloff, Friends of the Earth/Oregon, spoke to the Commission in favor of the petition.

John Charles, Oregon Environmental Council, requested added language of "affected or aggrieved" parties to be added to the rule change being requested.

Llewellyn Matthews, Northwest Pulp & Paper Association, also spoke to the Commission on the matter.

It was MOVED by Commissioner Burgess, seconded by Commissioner Brill, and passed unanimously that the Director's Recommendation be approved with the added request to staff to research whether any process can be developed which would improve the process without a significant adverse impact on any applicant.

AGENDA ITEM N: PROPOSED ADOPTION OF THE CARBON MONOXIDE CONTROL STRATEGY FOR THE MEDFORD-ASHLAND AQMA AS A REVISION TO THE STATE IMPLEMENTATION PLAN.

This item concerns adoption of the carbon monoxide control strategy for the Medford area. A strategy to bring the Medford area into attainment with the carbon monoxide standard by 1987 has been developed and adopted by Jackson County and the City of Medford. Five persons gave verbal testimony at the DEQ public hearing. Two supported the plan in its proposed form, two recommended changes in the plan, and one was opposed in general to the plan. Adoption of this strategy by the Commission would revise the State Implementation Plan and avoid potential federal economic sanctions.

Director's Recommendation

Based on the Summation, the Director recommends that the EQC adopt the carbon monoxide attainment strategy for the Medford-Ashland AQMA and direct the Department to forward it to EPA as a revision of the State Implementation Plan.

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

AGENDA ITEM O: PROPOSED ADOPTION OF REVISIONS TO THE EMISSION STANDARDS FOR HAZARDOUS AIR CONTAMINANTS, OAR 340-25-0450 TO 480, TO MAKE THE DEPARTMENT'S RULES PERTAINING TO CONTROL OF ASBESTOS AND MERCURY CONSISTENT WITH THE FEDERAL RULES; AND TO AMEND STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES, OAR 340-25-505 TO 645, TO INCLUDE THE FEDERAL RULE FOR NEW PHOSPHATE ROCK PLANTS; AND TO AMEND THE STATE IMPLEMENTATION PLAN.

The proposed rule changes would:

1. Amend hazardous air contaminants rules to bring them up to date with federal rule changes since 1975.
2. Make asbestos rule more stringent in several places to make it more enforceable.
3. Amend standards of performance for new stationary sources to bring them up to date with federal rule changes made since October 8, 1980.

Director's Recommendation

It is recommended that the Commission adopt the attached amendments to OAR 340-25-450 to 25-700, rules on Hazardous Air Contaminants and Standards of Performance for New Stationary Sources, and to direct the Department to transmit the amended rules to EPA as amendments to the State Implementation Plan, seeking delegation from EPA for administering state rules comparable to federal rules.

It was MOVED by Commissioner Bishop, seconded by Commissioner Burgess, and carried unanimously that the Director's Recommendation be approved, including an instruction to staff to determine if there are any users of beryllium in the state of Oregon.

AGENDA ITEM Q: CITY OF PORTLAND BOND PURCHASE AGREEMENT--CONCURRENCE IN UPDATE OF TECHNICAL PROVISIONS.

The Bond Purchase Agreement for the City of Portland \$5 million revenue bond issue has been before the EQC on two previous occasions. Since it was initially signed, the EQC has approved modified language for provisions regarding debt security.

As a result of further studies by the City, project technical details have been changed although objectives remain the same.

The agreement has been updated to reflect these changes. Bond counsel has reviewed the revised agreement and rendered his opinion that the changes do not diminish the state's security for repayment of the bonds.

The Department recommended that the Commission concur in the updated agreement.

Director's Recommendation

It is recommended that the Commission concur in the attached updated Bond Purchase Agreement for the City of Portland.

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

AGENDA ITEM R: REQUEST FROM ROY H. BERG FOR ALTERNATIVE FORM OF SECURITY FOR CONSTRUCTION OF SEWERAGE FACILITY FOR HOUSEBOAT MOORAGE.

Some of the smaller developers are finding it impossible to acquire perpetual surety bonds for their private sewerage systems. If they cannot secure a perpetual bond or do not have the available cash to provide an equivalent savings account, they are unable to build their sewerage system, even to correct existing problems.

Mr. Berg is unable to get a perpetual bond but is willing to put up the cash deposit if it can be reduced to \$5,000. Since it is for a subsurface system, we can agree to reducing it to that amount.

Director's Recommendation

Based upon the Summation, it is recommended that the Commission approve Mr. Berg's request and allow him to provide a \$5,000 insured savings account or equivalent, assigned to the Department in lieu of the \$10,000 security.

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

AGENDA ITEM S: ELIGIBILITY OF LAND FOR BOND FUND LOANS.

This is an informational item which responds to commissioner Peterson's request at the last regular meeting for some additional information regarding the eligibility of land for federal grants.

The report was accepted by the Commission.

AGENDA ITEM T: PROPOSAL TO ADOPT A TEMPORARY RULE TO AMEND OAR 340-81-035(6) REGARDING BOND FUND DEBT RETIREMENT SCHEDULES

The Department has been authorized by the Emergency Board to loan from the Pollution control Bond Fund to the City of Gresham and the Multnomah County Central County Service District to fund construction of sewers in the East Burnside Light Rail Corridor.

The Department's legal counsel has advised that a provision of existing Department rule which is more restrictive than statute appears to prohibit the loan under terms approved by the Emergency Board.

This item proposes a temporary rule to correct the problem so that a loan can be made prior to November 2, 1982.

The Department is in the process of rewriting the rules relating to pollution control bonds and will be before the Commission for hearing authorization within the next few months.

Director's Recommendation

Based on the findings in the Summation, the Director recommends that the Commission adopt the following revision to OAR 340-81-035(6) to be effective for 180 days after adoption:

"(6) The loan or bond retirement schedule of the agency must retire its debt obligation to the state at least as rapidly as the state bonds from which the loan funds are derived are scheduled to be retired; except that [when a dept requirement schedule longer than the state's bond repayment schedule is legally required,] special debt service requirements on the agency's loan [will] may be established by the Department[.] when (a) a debt retirement schedule longer than the state's bond repayment schedule is legally required, or (b) other special circumstances are present."

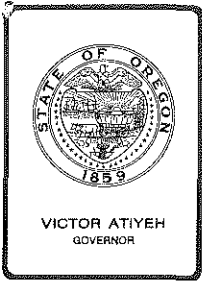
It was MOVED by Commissioner Burgess, seconded by Commissioner Brill, and passed unanimously that the Director's Recommendation be approved.

There being no further business, the meeting was adjourned.

Respectfully submitted,



Jan Shaw
EQC Assistant



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. B, December 3, 1982, EQC Meeting
September and October, 1982 Program Activity Reports

Discussion

Attached are the September and October, 1982 Program Activity Reports.

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

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

The purposes of this report are:

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

Recommendation

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

Bill

William H. Young



Contains
Recycled
Materials

CASplettstaszer
229-6484
11/12/82
Attachments

DEPARTMENT OF ENVIRONMENTAL QUALITY

Monthly Activity Report

September and October, 1982

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* The Noise Report for October, 1982 is not available at this time. It will be included in the next Monthly Activity Report.

MONTHLY ACTIVITY REPORT

September, 1982

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

AO, WO, SW Divisions
(Reporting Unit)

September, 1982
(Month and Year)

SUMMARY OF PLAN ACTIONS

	Plans Received		Plans Approved		Plans Rejected		Plans Pending
	Month	FY	Month	FY	Month	FY	
<u>Air</u>							
Direct Sources	7	14	5	17	0	0	17
Small Gasoline Storage Tanks Vapor Controls	0	0	0	0	0	0	0
Total	7	14	5	17	0	0	17
<u>Water</u>							
Municipal	17	57	18	42	1	3	23
Industrial	7	18	3	27	-	-	11
Total	24	75	21	69	1	3	34
<u>Solid Waste</u>							
Gen. Refuse	5	7	1	3	0	0	6
Demolition	0	0	0	0	0	0	0
Industrial	3	5	3	7	0	0	3
Sludge	2	2	2	3	0	0	0
Total	10	14	6	13	0	0	9
<u>Hazardous Wastes</u>							
	-	-	-	-	-	-	-
<u>GRAND TOTAL</u>	41	103	32	99	1	3	69

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division
(Reporting Unit)

September, 1982
(Month and Year)

SUMMARY OF AIR PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sources Under Permits	Sources Reqr'g Permits
	Month	FY	Month	FY			
<u>Direct Sources</u>							
New	3	9	7	11	15		
Existing	2	3	3	8	16		
Renewals	6	30	17	33	62		
Modifications	<u>1</u>	<u>7</u>	<u>4</u>	<u>11</u>	<u>14</u>		
Total	12	49	31	63	107	1905	1936
<u>Indirect Sources</u>							
New	0	1	0	1	3		
Existing	0	0	0	0	0		
Renewals	0	0	0	0	0		
Modifications	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>		
Total	0	1	0	1	3	203	206
<u>GRAND TOTALS</u>	12	50	31	64	110	2108	2142

Number of
Pending Permits

Comments

15	To be reviewed by Northwest Region
7	To be reviewed by Willamette Valley Region
3	To be reviewed by Southwest Region
4	To be reviewed by Central Region
2	To be reviewed by Eastern Region
24	To be reviewed by Program Planning Division
14	To be reviewed by Program Operations
16	Awaiting Public Notice
<u>22</u>	Awaiting the end of the 30-day period
107	TOTAL

MAR.5 (8/79)

AA2666 (1)

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MONTHLY ACTIVITY REPORT
DIRECT SOURCES
PERMITS ISSUED

COUNTY	SOURCE	PERMIT NUMBER	APPL. RECEIVED	STATUS	DATE ACHIEVED	TYPE	PSEL
HOOD RIVER	CASCADE LOCKS LUMBER CO.	14	0005 01/13/82	PERMIT ISSUED	09/01/82	RNW	
JACKSON	GRANGE COOP SUPPLY ASSN.	15	0166 09/22/81	PERMIT ISSUED	09/01/82	NEW	
JACKSON	UNION OIL CO OF CALIF.	15	0169 11/05/81	PERMIT ISSUED	09/01/82	EXT	
JACKSON	HAKK OIL COMPANY	15	0171 09/10/81	PERMIT ISSUED	09/01/82	NEW	
JOSEPHINE	MILLER REDWOOD CO.	17	0023 01/13/82	PERMIT ISSUED	09/01/82	RNW	Y
MARION	UNION OIL OF CALIFORNIA	24	5234 10/23/81	PERMIT ISSUED	09/01/82	NEW	
MARION	MERRITT TPUAX OIL CO	24	5323 08/14/81	PERMIT ISSUED	09/01/82	RNW	
MULTNOMAH	UNION OIL (MT. HOOD)	25	3015 11/05/81	PERMIT ISSUED	09/01/82	EXT	
POLK	MENNIS OIL CO., INC.	27	2014 09/29/81	PERMIT ISSUED	09/01/82	NEW	N
PORT.SOURCE	CUSTOM ROCK & PAVING	37	0012 05/10/82	PERMIT ISSUED	09/01/82	RNW	
PORT.SOURCE	KLAMATH CNTY RD DEPT	37	0019 01/20/82	PERMIT ISSUED	09/01/82	NEW	
PORT.SOURCE	OREGON STATE HWY DIVISION	37	0028 10/27/81	PERMIT ISSUED	09/01/82	RNW	
PORT.SOURCE	KINCHELOS 3 SONS INC	37	0146 12/16/81	PERMIT ISSUED	09/01/82	RNW	
PORT.SOURCE	BAKER COUNTY ROAD DEPT.	37	0152 01/27/82	PERMIT ISSUED	09/01/82	RNW	
PORT.SOURCE	TAGGART R J CONSTR CO	37	0167 05/23/82	PERMIT ISSUED	09/01/82	RNW	
PORT.SOURCE	DON OBRIST, INC.	37	0232 05/04/82	PERMIT ISSUED	09/01/82	RNW	Y
PORT.SOURCE	ROCKLINE, INC	37	0287 04/29/82	PERMIT ISSUED	09/01/82	NEW	
CLACKAMAS	WESTERN ROCK PRODUCTS	03	2553 07/08/82	PERMIT ISSUED	09/08/82	MOD	
MULTNOMAH	DARIGOLD FEED CO	26	3010 07/26/82	PERMIT ISSUED	09/08/82	MOD	
JACKSON	MEDFORD READY MIX CONCRET	15	0180 05/27/82	PERMIT ISSUED	09/15/82	EXT	
MULTNOMAH	PORTLAND WILLAMETTE CO	26	2435 03/03/82	PERMIT ISSUED	09/15/82	MOD	
MULTNOMAH	W R GRACE 3 CO CONSTR DIV	25	2530 11/20/81	PERMIT ISSUED	09/15/82	MOD	
PORT.SOURCE	NORCAP CONSTRUCTION CO	37	0036 05/21/82	PERMIT ISSUED	09/15/82	RNW	
PORT.SOURCE	GRANT I SHARP CO	37	0099 12/05/80	PERMIT ISSUED	09/15/82	RNW	
PORT.SOURCE	EUCON CORPORATION	37	0164 05/25/82	PERMIT ISSUED	09/15/82	RNW	
PORT.SOURCE	SUPERIOR ASPHALT & CONCPE	37	0166 01/07/82	PERMIT ISSUED	09/15/82	RNW	
PORT.SOURCE	REID-WOLF INC	37	0183 11/30/81	PERMIT ISSUED	09/15/82	RNW	
PORT.SOURCE	QUALITY ASPHALT PAVING	37	0195 12/30/81	PERMIT ISSUED	09/15/82	RNW	
PORT.SOURCE	R.L. COATS	37	0207 01/13/82	PERMIT ISSUED	09/15/82	RNW	
PORT.SOURCE	IDAHO SAND & GRAVEL CO IN	37	0253 06/04/82	PERMIT ISSUED	09/15/82	RNW	
PORT.SOURCE	SOUTHERN OREGON CONCRETE	37	0234 01/13/82	PERMIT ISSUED	09/15/82	NEW	

TOTAL NUMBER QUICK LOCK REPORT LINES 31

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality	September 1982
(Reporting Unit)	(Month and Year)

PLAN ACTIONS COMPLETED - 22

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

MUNICIPAL WASTE SOURCES 19

Marion	Waste Water Treatment Plant Expansion Silverton	9/3/82	P.A.		
Tillamook	The Knoll - Bill Hiatt Sewerage System Expansion Neskowin	9/4/82	P.A.		
Klamath	Stewart-Lenox Sewerage Project - Klamath Falls	9/7/82	P.A.		
Lane	Seasonal Industrial Waste Disposal Facility C-43 (Agridac) MWMC	9/8/82	P.A.		
Lane	Waste Water Treatment Plant Expansion and Upgrading - Cottage Grove	9/14/82	P.A.		
Tillamook	Pacific Addition Sanitary Sewers Bay City	9/16/82	P.A.		
Tillamook	Third St. Extension Sanitary Sewers Bay City	9/16/82	P.A.		
Lincoln	Prospect-Radar Road Sewer Project Yachats	9/25/82	P.A.		
Clackamas	Edgewater at Charbonneau Wilsonville	9/25/82	P.A.		

MAR.3 (5/79)

WL2020

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality
(Reporting Unit)

September 1982
(Month and Year)

PLAN ACTIONS COMPLETED - 22

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	* * *
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MUNICIPAL WASTE SOURCES (Continued)

Clackamas	MacNaughton-Angelelo Sanitary Sewer Lake Oswego	9/25/82	P.A.	
Deschutes	Mountain Village East Trunk Pump Station 10 Abandonment - Sunriver	9/25/82	P.A.	
Jackson	Table Rock Road - Airport Road Project Sanitary Sewers BCVSA	9/25/82	P.A.	
Tillamook	Fork Island SS Improvements Sanitary Sewers NTCSA	9/25/82	P.A.	
Tillamook	Sea Forest Replat Sanitary Sewers NTCSA	9/25/82	P.A.	
Malheur	Highway 201 Sanitary Sewer Extension Ontario	9/25/82	P.A.	
Coos	Virginia Avenue 24" Sanitary Reliever Sewer City of North Bend	9/25/82	P.A.	

MAR.3 (5/79)

WL2020

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality	September 1982
(Reporting Unit)	(Month and Year)

PLAN ACTIONS COMPLETED - 22

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action
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MUNICIPAL WASTE SOURCES (Continued)

Wasco	Foley Lakes Project The Dalles	9/27/82	P.A.
Lane	Game Farm Road Pump Station and Sanitary Sewer Springfield	9/27/82	Rejected
Clackamas	Palisades Park Estates II Revised Lots 14, 15, 16 Block 1 Lake Oswego	9/30/82	P.A.

P.A. Provisional Approval

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality Division	September, 1982
(Reporting Unit)	(Month and Year)

PLAN ACTIONS COMPLETED 22

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

INDUSTRIAL WASTE SOURCES - 3

Clackamas	Ray Kaser Hog Lagoon Expansion	9-13-82	Approved
Marion	Stayton Canning, Stayton pH Monitor & Alarm	9-17-82	Approved
Tillamook	Lucas Dairy Manure Control System	9-29-82	Approved

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality Division September, 1982
 (Reporting Unit) (Month and Year)

SUMMARY OF WATER PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sources Under Permits	Sources Reqr'g Permits
	Month	Fis. Yr.	Month	Fis. Yr.			
	* /**	* /**	* /**	* /**	* /**	* /**	* /**
<u>Municipal</u>							
New	0 /4	0 /8	0 /4	0 /6	1 /14	****	
Existing	0 /0	0 /0	0 /0	0 /0	0 /0		
Renewals	6 /0	18 /3	0 /0	10 /0	40 /6	***	
Modifications	0 /0	1 /0	2 /0	1 /0	0 /0		
Total	6 /4	19 /11	2 /4	11 /6	41 /20	238/114	239/128
<u>Industrial</u>							
New	0 /2	1 /3	1 /0	4 /0	1 /11		
Existing	0 /0	0 /0	0 /0	0 /0	0 /1		
Renewals	3 /3	7 /8	2 /3	5 /6	40 /21		
Modifications	0 /0	1 /0	0 /0	3 /0	0 /0		
Total	3 /5	9 /11	3 /3	12 /6	41 /33	373/179	374/191
<u>Agricultural (Hatcheries, Dairies, etc.)</u>							
New	0 /0	0 /0	0 /0	0 /0	1 /0		
Existing	0 /0	0 /0	0 /0	0 /0	0 /0		
Renewals	0 /0	0 /0	0 /0	0 /0	0 /0		
Modifications	0 /0	0 /0	0 /0	0 /0	0 /0		
Total	0 /0	0 /0	0 /0	0 /0	1 /0	53 /19	54 /19
<u>GRAND TOTALS</u>	9 /9	28 /22	5 /7	23 /12	83 /53	664/312	667/338

* NPDES Permits
 ** State Permits
 *** One NPDES transferred to WPCF and added one more WPCF permit
 **** Two WPCF issued General Permits
 8 General Permits Issued

MAR.5W (8/79) WG1629

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality (Reporting Unit)	September, 1982 (Month and Year)
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PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	*
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MUNICIPAL AND INDUSTRIAL SOURCES - NPDES PERMITS (3)

Baker	United Nuclear Corp.	9-17-82	Permit Issued
Multnomah	Pennzoil Company Portland	9-22-82	Permit Renewed
Clackamas	Publishers Paper, Pulp Oregon City	9-27-82	Permit Renewed

MUNICIPAL AND INDUSTRIAL SOURCES - STATE PERMITS (7)

Multnomah	Chuck E. Cheeze's Pizzatime Portland, STP	9-17-82	Permit Issued
Jackson	Reichhold Chemical Resin White City	9-17-82	Permit Renewed
Lane	US Army Corps of Engineers Schwarz Park STP	9-17-82	Permit Issued
Jackson	Reeder Reservoir Ashland	9-22-82	Permit Renewed
Umatilla	J. R. Simplot, Food Div. Hinkle	9-27-82	Permit Renewed
Linn	Halcyon Villa Mobile Park STP	9-27-82	Permit Issued
Lane	Dexter Park, STP	9-30-82	Permit Issued

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

<u>Water Quality</u>	<u>September, 1982</u>
(Reporting Unit)	(Month and Year)

PERMIT ACTIONS COMPLETED

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

MUNICIPAL AND INDUSTRIAL SOURCES - MODIFICATIONS (2)

Lane	Veneta, STP	9-17-82	Addendum #1
Benton	Riverview Service Corp. STP Corvallis	9-17-82	Addendum #1

MUNICIPAL AND INDUSTRIAL SOURCES - GENERAL PERMITS (8)

Cooling Water, Permit 0100-J, File 32539 (3)

Multnomah	Pacific Meal Co. Portland	9-7-82	Transferred to General Permit
Benton	Pat Atterbery Corvallis	9-7-82	General Permit Issued (Heat Pump)
Douglas	PP&L Co. Tuketee Village	9-28-82	General Permit Issued

Filter Backwash, Permit 0200-J, File 32540 (1)

Lincoln	TDMB Water Co. Pacific City	9-22-82	General Permit Issued
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Fish Production, Permit 0300-J, File 32560 (1)

Coos	Burnt Hill Salmon Ranch Bandon	9-14-82	General Permit Issued
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Gold Mining, Permit 0600, File 34580 (2)

Baker	Neil Mishler Sicily Bar	9-21-82	General Permit Issued
Grant	S & W Mining Development Granite	9-21-82	General Permit Issued

Gravel Mining, Permit 1000, File 32565 (1)

Deschutes	R. L. Coats Bend	9-1-82	Transferred to General Permit
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DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Solid Waste Division
(Reporting Unit)

September 1982
(Month and Year)

SUMMARY OF SOLID AND HAZARDOUS WASTE PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sites Under Permits	Sites Reqr'g Permits
	Month	FY	Month	FY			
<u>General Refuse</u>							
New	-	1	-	2	1		
Existing	-	-	-	-	-		
Renewals	-	4	-	6	8		
Modifications	-	4	-	4	-		
Total	0	9	0	12	9	175	175
<u>Demolition</u>							
New	-	-	-	1	-		
Existing	-	-	-	-	-		
Renewals	1	1	-	-	1		
Modifications	-	2	-	2	-		
Total	1	3	0	3	1	21	21
<u>Industrial</u>							
New	-	2	-	5	1		
Existing	-	-	-	-	-		
Renewals	1	5	2	5	5		
Modifications	-	-	-	-	-		
Total	1	7	2	10	6	103	103
<u>Sludge Disposal</u>							
New	-	-	-	1	-		
Existing	-	-	-	-	-		
Renewals	-	2	1	2	-		
Modifications	1	1	1	1	-		
Total	1	3	2	4	0	11	11
<u>Hazardous Waste</u>							
New	81	197	81	197	-		
Authorizations	-	-	-	-	-		
Renewals	-	-	-	-	-		
Modifications	-	-	-	-	-		
Total	81	197	81	197	-	-	-
<u>GRAND TOTALS</u>	84	219	85	226	16	310	310

SC721.A
MAR.5S (4/79)

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Solid Waste Division
(Reporting Unit)

September 1982
(Month and Year)

PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	*
Klamath	Modoc Lumber Existing Site	9/24/82	Permit Renewed	*
Klamath	JNS Lagoons Existing Site	9/24/82	Permit Renewed	*
Douglas	Douglas County Lumber Existing Site	9/24/82	Permit Renewed	*
Multnomah	Hayden Island Sludge Existing Site	9/30/82	Permit Amended	*

SC721.D
MAR.6 (5/79)

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Solid Waste Division

(Reporting Unit)

September 1982

(Month and Year)

HAZARDOUS WASTE DISPOSAL REQUESTS

CHEM-SECURITY SYSTEMS, INC., GILLIAM CO.

WASTE DESCRIPTION

* Date *	* Type *	* Source *	* Present *	* Quantity Future *
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TOTAL DISPOSAL REQUESTS GRANTED (81)

OREGON (9)

8	Heavy metals sludge	Electronic	0	25 cu.yd.
10	Sulfuric acid	Waste treat.	40 drums	0
10	Acetone	Sport. equip.	0	12 drums
10	Freon	Sport. equip.	0	4 drums
10	Methanol	Sport. equip.	0	4 drums
20	Hexane/rubber sludge	Tin cans	0	3 drums
27	Zinc-chrome hydroxide with Cd	Electroplating	700 gal.	0
27	PCB capacitors	Wood products	0	1,200 lb.
27	PCB-contaminated matl.	Wood products	0	600 lb.

WASHINGTON (46)

10	Hydrogen halide soln.	Radiation coils man.	6 drums	0
14	PCB spill cleanup debris	Public util.	26 drums	50 drums
14	PCB capacitors	Public util.	1 drum	12 drums
14	Methyl chloride solvent	Sheet metal treatment	0	1 drum

SC721.E

MAR. 15 (1/82)

* * * * *	* * * * *	* * * * *	* * * * *	* * * * *		* * * * *
				* * * * *	* * * * *	
Date	Type	Source	Present	Future	Quantity	
14	HF/HNO ₃ /chromic acid solution	Sheet metal treatment	0	1 drum		
14	Caustic solution	Sheet metal treatment	0	1 drum		
14	HF/HNO ₃ solution	Sheet metal treatment	0	2 drums		
14	HCl/HNO ₃ solution	Sheet metal treatment	0	1 drum		
14	H ₃ PO ₄ /chromic acid solution	Sheet metal treatment	0	1 drum		
14	H ₃ PO ₄ / (18% solution)	Sheet metal treatment	0	1 drum		
14	Phenol-contam. water	Resin manuf.	15,000 gal.	0		
14	Phenol-contam. soil	Resin manuf.	1,660 tons	0		
15	Arsenic-contam. rags	Waste treat.	4 drums	0		
15	Fire-fighting foam	Fed. agency	0	300 drums		
15	Alkaline industrial cleaning solution	Fed. agency	0	25 drums		
15	Freon	Fed. agency	0	80 drums		
20	Calcium sulfate pickling sludge	Manuf. of pumps	0	24 drums		
27	Coal tar distillate-contaminated water	Ind. cleaning service	15,000 gal.	0		
27	HNO ₃ /HF soln. (dilute)	Electronic	0	1,000 gal.		
27	H ₃ PO ₄ /chromic acid sol.	Electronic	0	230 gal.		
27	Cadmium cyanide soln.	Electronic	0	200 gal.		
27	Silver cyanide soln.	Electronic	0	120 gal.		
27	Sodium dichromate/HNO ₃ solution	Electronic	0	300 gal.		
27	Fluoboric acid	Electronic	0	165 gal.		

SC721.E
MAR.15 (1/82)

* * * *	* * * *	* * * *	* * * *	* * * *	* * * *		* * * *
					Quantity	Quantity	
* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *
Date	Type	Source	Present	Future			
27	Chromate/H ₂ SO ₄ soln.	Electronic	0	1,200 gal.			
27	Chromate soln. (1%)	Electronic	0	1,200 gal.			
27	Sulfuric acid soln.	Electronic	0	2,000 gal.			
27	Tin-lead conditioner with HCl	Electronic	0	300 gal.			
27	Concentr. HF/HNO ₃ soln.	Electronic	0	600 gal.			
27	Acid nickel chloride solution	Electronic	0	120 gal.			
27	HF/H ₂ SO ₄ solution	Electronic	0	700 gal.			
27	Hydrochloric acid 50%	Electronic	0	4,000 gal.			
27	Tin-Pb plating soln.	Electronic	0	600 gal.			
27	H ₃ PO ₄ /HNO ₃ solution	Electronic	0	600 gal.			
27	HF/HNO ₃ solution	Electronic	0	600 gal.			
27	Zinc cyanide solution	Electronic	0	220 gal.			
27	Nickel sulfamate soln.	Electronic	0	600 gal.			
27	Copper cyanide soln.	Electronic	0	150 gal.			
27	HF/acetic acid soln.	Electronic	0	340 gal.			
27	Coal tar-contaminated soil	Fed. agency	0	1,000 tons			
27	Coal tar-contaminated canvas	Fed. agency	0	200 drums			
27	Coal tar-contaminated concrete	Fed. agency	0	50 drums			
27	Coal tar-contaminated calcium silicate	Fed. agency	0	100 drums			
27	Coal tar-contaminated water	Fed. agency	0	30 drums			
27	Coal tar-contaminated rubber/hose	Fed. agency	0	20 drums			

SC721.E
MAR. 15 (1/82)

* * Date *	* Type *	* Source *	* Quantity *	
			* Present *	* Future *

30	Flexo ink washwater w/ ethanol, acetate, etc.	Printing	0	165 gal.
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OTHER STATES (26)

10	Various lab chemicals (Alberta)	University	36 drums	50 drums
15	Mixed lab chemicals (Alberta)	Chemical supplier	10 drums	15 drums
15	Solid toxic lab chem. (Alaska)	University	0	} 20 drums
15	Liquid toxic lab chem. (Alaska)	University	0	
15	Ignitable lab chem. (Alaska)	University	0	
15	Other misc. lab chem. (Alaska)	University	0	
15	Corrosive solid chem. (Alaska)	University	0	
15	Oxidizing agents (AK)	University	0	
15	Corrosive liquids (AK)	University	0	
20	Monoethanolamine reclaimer bottoms (Alberta)	Ammonia prod.	1,000 gal.	5,000 gal.
20	Mercury-contaminated sewage sludge (Hawaii)	Waste mgmt.	0	8 drums
20	Hg-contam. clothing, articles, etc. (Hawaii)	Waste mgmt.	0	5 drums
20	2,4-D/Picloram herbi- cide (Alaska)	State agency	0	9 drums
20	2,4,5-T herbicide (AK)	State agency	0	1 drum
20	Malathion insecticide (Alaska)	State agency	0	24 drums
20	Chrome potassium sulfate (Alaska)	Oil co.	41,800 lb.	0

SC721.E
MAR.15 (1/82)

* * Date *	* Type *	* Source *	* Quantity *		* *
			* Present *	* Future *	
20	Chrom-Alum (Alaska)	Oil co.	43,600 lb.	0	
20	Paraformaldehyde (AK)	Oil co.	79,600 lb.	0	
20	Chrome lignite (AK)	Oil co.	95,048 lb.	0	
20	Ferro-chrome lignosulfonate (Alaska)	Oil co.	137,200 lb.	0	
20	Paint sludge (Colorado)	Shale oil research	14 drums	0	
20	Lube oil (Colorado)	Shale oil research	5 drums	0	
20	Penchlor acid-proof cement (Colorado)	Shale oil research	7 drums	0	
20	Petroleum oil distillates (Colorado)	Shale oil research	4 drums	0	
20	Toluene solvent (Colorado)	Shale oil research	4 drums	0	
20	Shale crude oil (Colorado)	Shale oil research	5 drums	0	

SC721.E
MAR. 15 (1/82)

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program (Reporting Unit)	September, 1982 (Month and Year)
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SUMMARY OF NOISE CONTROL ACTIONS

Source Category	New Actions Initiated		Final Actions Completed		Actions Pending	
	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>Last Mo</u>
Industrial/ Commercial	4	24	3	20	111	110
Airports			1	3	1	1

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program	September, 1982
(Reporting Unit)	(Month and Year)

FINAL NOISE CONTROL ACTIONS COMPLETED

County	Name of Source and Location	Date	Action
Multnomah	Rhone-Poulenc Chemical Company a.k.a. Rhodia Portland	09/82	In Compliance
Multnomah	Ross Island Sand and Gravel Vanport Division Portland	09/82	In Compliance
Curry	Tidewater Rock Crusher Gold Beach	09/82	No Violation
Multnomah	U.S. Bancorp Tower Helistop Portland	09/82	Boundary Approval

CIVIL PENALTY ASSESSMENTS

DEPARTMENT OF ENVIRONMENTAL QUALITY
1982

CIVIL PENALTIES ASSESSED DURING MONTH OF SEPTEMBER, 1982:

<u>Name and Location of Violation</u>	<u>Case No. & Type of Violation</u>	<u>Date Issued</u>	<u>Amount</u>	<u>Status</u>
Stayton Canning Co. Stayton, Oregon	WQ-WVR-82-66 Failure to immediately report and correct an ammonia spill into public waters.	9-3-82	\$500	Paid 9-13-82.
Arthur Griffiths, dba/ Valley Septic Service Clackamas County	SS-NWR-82-77 Installed an improper replacement for a septic tank and without first obtaining a repair permit.	9-3-82	\$250	Default Order & Judgment issued. Penalty paid on 11/5/82.

NOTICES OF VIOLATION AND ORDER REQUIRING REMEDIAL ACTION
ISSUED DURING SEPTEMBER, 1982

<u>Name and Location of Violation</u>	<u>Case No. & Type of Violation</u>	<u>Date Issued</u>	<u>Status</u>
Fireball Const. Corp. & Glenn & Dianne Dorsey Grants Pass, Oregon	SS-SWR-82-82 Failing on-site sewage disposal system.	9-20-82	Contested 9-30-82. Department issued amended order on 11/1/82.
Donna Sirmans Benton County	SS-WVR-82-88 Failing on-site sewage disposal system.	9-29-82	Returned unclaimed 10/25/82. Trying to arrange service.
Donna Brokken Benton County	SS-WVR-82-82 Failing on-site sewage disposal system.	9-29-82	Received on 9-30-82; Order is now final.

VAK:b
GB1416

<u>ACTIONS</u>	<u>LAST MONTH</u>	<u>PRESENT</u>
Preliminary Issues	2	7
Discovery	0	0
Settlement Action	0	0
Hearing to be scheduled	3	4
Hearing scheduled	0	1
HO's Decision Due	4	4
Briefing	0	0
Inactive	4	3
 SUBTOTAL of cases before hearings officer.	 <u>13</u>	 <u>19</u>
 HO's Decision Out/Option for EQC Appeal	 0	 0
Appealed to EQC	1	1
EQC Appeal Complete/Option for Court Review	1	0
Court Review Option Pending or Taken	0	0
Case Closed	2	2
 TOTAL Cases	 <u>17</u>	 <u>22</u>

15-AQ-NWR-76-178 15th Hearing Section case in 1976 involving Air Quality Division violation in Northwest Region jurisdiction in 1976; 178th enforcement action in Northwest Region in 1976.

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

September 1982

DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrl	DEQ Atty	Hrng Date	Resp Code	Case Type & No.	Case Status
POWELL, Ronald	11/77	11/77	RLH	01/23/80	Prtys	\$10,000 Fld Brn 12-AQ-MWR-77-241	Stipulated settlement proposal to be drafted for presentation to EQC.
WAH CHANG	04/78	04/78	RLH		Prtys	16-P-WQ-WVR-78-2849-J NPDES Permit Modification	Current permit in force. Hearing deferred.
WAH CHANG	04/78	04/78	RLH		Prtys	08-P-WQ-WVR-78-2012-J NPDES Permit Modification	Current permit in force. Hearing deferred.
M/V TOYOTA MARU No. 10	12/10/79	12/12/79	RLH		Hrgs	17-WQ-NWR-79-127 Oil Spill Civil Penalty of \$5,000	Ruling due on requests for partial summary judgment.
HAYWORTH, John W. dba/HAYWORTH FARMS INC.	12/02/80	12/08/80	LMS	04/28/81	Hrgs	33-AQ-WVR-80-187 Field burning civil penalty of \$4,660	Decision due.
PULLEN, Arthur W. dba/Lakes Mobile Home Park	07/15/81	07/15/81	RLH		Prtys	16-WQ-CR-81-60	Dept. does not wish to actively pursue further enforcement action pending expected progress in establishing a community sewage facility.
FRANK, Victor	09/23/81	09/23/81	LMS	06/08/82	Hrgs	19-AQ-FB-81-05 FB civil penalty of \$1,000	Post hearing argument conducted 6/29/82. Decision due.
GATES, Clifford	10/06/81		LMS		Hrgs	21-SS-SWR-81-90	To be scheduled.
SPERLING, Wendell dba/Sperling Farms	11/25/81	11/25/81	LMS		Hrgs	23-AQ-FB-81-15 FB Civil Penalty of \$3,000	To be scheduled.
NOFZIGER, Leo	12/15/81	01/06/82	LMS	06/29/82	Resp	26-AQ-FB-81-18 FB Civil Penalty of \$1,500.	Record closed 8/15/82.
OLD MILL MARINA		03/04/82	LMS		Hrgs	27-AQOB-NWR-82-01 Open Burning Civil Penalty	To be scheduled.
PULLEN, Arthur	03/16/82		RLH		Prtys	28-WQ-CR-82-16	See companion case above.
ANDERSON, Douglas	04/03/82		VAK	06/24/82	Resp	29-AQOB-NWR-82-23	<u>Confirmation of service received. No appeal. Case closed.</u>
BOWERS EXCAVATING & FENCING, INC.	05/20/82		LMS		Prtys	30-SW-CR-82-34	Preliminary Issues.
ADAMS, Gailen			VAK	08/25/82	Prtys	31-SS-NWR-82-51	Decision due.
KOENNECKE and WERTHEIM-ISEMAN NRIEHBORG, INC.					Prtys	32-SW-NWR-82 Declaratory Ruling Request re: OAR 340-61-031-Wildwood landfill	Commission declined to issue declaratory ruling.
OLINGER, Bill LINCOLN MERCURY, INC.	09/10/82	09/13/82	RLH		Prtys	33-WQ-NWR-82-73	Answer filed Oct. 4, 1982.
TOEDLEMEIER, Norman	09/10/82	09/13/82	LMS		Prtys	34-AQOB-WVR-82-65	Preliminary Issues.
SYLER, Richard E.	09/20/82	09/28/82	VAK		Prtys	35-AQOB-WVR-82-76 OB civil penalty of \$100.	Preliminary Issues.
LOGSTON, Howard	09/23/82	09/28/82	LMS		Prtys	36-AQ-ER-82-72 AQ civil penalty of \$2,000.	Preliminary Issues.
FRIENDS OF THE EARTH/OREGON	09/14/82	09/21/82		10/15/82		37-NWR-82 Petition to Amend OAR 340-14-025(5)	Before the EQC October 15, 1982
FIREBALL CONSTRUCTION CORP.	09/27/82					38-SS-SWR-82-85	Department to amend Notice.

MONTHLY ACTIVITY REPORT

October, 1982

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

AQ, WQ, SW Divisions

(Reporting Unit)

October 1982

(Month and Year)

SUMMARY OF PLAN ACTIONS

	Plans Received		Plans Approved		Plans Disapproved		Plans Pending
	Month	FY	Month	FY	Month	FY	
<u>Air</u>							
Direct Sources	5	19	7	24	0	0	15
Small Gasoline Storage Tanks Vapor Controls	0	0	0	0	0	0	0
Total	5	19	7	24	0	0	15
<u>Water</u>							
Municipal	14	71	17	59	0	3	18
Industrial	4	22	9	36	-	-	6
Total	18	93	26	95	0	3	24
<u>Solid Waste</u>							
Gen. Refuse	4	11	1	4	0	0	9
Demolition	0	0	0	0	0	0	0
Industrial	3	8	1	8	0	0	5
Sludge	0	2	0	3	0	0	0
Total	7	21	2	15	0	0	14
<u>Hazardous Wastes</u>							
	-	-	-	-	-	-	-
<u>GRAND TOTAL</u>	30	133	35	134	0	0	53

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

COUNTY	NUMBER	SOURCE	PROCESS DESCRIPTION	DATE OF ACTION	ACTION
LANE	808	WEYERHAEUSER CO. PAPER M	OPACITY MONITORS	07/19/82	APPROVED
MULTNOMAH	848	PORT OF PORTLAND	COAL TERMINAL	10/03/82	APPROVED
BAKER	849	OREGON PORTLAND CEMENT	CONVEYOR DUST COLL SYS	10/13/82	APPROVED
MULTNOMAH	852	ATLANTIC RICHFIELD CO.	FLOATING TANK SEALS (VOC)	10/19/82	APPROVED
JACKSON	853	GEBHARD ORCHARDS	OVERTREE SPRINKLING SYS.	10/15/82	APPROVED
MULTNOMAH	854	MCCLOSKEY VARNISH CORP	VAPOR CONT SYS	11/02/82	APPROVED
MULTNOMAH	855	ESCO CORPORATION PLANT 1	MOD KIT INSTAL FOR DUMPSTERS	10/27/82	APPROVED
TOTAL NUMBER QUICK LOOK REPORT LINES			7		

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division
(Reporting Unit)

October, 1982
(Month and Year)

SUMMARY OF AIR PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sources Under Permits	Sources Reqr'g Permits
	<u>Month</u>	<u>FY</u>	<u>Month</u>	<u>FY</u>			
<u>Direct Sources</u>							
New	2	11	1	12	12		
Existing	0	3	3	11	17		
Renewals	9	39	12	45	59		
Modifications	6	13	5	16	18		
Total	17	66	21	84	106	1906	1938
<u>Indirect Sources</u>							
New	0	1	0	1	3		
Existing	0	0	0	0	0		
Renewals	0	0	0	0	0		
Modifications	0	0	0	0	0		
Total	0	1	0	1	3	203	206
<u>GRAND TOTALS</u>	17	67	21	85	109	2109	2144

Number of
Pending Permits

Comments

16	To be reviewed by Northwest Region
8	To be reviewed by Willamette Valley Region
4	To be reviewed by Southwest Region
5	To be reviewed by Central Region
3	To be reviewed by Eastern Region
25	To be reviewed by Program Planning Division
17	To be reviewed by Program Operations
17	Awaiting Public Notice
11	Awaiting the end of the 30-day period
<u>106</u>	TOTAL

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MONTHLY ACTIVITY REPORT
DIRECT SOURCES
PERMITS ISSUED

COUNTY	SOURCE	PERMIT NUMBER	APPL. RECEIVED	STATUS	DATE ACHIEVED	TYPE	PSEL
CLACKAMAS	WYATTIER FOREST PRODUCTS	03	2533 06/21/82	PERMIT ISSUED	10/01/82	RNW	
CURRY	TIDEWATER CONTRACTORS, INC	08	0044 06/17/82	PERMIT ISSUED	10/01/82	EXT	
LINCOLN	WEATHERSHED	21	0047 06/27/82	PERMIT ISSUED	10/01/82	RNW	
UNION	BOISE CASCADE CORP	31	0011 09/30/82	PERMIT ISSUED	10/01/82	MOD	
PORT.SOURCE	BAKER SEDI-MIX, INC.	37	0020 11/15/81	PERMIT ISSUED	10/01/82	RNW	
PORT.SOURCE	TILLAMOOK CNTY RD DP	37	0034 10/27/81	PERMIT ISSUED	10/01/82	RNW	
PORT.SOURCE	EUCON CORP	37	0045 05/25/82	PERMIT ISSUED	10/01/82	RNW	
PORT.SOURCE	AMERICAN ASPHALT PAVING	37	1075 11/16/81	PERMIT ISSUED	10/01/82	RNW	
PORT.SOURCE	J D CORPTON CO	37	0173 10/19/81	PERMIT ISSUED	10/01/82	RNW	
PORT.SOURCE	EUCON CORP	37	0192 05/01/82	PERMIT ISSUED	10/01/82	RNW	
CLACKAMAS	WILLAMETTE HIGHWAY OP CITY	03	1937 07/27/82	PERMIT ISSUED	10/15/82	RNW	
JACKSON	DOWN RIVER FOREST PRODUCT	15	0027 02/22/82	PERMIT ISSUED	10/15/82	RNW	
JOSEPHINE	LUNDBERG'S LE HALL FUNK	17	0063 07/08/82	PERMIT ISSUED	10/15/82	NEW	
MARION	WOODBURN FERTILIZER	24	9145 07/16/82	PERMIT ISSUED	10/15/82	RNW	
MARION	WOODBURN CONC SAND & G	24	9185 07/29/82	PERMIT ISSUED	10/15/82	RNW	
MULTNOMAH	COLLINS OIL CO.	26	3020 07/19/82	PERMIT ISSUED	10/15/82	EXT	N
POLK	COASTAL FIBRE	27	8014 10/18/82	PERMIT ISSUED	10/15/82	MOD	
WASHINGTON	SLINGER-MONROE OIL CO	34	2458 03/16/82	PERMIT ISSUED	10/15/82	EXT	
MULTNOMAH	MCCALL OIL CHNCL COR. 550	26	3058 10/08/82	PERMIT ISSUED	10/18/82	MOD	
WASHINGTON	ELECTPC SCIENTIFIC INDUST	34	2803 08/03/82	PERMIT ISSUED	10/18/82	MOD	
COOS	WEYERHAEUSER COMPANY	06	0007 08/27/82	PERMIT ISSUED	10/21/82	MOD	

TOTAL NUMBER QUICK LOOK REPORT LINES

21

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality Division
(Reporting Unit)

October, 1982
(Month and Year)

PLAN ACTIONS COMPLETED - 26

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	* * *
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MUNICIPAL WASTE SOURCES (17)

Lane	Screens at STP City of Florence	10-6-82	Approved	
Linn	Sand Filter System Sunny Country Store (File No. 85860)	10-18-82	Verbally Approved	
Jefferson	L.I.D. 685 Second Street Madras	10-20-82	P. A.	
Tillamook	Pacific Dunes Unit #2 Subdivision NTCSA	10-20-82	P.A.	
Umatilla	Sanitary Sewers S.W. 8th Place northerly off W. Orchard Ave. Hermiston	10-20-82	P.A.	
Douglas	Franko Service Station (Woodward & Stephens St.) Roseburg	10-20-82	P.A.	
Jackson	Snowy Butte Drive, L.I.D. Central Point	10-20-82	P.A.	
Douglas	Harry Sargent Extension Green Sanitary District	10-20-82	P.A.	

MAR.3 (5/79) WG1729

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

<u>Water Quality Division</u>	<u>October, 1982</u>
(Reporting Unit)	(Month and Year)

PLAN ACTIONS COMPLETED - 26

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

Municipal Waste Sources - Continued

Deschutes	Nasu Park, 1st Addition Bend	10-29-82	P. A.	
Marion	Schedule #3, EDA Project (Pump Station & Force Main) Hubbard	10-29-82	P. A.	
Columbia	82 L.I.D. - 7 Scappoose	10-29-82	P. A.	
Columbia	82 L.I.D. - 8 Scappoose	10-29-82	P. A.	
Douglas	Lateral Extension for Nels Severtson-Canyonville	10-29-82	P. A.	
Marion	South Salem Force Main and Gravity Sewer Salem	11-2-82	Approved	
Marion	East/South Salem Relief Sewer, Lancaster Drive at Codley Drive to Lancaster Drive at Rickey Street Salem	11-2-82	Approved	
Marion	South Airport Pump Station East-South Salem Relief Sewer System Salem	11-2-82	Approved	
Marion	Battle Creek Pump Station Reconstruction Salem	11-2-82	Approved	

MAR.3 (5/79) WG1729

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality Division
(Reporting Unit)

October 1982
(Month and Year)

PLAN ACTIONS COMPLETED 26

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

INDUSTRIAL WASTE SOURCES 9

Multnomah	Pacific Coal Corp. Coal Pile Runoff Pond Portland	10/6/82	Approved
Tillamook	Eric Peterson Manure Control System Tillamook	10/8/82	Approved
Washington	Intel Solvent Collection & Storage Facility Aloha	10/12/82	Approved
Lane	Weyerhaeuser, Springfield Secondary Blow Heat Condensor Springfield	10/12/82	Approved
Lane	John Shelly Manure Control System Pleasant Hill	10/15/82	Approved
Polk	Angie Ashton Veal Farm Manure Control System	10/15/82	Approved
Multnomah	Mobil Oil Dock Modifications for Oil Collection Portland	10/18/82	Approved
Tillamook	Walt Blankenship Manure Control Facilities Tillamook	10/26/82	Approved
Clackamas	East County Aggregates Gravel Silt Settling Ponds Eagle Creek	10/24/82	Approved

MAR.3 (5/79) WL2095

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality Division
(Reporting Unit)

October, 1982
(Month and Year)

SUMMARY OF WATER PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sources Under Permits	Sources Reqr'g Permits
	Month	Fis. Yr.	Month	Fis. Yr.			
	* /**	* /**	* /**	* /**	* /**	* /**	* /**
<u>Municipal</u>							
New	0 /0	0 /8	0 /4	0 /10	1 /7		
Existing	0 /0	0 /0	0 /0	0 /0	0 /0		
Renewals	10 /2	28 /5	2 /4	12 /4	48 /4		
Modifications	0 /0	1 /0	0 /0	1 /0	0 /0		
Total	10 /2	29 /13	2 /8	13 /14	49 /11	238/118	239/125
<u>Industrial</u>							
New	2 /1	3 /4	0 /0	4 /0	3 /9		
Existing	0 /0	0 /0	0 /0	0 /0	0 /1		
Renewals	5 /4	12 /12	1 /3	6 /9	44 /20		
Modifications	1 /0	2 /0	0 /0	3 /0	1 /0		
Total	8 /5	17 /16	1 /3	13 /9	48 /30	373/179	376/189
<u>Agricultural (Hatcheries, Dairies, etc.)</u>							
New	0 /0	0 /0	0 /0	0 /0	1 /0		
Existing	0 /0	0 /0	0 /0	0 /0	0 /0		
Renewals	0 /0	0 /0	0 /0	0 /0	0 /0		
Modifications	0 /0	0 /0	0 /0	0 /0	0 /0		
Total	0 /0	0 /0	0 /0	0 /0	1 /0	53 /19	54 /19
<u>GRAND TOTALS</u>	18 /7	46 /29	3 /11	26 /23	98 /41	664/316	669/333

* NPDES Permits
** State Permits
1 General Permit Issued

MAR.5W (8/79) WG1629

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality
(Reporting Unit)

October, 1982
(Month and Year)

PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	*
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MUNICIPAL AND INDUSTRIAL SOURCES - NPDES PERMITS (3)

Columbia	Tagg Elementary School Dist. 5-J, STP	10-7-82	Permit Renewed
Clackamas	Crown Zellerbach West Linn Mill	10-12-82	Permit Renewed
Linn	City of Scio, STP	10-21-82	Permit Renewed

MUNICIPAL AND INDUSTRIAL SOURCES - STATE PERMITS (11)

Linn	Mountain River Estates STP, Albany	10-7-82	Permit Issued
Josephine	North Valley High School Josephine Co., School Dist. STP	10-7-82	Permit Renewed
Douglas	Les Saulsberry Bluebird Mine - Coffee Cr.	10-7-82	Permit Renewed
Deschutes	Jack and Mike Stone RV Park (Ranch) STP, S. Bend	10-7-82	Permit Issued
Linn	Atlantic Richfield I-5 & Hwy. 34, STP, Albany	10-11-82	Permit Renewed
Columbia	Berg and Cowen Riverport Moorage, STP	10-11-82	Permit Issued
Lane	City of Eugene, Airport STP	10-11-82	Permit Renewed as a State Permit
Multnomah	Rocky Point Moorage Sigmund Stubbs, STP	10-11-82	Permit Issued
Deschutes	City of Bend McGrath Rd., STP	10-20-82	Permit Renewed
Lane	Springfield Quarry Rock Products	10-26-82	Permit Renewed
Linn	United Foods, Inc.	10-29-82	Permit Renewed under New Name

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

<u>Water Quality</u>	<u>October, 1982</u>
(Reporting Unit)	(Month and Year)

PERMIT ACTIONS COMPLETED

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

MUNICIPAL AND INDUSTRIAL SOURCES - GENERAL PERMITS (1)

Cooling Water, Permit 0100-J, File 32539 (1)

Umatillah	Kenneth D. Peterson Near Hart Rock, NE Hermiston	10-25-82	General Permit Issued
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DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Solid Waste Division
(Reporting Unit)

October 1982
(Month and Year)

SUMMARY OF SOLID AND HAZARDOUS WASTE PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sites Under Permits	Sites Reqr'g Permits
	Month	FY	Month	FY			
<u>General Refuse</u>							
New	1	2	-	2	2		
Existing	-	-	-	-	-		
Renewals	3	10	11	17	3		
Modifications	-	7	-	4	3		
Total	4	19	11	23	8	175	175
<u>Demolition</u>							
New	-	-	-	1	-		
Existing	-	-	-	-	-		
Renewals	-	1	1	1	-		
Modifications	-	2	-	2	-		
Total	0	3	1	4	0	21	21
<u>Industrial</u>							
New	1	3	-	5	4		
Existing	-	-	-	-	-		
Renewals	2	7	1	6	6		
Modifications	-	-	-	-	-		
Total	3	10	1	11	10	103	103
<u>Sludge Disposal</u>							
New	-	-	-	1	-		
Existing	-	-	-	-	-		
Renewals	-	2	-	2	-		
Modifications	-	1	-	1	-		
Total	0	3	0	4	0	11	11
<u>Hazardous Waste</u>							
New	77	274	77	274	-		
Authorizations	-	-	-	-	-		
Renewals	-	-	-	-	-		
Modifications	-	-	-	-	-		
Total	77	274	77	274	-	-	-
<u>GRAND TOTALS</u>	84	309	90	316	18	310	310

SC766.A
MAR.5S (4/79)

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Solid Waste Division (Reporting Unit)	October 1982 (Month and Year)
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PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	*
Grant	Seneca Landfill Existing Site	10/22/82	Permit Renewed	
Lane	Florence Existing Site	10/22/82	Permit Renewed	
Malheur	Foothill Landfill Existing Site	10/22/82	Permit Renewed	
Deschutes	Alfalfa Existing Site	10/22/82	Permit Renewed	
Multnomah	Alexander's Dispos-Haul Existing Site	10/22/82	Permit Renewed	
Malheur	McDermitt Existing Site	10/22/82	Permit Renewed	
Washington	Hillsboro Existing Site	10/22/82	Permit Renewed	
Marion	Marion Forks Hatchery Existing Site	10/27/82	Letter Authorization Renewed	
Lane	Swishhome Transfer Station Existing Site	10/29/82	Permit Renewed	
Klamath	Odessa Transfer Station Existing Site	10/29/82	Permit Renewed	
Klamath	Beatty Landfill Existing Site	10/29/82	Permit Renewed	
Klamath	Chemult Landfill Existing Site	10/29/82	Permit Renewed	
Multnomah	Malarkey Roofing Existing Site	10/29/82	Permit Renewed	

SC766.D
MAR.6 (5/79)

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Solid Waste Division
(Reporting Unit)

October 1982
(Month and Year)

HAZARDOUS WASTE DISPOSAL REQUESTS

CHEM-SECURITY SYSTEMS, INC., GILLIAM CO.

WASTE DESCRIPTION

* Date *	Type	Source	Present	Quantity Future
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TOTAL DISPOSAL REQUESTS GRANTED (77)

OREGON (29)

10/14	Trichloroethylene-contaminated filters	Manufacture of tools	0	90 lb.
10/14	Ammonium fluoride solution with lead	Electronic	0	24 drums
10/14	Silk screen wash petroleum naptha	Plywood mill	0	480 gal.
10/14	Isopropyl alcohol/acetone solvent	Manuf. fire-place tools	7 drums	0
10/14	Caustic paint stripper sludge	Manuf. fire-place tools	0	5 drums
10/14	Chrome bearing fire bricks	Glass manuf.	0	300 cu.ft.
10/14	Cadmium-contaminated glass slag	Glass manuf.	0	2000 lb.
10/14	Lead-contaminated cement	Glass manuf.	0	3 cu.yd.
10/14	Asbestos	Glass manuf.	0	6 cu.yd.
10/14	PCB-contaminated transformers	Glass manuf.	0	1575 gal.
10/14	PCB transformers	Glass manuf.	0	650 gal.

SC766.E
MAR.15 (1/82)

* * *	* * *		* * *	* * *	* * * Quantity		* * *
* * *	* * *	Type	* * *	* * *	* * *	* * *	* * *
			Source	Present	Future		
10/18	DDT-contaminated lime	Spill cleanup	15 drums	0			
10/18	Galvanizers alkaline cleaners	Chemical co.	0		4500 gal.		
10/20	PCB capacitors	Frozen food	9 units	0			
10/20	Polyvinyl acetate emulsion product	Transit damage	14 drums	0			
10/20	Miscellaneous paints	Pesticide mfg.	0		15 drums		
10/20	2,4-D contaminated carbon sludge	Pesticide mfg.	0		60,000 gal.		
10/21	Buffing dust with lime, copper, zinc	Electroplat.	1500 lb.	0			
10/21	Sodium carbonate sludge with cyanide	Electroplat.	0		300 drums		
10/21	Copper plating sludge	Electroplat.	10 drums	0			
10/21	Dried plating sludge	Electroplat.	25 drums	0			
11/3	PCB transformers	Paper co.	0		1700 gal.		
11/3	PCB-contaminated transformers	Paper co.	0		90 gal.		
11/3	PCB capacitors	Paper co.	0		2700 lb.		
11/3	Hydrofluoric acid/sulfuric acid/nitric acid solution	Electronic	0		50,000 gal.		
11/3	Metal hydroxide sludge	Electronic	0		50,000 gal.		
11/3	Aluminum potliner	Al. reduction	0		3500 tons		
11/3	Chromic fluoride soln.	Tool manuf.	0		4 drums		
11/3	PCB capacitors	Electric util.	3200 lb.	0			
WASHINGTON (21)							
10/4	Trichloroethane solv.	Electronic	5 drums	0			
10/4	Toluene	Electronic	15 drums	0			

SC766.E
MAR. 15 (1/82)

* * *	* * *		* * *	* * *	<u>Quantity</u>		* * *
* * *	Date	Type	Source	Present	Future		* * *
	10/4	Methanol	Electronic	10 drums	0		
	10/5	Hydrochloric acid soln.	Foundry	0	8 drums		
	10/5	Ammonium hydrox. soln.	Foundry	0	8 drums		
	10/5	Aromatic hydrocarbons/ polyglycols	Chemical co.	0	9 drums		
	10/5	Toluol-containing silicone defoamer	Chemical co.	0	9 drums		
	10/14	Chlorate sludge	Chemical co.	3300 gal.	0		
	10/14	Paint sludge	Paint co.	0	4000 gal.		
	10/18	Nitric acid solution	Electroplat.	0	200 gal.		
	10/18	Caustic solution	Electroplat.	0	600 gal.		
	10/18	Sulfuric acid	Electronic	0	30 drums		
	10/18	Phosphoric acid	Electronic	0	12 drums		
	10/18	Fluoboric acid	Electronic	0	4 drums		
	10/18	Methylene chloride	Electronic	0	10 drums		
	10/18	Neutralized solder strip	Electronic	0	4 drums		
	10/21	Acetone/resin	Fiberglass boats	0	4400 gal.		
	10/25	PCB transformers	Shipyards	8 units	0		
	10/25	PCB liquids	Shipyards	13 drums	0		
	11/3	PCB capacitors	--	7 units	0		
	11/3	Caustic microfilm developer/fixer	Foundry	0	4 drums		
OTHER STATES (27)							
	10/4	Arsenic trisulfide sludge (MT)	Copper smelt.	0	2000 tons		

SC766.E
MAR.15 (1/82)

* * Date *	* Type *	* Source *	* Quantity *		* Future *
			* Present *	* Future *	
10/4	Chlorinated benzene photo resist stripping (UT)	Electronic	0	15,000 gal.	
10/4	Chromic/sulfuric acid (UT)	Electronic	0	700 gal.	
10/4	Arsenic-doped isopropyl alcohol (UT)	Electronic	0	200 gal.	
10/13	Misc. pesticides (BC)	Ag. research	24 drums	50 drums	
10/14	Lube oil/methyl ethyl ketone (CO)	Can packaging	0	2 drums	
10/18	Petroleum naphtha/ water (AK)	Chemical co.	0	1500 gal.	
10/18	Urea-formaldehyde/ dirt (AK)	Chemical co.	0	650 gal.	
10/14	Zinc chromate primer (UT)	Chemical co.	0	300 gal.	
10/14	Methyl anhydride (UT)	Chemical co.	0	180 gal.	
10/14	Paint products (UT)	Chemical co.	0	6 drums	
10/14	Paint thinner/curing agents (UT)	Chemical co.	0	100 drums	
10/14	Glycol ether Teflon etching soln. (UT)	Chemical co.	0	5 gal.	
10/14	Chrome/aluminum powder (AK)	Oil co.	2000 lb.	0	
10/14	Chromium/potassium sulfate (AK)	Oil co.	1600 lb.	0	
10/14	Ethyl acetate (AK)	Oil co.	8 drums	0	
10/14	Asbestos (AK)	Oil co.	3600 lb.	0	
10/21	Pentachlorophenol- contaminated soil (BC)	Lumber mill	5 drums	20 drums	
10/21	Vanadium pentoxide catalyst (HI)	Chemical co.	0	2 tons	

SC766.E
MAR.15 (1/82)

* * Date *	* Type *	* Source *	* Quantity *		* Future *
			* Present *	* Future *	
10/21	Isopropyl alcohol with dichlorophenol (AK)	Chemical co.	3800 gal.	0	
10/21	Isopropyl alcohol with alkyl propylene diaminoadipate (AK)	Chemical co.	110 gal.	0	
10/25	Misc. lab chem. (AK)	School	0		1 drum
10/25	PCB-contaminated materials (AK)	Elec. util.	0		1 drum
10/25	PCB capacitors (AK)	Elec. util.	0		9 drums
10/25	Trichloroethane sludge (AK)	Elec. util.	300 gal.	0	
11/3	Arsenic-contaminated soil (AK)	Chemical co.	13 drums	0	
11/3	Contaminated diesel oil #2 (AK)	Chemical co.	0		1500 gal.

SC766.E
MAR.15 (1/82)

CIVIL PENALTY ASSESSMENTS
 DEPARTMENT OF ENVIRONMENTAL QUALITY
 1982

CIVIL PENALTIES ASSESSED DURING MONTH OF OCTOBER, 1982:

<u>Name and Location of Violation</u>	<u>Case No. & Type of Violation</u>	<u>Date Issued</u>	<u>Amount</u>	<u>Status</u>
Brundidge & Sons, Inc., dba/A-1 Sanitation Service Co. Sandy, Oregon	SS-NWR-82-93 Illegally disposed of septic tank sludge.	10-6-82	\$500	Paid 11-9-82
John W. Ellsworth dba/ Willamette Valley Sanitation Multnomah County Clackamas County	SS-NWR-82-79 Installed a cesspool without being licensed and without a permit; pumped a septic tank without being licensed.	10-13-82	\$1500	Awaiting response to notice.
J.A. Calkins and Frances A. Calkins dba/ Sandy Oil Company Sandy, Oregon	WQ-NWR-82-90 Negligently spilled oil into public waters.	10-13-82	\$500	Paid 10-29-82.

GB1503

<u>ACTIONS</u>	<u>LAST MONTH</u>	<u>PRESENT</u>
Preliminary Issues	7	3
Discovery	0	0
Settlement Action	0	1
Hearing to be scheduled	4	5
Hearing scheduled	1	2
HO's Decision Due	4	2
Briefing	0	0
Inactive	3	4
SUBTOTAL of cases before hearings officer.	<u>19</u>	<u>17</u>
HO's Decision Out/Option for EQC Appeal	0	2
Appealed to EQC	1	1
EQC Appeal Complete/Option for Court Review	0	0
Court Review Option Pending or Taken	0	0
Case Closed	2	0
TOTAL Cases	<u>22</u>	<u>20</u>

15-AQ-NWR-76-178 15th Hearing Section case in 1976 involving Air Quality Division violation in Northwest Region jurisdiction in 1976; 178th enforcement action in Northwest Region in 1976.

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

CONTES.B (2)

October 1982

DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrl	DEQ Atty	Hrng Date	Resp Code	Case Type & No.	Case Status
POWELL, Ronald	11/77	11/77	RLH	01/23/80	Prtys	\$10,000 Fld Brn 12-AQ-MWR-77-241	Stipulated settlement proposal to be drafted for presentation to EQC.
WAH CHANG	04/78	04/78	RLH		Prtys	16-P-WQ-WVR-78-2849-J NPDES Permit Modification	Current permit in force. Hearing deferred.
WAH CHANG	04/78	04/78	RLH		Prtys	08-P-WQ-WVR-78-2012-J NPDES Permit Modification	Current permit in force. Hearing deferred.
M/V TOYOTA MARU No. 10	12/10/79	12/12/79	RLH		Hrgs	17-WQ-NWR-79-127 Oil Spill Civil Penalty of \$5,000	Ruling due on requests for partial summary judgment.
HAYWORTH, John W. dba/HAYWORTH FARMS INC.	12/02/80	12/08/80	LMS	04/28/81	Hrgs	33-AQ-WVR-80-187 Field burning civil penalty of \$4,660	<u>Decision issued 11/10/82.</u>
PULLEN, Arthur W. dba/Lakes Mobile Home Park	07/15/81	07/15/81	RLH		Prtys	16-WQ-CR-81-60	Dept. does not wish to actively pursue further enforcement action pending expected progress in establishing a community sewage facility.
FRANK, Victor	09/23/81	09/23/81	LMS	06/08/82	Hrgs	19-AQ-FB-81-05 FB civil penalty of \$1,000	Decision due.
GATES, Clifford	10/06/81		LMS		Hrgs	21-SS-SWR-81-90	To be scheduled.
SPEHLING, Wendell dba/Sperling Farms	11/25/81	11/25/81	LMS	<u>12/09/82</u>	Hrgs	23-AQ-FB-81-15 FB Civil Penalty of \$3,000	<u>Hearing scheduled.</u>
NOFZIGER, Leo	12/15/81	01/06/82	LMS	06/29/82	Resp	26-AQ-FB-81-18 FB Civil Penalty of \$1,500.	Record closed 8/15/82.
OLD MILL MARINA		03/04/82	LMS	<u>01/06/83</u>	Hrgs	27-AQOB-NWR-82-01 Open Burning Civil Penalty	<u>Hearing scheduled.</u>
PULLEN, Arthur	03/16/82		RLH		Prtys	28-WQ-CR-82-16	See companion case above.
BOWERS EXCAVATING & FENCING, INC.	05/20/82		LMS		Prtys	30-SW-CR-82-34	<u>To be scheduled.</u>
ADAMS, Gailen			VAK	08/25/82	Prtys	31-SS-NWR-82-51	<u>Decision issued 11/4/82.</u>
OLINGER, Bill INC.	09/10/82	09/13/82	RLH		Prtys	33-WQ-NWR-82-73	Answer filed 10/4/82.
TOEDLEMEIER, Norman	09/10/82	09/13/82	LMS		Prtys	34-AQOB-WVR-82-65	<u>To be scheduled.</u>
SYLER, Richard E.	09/20/82	09/28/82	VAK		Prtys	35-AQOB-WVR-82-76 OB civil penalty of \$100.	<u>To be scheduled.</u>
LOGSTON, Howard	09/23/82	09/28/82	LMS		Prtys	36-AQ-ER-82-72 AQ civil penalty of \$2,000.	<u>To be scheduled.</u>
FRIENDS OF THE EARTH/OREGON	09/14/82	09/21/82		10/15/82		37-NWR-82 Petition to Amend OAR 340-14-025(5)	<u>Petition for Rulemaking denied. Findings to be issued.</u>
FIREBALL CONSTRUCTION CORP.	09/27/82					28-SS-SWR-82-85	Department to amend Notice.

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

3 from 12/13
1 from 12/10

12-2-92

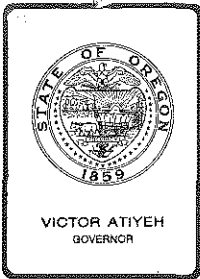
COUNTY	NUMBER	SOURCE	PROCESS DESCRIPTION	DATE	STATUS	ASSIGNED
JACKSON	660	ENERGY COOPERATION INC	EXP ALCOHOL FUEL PLANT	09/15/80	RQST AD INFO	PO
MULTNOMAH	687	CONTINENTAL LIME INC	STORAGE/TRANSFER FACILITY	10/27/80	RQST AD INFO	RO
MULTNOMAH	752	ESCO CORPORATION PLANT 3	BAGHOUSE INSTALLATION	05/11/81	RECEIVED	RO
JACKSON	833	BOISE CASCADE CORP	STUD MACHINE INSTAL	06/01/82	RECEIVED	PO
WASHINGTON	838	TEKTRONIX INC	VOC CONT SYS-LOW SOLV MATL	06/10/82	RECEIVED	RO
JACKSON	847	BRISTOL SILICA-LIMESTONE	DOLOMITE PLANT RELOCATION	02/19/82	RQST AD INFO	PO
MULTNOMAH	857	OWENS-ILLINOIS	FURNACE MOD & DUST COLL SYS	10/19/82	RECEIVED	RO
KLAMATH	858	MODOC LUMBER CO	2.5 MW TURBINE GEN SET	10/21/82	RECEIVED	PO
	859		BLR & 3.75 TURBINE GEN SET	10/21/82	RECEIVED	PO
CLACKAMAS	861	PREC CASTPTS MTL HDG FACS	DUST COLLECTION SYSTEM	11/12/82	RECEIVED	RO
JACKSON	862	SWEDENBURG ORCHARDS	WIND MACHINES	11/24/82	RECEIVED	PO
MULTNOMAH	863	SHELL OIL COMPANY	VAPOR RECOVERY EQUIP MOD	11/24/82	RECEIVED	RO

5-12-92
corrected

TOTAL NUMBER QUICK LOOK REPORT LINES ~~47~~
12

12/13/92
12/10/92

HMP



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. C, December 3, 1982, EQC Meeting

TAX CREDIT APPLICATIONS

Director's Recommendation

It is recommended that the Commission take the following actions:

1. Approve tax credit applications:

Appl. No.	Applicant	Facility
T-1512	International Paper Company	Slaker vent scrubber system
T-1523	Weyerhaeuser Company	Modification of veneer dryer
T-1532	Willamina Lumber Company	Rock & dirt fill material
T-1540	Tektronix, Inc.	VOC Controls
T-1554	Paasch Orchards, Inc.	One wind machine
T-1556	#1 Boardman Station	Groundwater monitoring system
T-1557	#1 Boardman Station	Groundwater monitoring system
T-1558	#1 Boardman Station	Continuous emission monitors
T-1561	Weyerhaeuser Company	Ditch culverting project
T-1562	Weyerhaeuser Company	Fly-ash collection system
T-1563	Northwest Marine Iron Works	Baghouse
T-1566	W. W. Lumber Company	Asphalt paving
T-1567	Praegitzer Industries, Inc.	Heavy metal pretreatment facility
T-1573	Waste Recovery, Inc.	Wood waste recycling project

WITHDRAWN

2. Waive Preliminary Certification requirement and approve tax credit application T-1549, Robert G. Williamson, for a manure control system (see review report).
3. Find that McFarlane's Bark, Inc, application T-1564, made a de facto request for Preliminary Certification, and approve their tax credit application.

Bill

William H. Young

CASplettstaszer
229-6484
11/18/82
Attachments



Contains
Recycled
Materials

PROPOSED DECEMBER, 1982 TOTALS

Air Quality	\$ 1,148,690
Water Quality	213,969
Solid/Hazardous Waste	540,971
Noise	-0-
	<u>\$ 1,903,630</u>

CALENDAR YEAR TOTALS TO DATE

Air Quality	\$11,690,655
Water Quality	43,146,926
Solid/Hazardous Waste	25,430,219
Noise	49,416
	<u>\$80,317,205</u>

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

1. Applicant

International Paper Company
Industrial Packaging
Post Office Box 854
Gardiner, Oregon 97441

The applicant owns and operates a pulp and paper mill utilizing the kraft process at Gardiner, Oregon.

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

2. Description of Claimed Facility

The facility described in this application consists of a slaker vent scrubber system.

Request for Preliminary Certification for Tax Credit was made on January 17, 1978, and approved on November 13, 1978.

Construction was initiated on the claimed facility on May 9, 1979, completed on February 1, 1980, and the facility was placed into operation on February 1, 1980.

Facility Cost: \$74,517.25 (Accountant's Certification was provided).

3. Evaluation of Application

The claimed facility, consisting of a Ducon scrubber, 46-foot high exhaust stack, fan and motor, was required to control lime dust emissions from the slaker vent. The claimed facility has been inspected by Department personnel and has been found to be operating in compliance with regulations and permit conditions.

The claimed facility, which was installed primarily for air pollution control, collects approximately 100 lbs of particulate lime dust daily. All material collected is diverted back into the process. The value of the lime dust collected is \$97.00 per ton. Based upon a normal operating schedule of 355 days per year, the value of the lime dust collected annually is \$1,473.00. The annual operating expenses before taxes, exclusive of depreciation, are as follows:

Utilities -	\$3,599.60
Insurance -	<u>134.88</u>
Total	- \$3,734.48

Since the annual operating expenses exceed the value of the recovered material, there is no return on the investment in the facility. Therefore, in accordance with the guidelines on cost allocation, 80% or more of the facility cost is allocable to pollution control.

The application was received on April 15, 1982, additional information was received on September 29, 1982, and the application was considered complete on September 29, 1982.

4. Summation

- a. Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.
- b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).
- c. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing air pollution.
- d. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468, and the rules adopted under that chapter.
- e. The portion of the facility cost that is properly allocable to pollution control is 80% or more.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$74,517.25 with 80% or more allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1512.

HMPatterson:ahe
(503) 229-5364
November 2, 1982

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

1. Applicant

Weyerhaeuser Company
Cottage Grove Wood Products Division
Post Office Box 275
Springfield, OR 97477

The applicant owns and operates a plywood manufacturing mill together with other wood product manufacturing operations at Cottage Grove, Oregon.

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

2. Description of Claimed Facility

The facility described in this application is the modification of veneer dryer no. 1. Decreasing the exhaust air and sealing the dryer made it possible to vent all emissions through the boiler as a means of achieving air emission compliance.

Plans and specifications were reviewed and approved by Lane Regional Air Pollution Authority.

Request for Preliminary Certification for Tax Credit was made on February 28, 1980, and approved on April 18, 1980.

Construction was initiated on the claimed facility on July 1, 1980, completed on May 1, 1981, and placed into operation on May 1, 1981.

Facility cost: \$325,902 (Accountant's Certification was provided). The company subsequently reduced the claimed facility cost to \$296,632.

3. Evaluation of Application

Beginning in July 1980, Weyerhaeuser Company undertook the modification of veneer dryer no. 1 for the purpose of achieving compliance with emission standards for Lane Regional Air Pollution Authority (same as State-wide standards). The work consisted primarily of changing the air flow pattern within the dryer. This required relocating the heating coils and motor/fan systems and enlarging the air transfer ducts. This reduced the pressure at the dry end and stopped air from leaking in through the green end. Installing foam door seals and automatic stack dampers provided additional controls to abate fugitive emissions.

The reduced air volume configuration made it possible to duct all exhaust gases to the hogged fuel boiler for incineration. The exhaust gas collection system and ducting to the boiler had been granted Tax Credit Certification in December 1977 (T-950). However, it was found to be incapable of handling the total contaminated air from dryers

1 and 2 which included discharges from the dryer cooling section.

Alternative pollution control techniques considered included the installation of a Rader Sandfilter Scrubber (\$550,000) or a Burley Scrubber (\$225,000). These were rejected by the company because the suppliers could not guarantee compliance performance on this installation and the implemented strategy had lower operating costs.

Lane Regional Air Pollution Authority has certified that the veneer dryers are now in compliance with emission standards.

The initial claimed facility cost was \$325,902. This amount was subsequently reduced down to \$296,632 (two fan motors, \$10,170; \$200 scrap value for the replaced fans; and \$18,900 as 70% of the replacement steam coils which represents the expended life of the original coils = reduction).

Weyerhaeuser estimates the reconstructed dryer resulted in an annual saving of \$41,000 (\$34,000 improved drying to reduce overtime labor and \$7,000 in steam heat savings). The resulting return on investment is less than 7%.

The primary purpose for undertaking the project was to accomplish air pollution control in conformance with agency regulations. Therefore, 80% or more of the adjusted facility cost of \$296,632 is allocable to pollution control.

The application was received on May 3, 1982, additional information was received on September 7 and 30, 1982, and the application was considered complete on September 30, 1982.

4. Summation

- a. Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.
- b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1) (a).
- c. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing air pollution.
- d. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468, and the rules adopted under that chapter.
- e. The portion of the facility cost that is properly allocable to pollution control is 80% or more.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$296,632 with 80% or more allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1523.

HMPatterson:ahe
(503) 229-5364
10-21-82

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Willamina Lumber Company
9400 S.W. Barnes Road, Suite 400
Portland, OR 97225

The applicant owns and operates a lumber and veneer manufacturing facility at Willamina.

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

2. Description of Claimed Facility

The facility described in this application consists of rock and dirt fill material.

Request for Preliminary Certification for Tax Credit was made August 23, 1978, and approved October 6, 1978. Construction was initiated on the claimed facility October, 1978, completed December, 1978, and the facility was placed into operation December, 1978.

Facility Cost: \$47,670 (Accountant's Certification was provided).

3. Evaluation of Application

Willamina Lumber Company operated a wood waste landfill in a low area which collected runoff from the surrounding land. Several springs at the bottom of the site kept it moist year-round. The site occasionally filled with water and the mixture of rainwater, spring water, and leachate overflowed to Willamina Creek. The Department required Willamina Lumber to close the landfill and eliminate the water pollution.

The site was dewatered onto adjacent land and subsequently filled with clean earth and rock. The filling of the old landfill eliminated the periodic discharge of contaminated water to Willamina Creek. The closure of the landfill resulted in no return on investment.

4. Summation

- a. Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.
- b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).
- c. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing water pollution.
- d. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468 and the rules adopted under that chapter.
- e. The portion of the facility cost that is properly allocable to pollution control is 80 percent or more.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$47,670 with 80 percent or more allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1532.

CKA:g
(503) 229-5325
WG1693

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

1. Applicant

Tektronix, Inc.
P. O. Box 500
Beaverton, OR 97077

The applicant owns and operates an electronic equipment manufacturing facility at Tektronix Industrial Park, Beaverton, Oregon.

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

2. Description of Claimed Facility

The facility described in this application is the replacement of one vapor degreaser and the modification of five open top vapor degreasers with the controls and lids required by Department rules for control of VOC.

Request for Preliminary Certification for Tax Credit was made on 2-25-80, and approved on 6-12-80.

Construction was initiated on the claimed facility on 6-16-80, completed on 8-31-81, and the facility was placed into operation on 8-31-81.

Facility Cost: \$18,438.36 (Complete Documentation by copies of invoices was provided)

3. Evaluation of Application

The open top vapor degreasers did not comply with the DEQ rules. The volatile organic compounds, VOC, evaporative losses were uncontrolled and vented to the ambient air. Five degreasers were modified as described in OAR 340-22-180 through -186, and one degreaser could not be modified to meet the rule and had to be replaced.

The savings in vapor loss are \$4,892.75 per year. The factor used to establish the portion of cost allocable to pollution control is the estimated annual percent return on the investment in modifying the degreasers. Using the Department's tax credit program guidance handbook method, the return on investment is 11%. The percent of cost allocable to pollution control in accordance with the guidance handbook is 60% or more but less than 80%, based on an 11% return on investment calculated with a five year useful life of the facility.

The application was received on 6-29-82, additional information was received on 7-12-82, and the application was considered complete on 11-4-82.

4. Summation

- a. Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.
- b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).
- c. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing air pollution.
- d. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468, and the rules adopted under that chapter.
- e. The portion of the facility cost that is properly allocable to pollution control is 60% or more but less than 80%.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$18,438.36 with 60% or more but less than 80% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1540.

R. Potts, Engineer:a
(503) 229-6093
11-5-82
AA2760

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

1. Applicant

Paasch Orchards, Inc.
2700 Paasch Drive
Hood River, OR 97031

The applicant owns and operates a pear and apple orchard at Hood River, Oregon.

The application was made for tax credit for an air pollution control facility.

2. Description of Claimed Facility

The facility described in this application is one electric-powered tropic breeze wind machine for frost control with tower, serial no. T81-34E373.

Request for Preliminary Certification for Tax Credit was made on November 4, 1980, and approved on October 7, 1981.

Construction was initiated on the claimed facility on November 1, 1981, completed on March 1, 1982, and the facility was placed into operation on March 15, 1982.

Facility Cost: \$16,476.35 (Accountant's Certification was provided).

3. Evaluation of Application

The wind machine reduces the number of oil-fired orchard heaters needed to provide frost protection for fruit trees. Orchard heaters cause an air pollution problem in the surrounding communities due to incomplete combustion. The wind machine eliminates the use of heaters on light frost nights and reduce from 600 to 240 the number of heaters needed on heavy frost nights. A substantial purpose for installing wind machines is to reduce air contaminant emissions and thus make the orchard a better neighbor. The emissions from farm operations are not regulated by the Department.

The factor used to establish the portion of cost allocable to pollution control is the estimated annual percent return on the investment on the wind machine. The applicant submitted cost data showing a fuel cost savings of \$4,434 for an average season. The return on investment was determined using the method shown in the Department's tax credit program guidance handbook. The savings in fuel and power operation expenses only were considered. The other operating expenses are small compared to fuel cost and are considered to cancel each other. The guidance handbook method results in a return on investment of 18.93%. The percent of actual cost of claimed facility allocable to pollution control in accordance with the guidance handbook is 40% or more but less than 60%.

The application was received on September 1, 1982, and was considered complete on November 1, 1982.

4. Summation

- a. Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.
- b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).
- c. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing air pollution.
- d. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468, and the rules adopted under that chapter.
- e. The portion of the facility cost that is properly allocable to pollution control is 40% or more but less than 60%.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$16,476.35 with 40% or more but less than 60% allocated to pollution control, be issued to the facility claimed in Tax Credit Application No. T-1554.

HMPatterson:ahe
(503) 229-5364
November 2, 1982

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Number One Boardman Station
121 S.W. Salmon Street
Portland, OR 97204

The applicant owns and operates a coal burning electric generating facility at Boardman.

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

2. Description of Claimed Facility

The facility described in this application is a groundwater monitoring system consisting of 5 wells with 4 inch PVC casings.

Request for Preliminary Certification for Tax Credit was made November 22, 1976. Construction was initiated on the claimed facility January 14, 1978, completed March 18, 1980, and the facility was placed into operation on March 18, 1980. Although the request for preliminary certification was submitted as required, the Department did not act upon it due to an apparent oversight.

Facility Cost: \$21,533 (Accountant's Certification was provided).

3. Evaluation of Application

The wells were installed to monitor the quality of the groundwater around the ash disposal site. Four of the wells are installed downgradient of the disposal site and the fifth is installed across the reservoir as a control well. The wells are monitored to detect changes in water chemistry which could indicate contamination from the disposal site. There is no return on investment from this facility.

4. Summation

- a. Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.
- b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).
- c. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing water pollution.
- d. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468 and the rules adopted under that chapter.
- e. The portion of the facility cost that is properly allocable to pollution control is 80 percent or more.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$21,533 with 80 percent or more allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1556.

CKA:g
(503) 229-5325
September 30, 1982

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Number One Boardman Station
121 S.W. Salmon Street
Portland, OR 97204

The applicant owns and operates a coal burning electric generating facility at Boardman.

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

2. Description of Claimed Facility

The facility described in this application is a groundwater monitoring system consisting of 9 wells with 4 inch PVC casings.

Request for Preliminary Certification for Tax Credit was made November 22, 1976. Construction was initiated on the claimed facility August 30, 1979, completed September 7, 1979, and the facility was placed into operation December, 1979. Although the request for preliminary certification was submitted as required, the Department did not act upon it due to an apparent oversight.

Facility Cost: \$15,128 (Accountant's Certification was provided).

3. Evaluation of Application

The wells were installed to monitor the quality of the groundwater downgradient of Carty Reservoir. The wells are monitored to attempt to determine the extent and contribution of reservoir seepage to the groundwater by measuring the water chemistry within each well. There is no return on investment from this facility.

4. Summation

- a. Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.
- b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).
- c. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing water pollution.
- d. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468 and the rules adopted under that chapter.
- e. The portion of the facility cost that is properly allocable to pollution control is 80 percent or more.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$15,128 with 80 percent or more allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1557.

CKA:g
(503) 229-5325
September 30, 1982

WG1610

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Number One Boardman Station
consisting of:

Portland General Electric Co. 80%
121 S. W. Salmon Street
Portland, Oregon 97204

Idaho Power Co. 10%
1220 Idaho Street
P. O. Box 70
Boise, Idaho 83707

Pacific Northwest Generating Co. 10%
Suite 330
8383 N. E. Sandy Blvd.
Portland, Oregon 97220

The applicants own and operate a single 500,000 KW coal-burning steam electric generator at Boardman, Oregon.

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

2. Description of Claimed Facility

The facility described in this application consists of six (6) continuous emission monitors, associated equipment and installation.

Request for Preliminary Certification for Tax Credit was made on October 1, 1975. Additional requested information was received on May 21, 1980, and the request was approved on May 28, 1980.

Construction was initiated on the claimed facility in January, 1980, completed in July, 1980, and the facility was placed into operation on August 3, 1980.

Facility Cost: \$266,486.00 (Accountant's Certification was provided.)

3. Evaluation of Application

The claimed facility which was required by the Department to monitor flue gas emissions consists of the following continuous emission monitors, associated equipment and installation:

- (2) Lear-Siegler RM 41 Opacity Monitors
- (2) Lear-Siegler SM-810 SO₂/NO Monitors
- (2) Lear-Siegler CM 50 Oxygen Monitors
- (1) Lear-Siegler Model DP 30 Data Processor
- (3) Lear-Siegler Model CR 15-301 Strip Chart Recorders
- (1) Westinghouse Model 75RE Strip Chart Recorder

The claimed facility is necessary to demonstrate compliance on a continuous basis as required by the Air Contaminant Discharge Permit. Additionally the claimed facility provides instantaneous information to assist the plant operator to adjust operating parameters to maintain low level emissions and to determine operating and emission control equipment maintenance requirements.

The claimed facility has been effective in demonstrating compliance and providing necessary information to the plant operator to maintain low emission levels of the coal-fired steam electric generator. The coal-fired steam electric generator and the claimed facility have been inspected by the Department personnel and have been found to be operating in compliance with regulations and permit conditions.

The annual operating expenses before taxes, exclusive of depreciation are \$12,320 and consist of the following:

Labor	\$7200.00
Utilities	790.00
Maintenance	4010.00
Insurance	<u>320.00</u>
TOTAL	\$12320.00

The applicant states "operating costs far exceed any or no income"; therefore, there is no return on the investment on the facility and 80% or more of the facility cost is allocable to pollution control.

The application was received on September 16, 1982, and the application was considered complete on September 16, 1982.

4. Summation

- a. Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.
- b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1) (a).
- c. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing air pollution.

- d. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468, and the rules adopted under that chapter.
- e. The portion of the facility cost that is properly allocable to pollution control is 80% or more.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$266,486.00 with 80% or more allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1558.

HMP:h

(503) 229-5364

November 3, 1982

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Weyerhaeuser Company
Eastern Oregon Region
P. O. Box 9
Klamath Falls, OR 97601

The applicant owns and operates a lumber, plywood, particleboard, and hardboard manufacturing facility at Klamath Falls.

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

2. Description of Claimed Facility

The facility described in this application is a ditch culverting project consisting of 315 feet of 72 inch metal culvert, rock bedding, and earth cover.

Request for Preliminary Certification for Tax Credit was made July 17, 1981, and approved July 31, 1981. Construction was initiated on the claimed facility September 1, 1981, completed December 9, 1981, and the facility was placed into operation December 9, 1981.

Facility Cost: \$34,640 (Accountant's Certification was provided).

3. Evaluation of Application

The Holliday Drainage Ditch runs between the hardboard plant and the hog fuel pile en route to the Klamath River. The ditch also passes under a sander dust storage bin. Because the winds continuously caused wood materials to enter the ditch, the Department required a section of the ditch to be culverted. Approximately 300 feet of ditch near the hardboard plant was culverted with 72 inch metal culvert. Clean earth was used for backfill. The applicant has not realized any economic benefit from this project and there is no return on investment.

4. Summation

- a. Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.
- b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).
- c. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing water pollution.
- d. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468 and the rules adopted under that chapter.
- e. The portion of the facility cost that is properly allocable to pollution control is 80 percent or more.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$34,640 with 80 percent or more allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1561.

LDP:g
(503) 229-5325
September 29, 1982

WG1606

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Weyerhaeuser Company
Eastern Oregon Branch
P.O. Box 9
Klamath Falls, OR 97601

The applicant owns and operates a lumber, plywood, particleboard, and hardboard plant at Klamath Falls.

Application was made for tax credit for a solid waste pollution control facility.

2. Description of Claimed Facility

The facility described in this application consists of cyclone and low pressure pneumatic conveying system to collect and transport fly-ash to a truck loading facility for ultimate sale to a charcoal briquette manufacturing firm.

Request for Preliminary Certification for Tax Credit was made on July 29, 1981 and approved on October 5, 1981.

Construction was initiated on the claimed facility on August 1, 1981, completed on October 1, 1981, and the facility was placed into operation on December 15, 1981.

Facility Cost: \$116,065 (Accountant's Certification was provided).

3. Evaluation of Application

The facility collects and transports fly ash to a truck loading facility where it is loaded for transport and sale for charcoal briquette manufacturing. Prior to installation some material was reintroduced into the plant boilers and the remaining (over 21,000 cubic yards) landfilled.

Value of the recovered material to the company is approximately \$51,500/year.

4. Summation

- a. Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.

- b. As required by ORS 468.165, the facility was under construction on or after January 1, 1973, and
 - (1) The substantial purpose of the facility is to utilize material that would otherwise be solid waste, by mechanical process; through the production, processing, or use of materials for their heat content or other forms of energy or materials which have useful chemical or physical properties;
 - (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. In addition, the Commission finds that the facility will provide a new or different solution to a solid waste problem than has been previously used.
- 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 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 \$116,065 with 100 percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1562.

R. L. Brown:b
(503) 229-5157
11-8-82
SB1522

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Northwest Marine Iron Works
Marine Division
P.O. Box 3109
Portland, OR 97208

The applicant owns and operates a construction, conversion, overhaul and repair of ships facility at the foot of North Channel Avenue, Swan Island, Portland, Oregon.

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

2. Description of Claimed Facility

The facility described in this application is a baghouse for control of sand blasting and paint booths for control of over spray emissions.

Request for Preliminary Certification for Tax Credit was made on 1-15-81, and approved on 1-21-81.

Construction was initiated on the claimed facility on 1-15-81, completed on 10-81, and the facility was placed into operation on 10-81.

Facility Cost: \$395,040 (Accountant's Certification was provided).

3. Evaluation of Application

The sand blasting and painting was formerly done outdoors or in temporary shelters. The Department required the Port of Portland to control particulate emissions from these operations. This work is now done inside a new building owned by the Port of Portland. (The applicant owns the equipment installed inside the building.) A source test of the baghouse showed that the baghouse met Department emission limits. The paint spray booths control emissions satisfactorily.

The baghouse is a CAB model 168, size 546-13 having 94,000 standard cubic feet per minute capacity. The paint booths are four DeVilbiss model XNO-6118 with a total air flow rate of 144,000 standard cubic feet per minute.

Water walls and water sprays are used to control paint particulate emissions.

The total cost to install the sand blasting and painting operation inside the building was \$719,427. Only the baghouse and paint booths of the installation received preliminary approval for tax credit. The portion of the cost allocated to the baghouse and paint booths is:

	<u>Total Cost</u>	<u>Portion Allocated to Baghouse & Paint Booths</u>
Structural Additions and Improvements	\$164,535	\$ 44,973
Electrical System	171,637	72,229
Filtering System	299,776	216,900
Ventilation and Fire Protection System	83,479	60,938
<u>Total Costs</u>	<u>\$719,427</u>	<u>\$395,040</u>

The collected material is taken to land fills. The percent of the \$395,040 cost allocable to pollution control is 80% or more.

The application was received on 9-16-82, additional information was received on 10-21-82, and the application was considered complete on 10-26-82.

4. Summation

- a. Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.
- b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).
- c. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing air pollution.
- d. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468, and the rules adopted under that chapter.
- e. The portion of the facility cost that is properly allocable to pollution control is 80% or more.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$395,040.00 with 80% or more allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1563.

HMP:a

AA2733

(503) 229-5364

October 27, 1982

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

1. Applicant

W. W. Lumber Company
William Claussen, President
1240 East Main
Cottage Grove, Oregon 97424

The applicant owns and operates a sawmill at 1240 East Main, Cottage Grove.

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

2. Description of Claimed Facility

The facility described in this application consists of approximately 43,200 square feet of asphalt paving.

Plans and specifications were reviewed and approved by Lane Regional Air Pollution Authority.

Request for Preliminary Certification for Tax Credit was made on September 26, 1980, and approved on December 16, 1981 after Commission approval of the paving project guidelines on July 17, 1981.

Construction was initiated on the claimed facility on October 10, 1980, completed on October 28, 1980, and the facility was placed into operation on October 28, 1980.

Facility Cost: \$71,831.00 requested, of which \$51,831.00 is eligible. Accountant's Certification was provided.

3. Evaluation of Application

The applicant has paved approximately 43,200 square feet of a log yard at the sawmill. An inspection by Lane Regional Air Pollution Authority (LRAPA) revealed that the area paved is that used exclusively by lumber moving equipment. The entire area is eligible for tax credit consideration in accordance with the paving project guidelines. Although the facility is not located in a particulate AQMA, a problem was identified by LRAPA resulting from the fugitive dust emissions generated by the vehicular activity (50 vehicles per day). It should be noted that W. W. Lumber Company is located one-half mile from the center of town.

Prior to paving, this area was a source of fugitive dust emissions because of the equipment operating in the area. On March 20, 1979, LRAPA solicited that the unpaved areas be paved to reduce the ambient impact of fugitive dust emissions from this and other plants. LRAPA has indicated that a substantial reduction of fugitive emissions has resulted from the project, eliminating complaints from adjacent residential tenants, and that they support 60-80% tax benefit for the applicant.

The company has requested 100% of the claimed facility cost of this paving project be allocated to pollution control. However, the claimed facility cost of \$71,831.00 must be reduced by the cost of base rock, liner and site preparation which was not considered eligible for tax credit. The cost of these

items are as follows:

Base Rock	-	\$14,000
Liner	-	4,000
Preparation	-	<u>2,000</u>
TOTAL		\$20,000

Therefore, the eligible cost is \$71,831.00 minus \$20,000.00 or \$51,831.00. The economic benefits to the company consist of reduced equipment maintenance and better working conditions. A 50% savings in equipment maintenance costs was determined by the applicant which was estimated to be less than the \$2,400.00 annual cost to clean and patch the paving. Therefore, there is no return on the investment in the paving and 80% or more of the eligible facility cost is allocable to pollution control.

The application was received on September 27, 1982, additional information was received on October 2, 1982, and the application was considered complete on September 27, 1982.

4. Summation

- a. Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.
- b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1) (a).
- c. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing air pollution.
- d. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468, and the rules adopted under that chapter.
- e. The portion of the eligible facility cost that is properly allocable to pollution control is 80% or more.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$51,831.00 with 80% or more allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1566.

HMPatterson:ahe
(503) 229-5364
November 3, 1982

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Praegitzer Industries, Inc.
P.O. Box 500
Dallas, OR 97338

The applicant owns and operates a printed circuit board manufacturing facility at Dallas.

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

2. Description of Claimed Facility

The facility described in this application is a heavy metal pretreatment system consisting of:

- a. four concrete sumps with three Nettco mixers,
- b. four AMF Cuno Precision Control Pumps,
- c. two Chemtrix pH controllers with acid and caustic storage and feed systems,
- d. a flocculent feed system,
- e. a plate clarifier,
- f. a sludge holding tank, and
- g. a sludge dewatering press.

Request for Preliminary Certification for Tax Credit was made March 9, 1981, and approved June 30, 1981. Construction was initiated on the claimed facility August 1981, completed October 1981, and the facility was placed into operation October 1981.

Facility Cost: \$60,286.00 (Accountant's Certification was provided).

3. Evaluation of Application

The claimed facility is a pretreatment system for a new circuit board manufacturing plant. Heavy metals (tin, lead, copper, and nickel) are precipitated from the waste water and removed through a clarifier.

The heavy metal hydroxide sludge is thickened and disposed of as a hazardous waste. The clarified water is neutralized and discharged to the City of Dallas sewer system. Without this pretreatment system, the waste water from the circuit board plant could have been detrimental to the municipal sewerage system. There is no return on investment from this facility.

4. Summation

- a. Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.
- b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).
- c. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing water pollution.
- d. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468 and the rules adopted under that chapter.
- e. The portion of the facility cost that is properly allocable to pollution control is 80 percent or more.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$60,286.00 with 80 percent or more allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-T-1567.

Charles K. Ashbaker:l
(503) 229-5325
October 5, 1982

WL2018

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Waste Recovery, Inc.
dba/Waste By-Products
8501 N. Borthwick
Portland, OR 97217

The applicant owns and operates a facility to process waste wood and tires at 8501 N. Borthwick, Portland.

Application was made for tax credit for a solid waste pollution control facility.

2. Description of Claimed Facility

The facility described in this application consists of the following equipment:

Pettibone PM-800 Hydromower, S/N BC164	\$44,250
Portable Rotary Hopper Grinder, S/N 1008	93,500
Magnetic Separation System	17,562
Infeed Conveyor/Pre-sort System	9,966
Fuel Loading Conveyor	1,417
Euclid, S/N 34412	6,770
JD 450B Tractor, S/N 450 BC148412	6,885
JD 644A Loader, S/N 181250	18,511
Grinder	4,434
Mobile Screen in Unit	23,864
Hammermill	4,774
Stump Grinder	4,774
Prentice Loader, S/N 1800FD80364F	2,500
Screening System with Magnetic Head	<u>10,979</u>
	\$250,186

Request for Preliminary Certification for Tax Credit was made on February 22, 1982, and approved on March 24, 1982.

Construction was initiated on the claimed facility on March 24, 1982, completed on October 21, 1982, and the facility was placed into operation on July 6, 1982.

Facility Cost: \$250,186 (Accountant's Certification was provided).

3. Evaluation of Application

This facility and associated mobile equipment was constructed with the intent of diverting clean loads of woody waste from area landfills. The facility will process additional materials once a collection system for backyard burnable debris is established. The equipment converts woody waste material into hog fuel. Present annual income from the facility is \$87,690 which includes a small tipping fee and income from sale of the hog fuel.

4. Summation

- a. Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.
- b. As required by ORS 468.165, the facility was under construction on or after January 1, 1973, and
 - (1) The substantial purpose of the facility is to utilize material that would otherwise be solid waste, by mechanical process; through the production, processing, or use of materials for their heat content or other forms of energy or materials which have useful chemical or physical properties;
 - (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. In addition, the Commission finds that the facility is necessary to assist in solving a severe or unusual solid waste problem; and the facility will provide a new or different solution to a solid waste problem than has been previously used.
- 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 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 \$250,186 with 100 percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1573.

R. L. Brown:b
(503) 229-5157
11-8-82
SB1521

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

1. Applicant

Robert G. & Elizabeth Williamson
19527 Case Rd. N.E.
Aurora, OR 97002

The applicant owns and operates a dairy farm at Aurora.

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

2. Description of Claimed Facility

The facility described in this application is an animal manure control system consisting of a solids separating screen, 137 yards of concrete, a liquid waste pump, an earthen holding lagoon, and a liquid recycle pump.

Prior to construction, a Request for Preliminary Certification for Tax Credit was filled out by the Marion County Extension Service and signed by the applicant. Although the applicant assumed the Department had been notified, the request form was not filed with the Department until after completion of construction. Due to a change in personnel at the Extension Service, the request form was inadvertently laid aside. Applicant requests that Commission waive requirements for filing.

Construction was initiated on the claimed facility July 1981, completed June 1982, and the facility was placed into operation June 1982.

Facility Cost: \$34,712.49 (Accountant's Certification was provided).

3. Evaluation of Application

Prior to installation of the claimed facility, limited manure storage facilities necessitated the disposal of manure onto land year-round. During the winter when the ground was saturated, the disposal operation would often result in contaminated field runoff. The claimed facility separates solids from the animal waste and stores them in a concrete basin. Liquids are contained in an earthen lagoon where a portion of the waste is recycled as barn alley flushing water. The wastes are now stored up to 6 months until the land is dry enough for spreading solids and irrigating the liquids. There is no return on investment from this facility.

Had the Department received the request for preliminary certification prior to construction, it would have been granted. Therefore, the Department believes that the requirement for filing a Request for Preliminary Certification should be waived.

4. Summation

- a. Special circumstances exist which made the filing of an application for Preliminary Certification unreasonable, and the facility would otherwise be eligible for tax credit.
- b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).
- c. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing water pollution.
- d. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468 and the rules adopted under that chapter.
- e. The portion of the facility cost that is properly allocable to pollution control is 80 percent or more.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$34,712.49 with 80 percent or more allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1549.

Charles K. Ashbaker:1
(503) 229-5325
September 30, 1982

WL2014

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

McFarlane's Bark, Inc.
P.O. Box 338
13345 S.E. Johnson Road
Clackamas, OR 97015

The applicant owns and operates a shredding and composting facility at 13345 S.E. Johnson Road, Clackamas.

Application was made for tax credit for a solid waste pollution control facility.

2. Description of Claimed Facility

The facility described in this application consists of a:

Hammermill Grinder S/N 9063	\$104,498
644 -B John Deere Loader	60,177
Gate House, road, and miscellaneous	<u>10,045</u>
	\$174,720

Request for Preliminary Certification was made verbally and was approved verbally by the Department prior to beginning construction.

Construction was initiated on the claimed facility in November 1981, completed in February 1982, and the facility was placed into operation in February 1982.

Facility Cost: \$174,720 (Accountant's Certification was provided).

3. Evaluation of Application

The facility shreds clean yard debris for composting. During the initial year of operation 33,000 yards of yard debris which had previously been landfilled was converted into usable material producing an income of \$42,619. The facility was established in conjunction with the Metro yard debris program as an initial step in reducing volume of woody waste entering landfills and elimination of backyard burning.

Applicant submitted a letter of explanation regarding failure to file request for preliminary certification (attached). Also attached is a memo from Mark Hope who was the Solid Waste Division staff person involved with the Metro Yard Debris Program. It is staff opinion that the applicant fully intended to file request for preliminary certification and without the benefit of tax credits probably would not have established the facility. The Department has worked closely with the applicant on this project and staff is of the opinion that the intent of the law has been met.

4. Summation

- a. The facility was constructed on the basis of verbal preliminary certification for tax credit by Department staff. The Department believes that the intent of the law has been met.
- b. As required by ORS 468.165, the facility was under construction on or after January 1, 1973, and
 - (1) The substantial purpose of the facility is to utilize material that would otherwise be solid waste, by mechanical process; through the production, processing, or use of materials for their heat content or other forms of energy or materials which have useful chemical or physical properties;
 - (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. In addition, the Commission finds that the facility is necessary to assist in solving a severe or unusual solid waste problem; and the facility will provide a new or different solution to a solid waste problem than has been previously used.
- 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 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 \$174,720 with 100 percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1564.

R. L. Brown:b
(503) 229-5157
11-8-82
SB1523



Since 1932

McFarlane's Bark, Inc.

P.O. Box 338 • 13345 S.E. Johnson Rd., Clackamas, Oregon 97015, 774-1234 or 659-4240

September 10, 1982

State of Oregon
Department of Environmental Quality
522 S.W. 5th
Portland, Oregon 97207

Exhibit G

This letter is to advise you that McFarlane's Bark fully intended to apply for preliminary approval of tax credit. Preliminary discussions with Mark Hope of the Solid Waste Division lead us to believe that this financial assistance was available. The facilities were approved in concept by both DEQ and Metro staff as a first step in eliminating the need for back yard burning in the metro area. We proceeded to purchase a Hammermill grinder and John Deere loader based on the fact that we would have the benefits of a tax credit.

Our operations manager for this project was Leon Bobzein and he was responsible for all dealings with DEQ including completion of the preliminary certification forms. He left the project in mid-November 1981 and terminated in early December without advising us that the application was not completed and forwarded. When Kathleen McFarlane-Keene, (who assumed responsibility for the project in January), called the DEQ office in January 1982 to inquire about the status of the application, she was advised that it was not filed and it was too late because construction had already begun.

We respectfully request your consideration in accepting our application at this time.

Sincerely,

A handwritten signature in cursive script that reads "Patrick J. McFarlane".

Patrick J. McFarlane
Vice-President
McFarlane's Bark, Inc.

PM/mm

STATE OF OREGONDEPARTMENT OF ENVIRONMENTAL QUALITYINTEROFFICE MEMO

TO: Bob Brown

DATE: September 10, 1982

FROM: Mark Hope

SUBJECT: McFarlane's Tax Credit

Per our discussion of September 7, 1982, I am attaching a memo that documents my first visit to McFarlane's Bark Dust Co. A tax credit packet, i.e., information and application forms, was delivered to John McFarlane's associate at this time. The details of the solid waste tax credit program were discussed as being one form of assistance to help implement McFarlane's proposal for a full-scale yard debris recovery program.

ZC689

Attachment

cc: Yard Debris File

STATE OF OREGONDEPARTMENT OF ENVIRONMENTAL QUALITYINTEROFFICE MEMO

TO: File

DATE: July 29, 1981

FROM: Mark Hope, SWD

SUBJECT: McFarlane's Alternative to Backyard Burning

On July 20, 1981, I toured McFarlane, Inc.'s barkdust plant with John McFarlane, his son and one of his associates. It was interesting to learn that McFarlane is on the brink of developing a complete yard debris recovery system, i.e., a process to convert yard debris into a marketable product.

McFarlane, Inc., is a family business that began back in the 1930's to take bark waste from area mills and create a marketable product (hog fuel/landscaping material). Current economic conditions have forced McFarlane to look elsewhere for material (other than the lumber industry) in order to keep himself in business.

Regional Clearing, the contractor who processed Portland's ice storm debris, used a system similar to McFarlane's to produce a marketable product. Thus, we now have a proven technology for converting yard debris into a marketable product via shredding/chipping, composting and screening.

At this point, McFarlane's operation is sufficient to hog small material and screen it to produce several different variations of barkdust and soil amendment. To complete his system, McFarlane proposes to add a large chipper (hogger) to pre-process yard debris of all sizes and large pieces of processed wood waste at a capital investment of \$100,000-150,000. However, current economic conditions are making it extremely difficult to put together a financial package to acquire the primary chipper. Business loans at 20% discourage small businesses from making capital investments at this time.

Two incentives that would set favorable conditions for McFarlane to implement a full-scale yard debris recovery program are:

1. Approval of a tax credit for the capital investment of the large chipper and other necessary equipment as established by the state's ~~"Pollution Control Bonds"~~ "SOLID WASTE TAX CREDITS."¹⁶
2. Cooperation by Metro and local entities to regulate collection and flow of the material into a processing site. This could be accomplished through existing collection companies, neighborhood clean-up projects and Metro's proposed transfer station system.

McFarlane's Alternative to Backyard Burning

July 29, 1981

Page 2

Summary:

A company, McFarlane, Inc., exists in Clackamas, Oregon, that currently processes woody-vegetative material into a marketable product. This company is now stockpiling yard debris brought in by the public (as referred by Metro) and area landscapers without a tipping fee. McFarlane looks to developing an ongoing program to process yard debris into a marketable product while charging a nominal fee to the public to dump on site. Two obstacles for McFarlane to overcome in order to implement his proposals are capital investment and flow of the material to his site. Metro, prior to Spring Clean-Up, had originally contacted McFarlane on the possibility of using his process for the yard debris grant program. However, they have not followed up McFarlane's potential since the initial contact.

SC383

cc: Jim Herlihy, EPA
John Kowalczyk
Jack Weathersbee



STATE OF OREGON

INTEROFFICE MEMO

to WJF

TO: WHYoung
 cc: JAShaw
 MJDowns
 HMPatterson

FROM: CASplettstaszer

SUBJECT: Agenda Item C, Tax Credit Applications

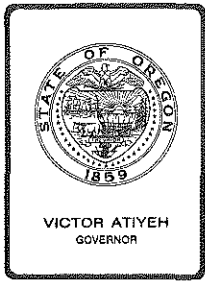
DATE: 11/29/82

Ray Potts, Air Quality Division, has requested that application T-1540, Tektronix, Inc., be withdrawn from the EQC agenda for Friday.

The Company originally stated that this facility had a life of five years. After further study, however, it appears the useful life is longer. Ray is going to rework his review of this project and it will appear on the EQC's January agenda.

Change your log!

State of Oregon
 DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
 NOV 29 1982
 AIR QUALITY CONTROL



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. D, December 3, 1982, EQC Meeting

Request for Authorization to Conduct a Public Hearing on Proposed Amendments to Pollution Control Bond Fund Rules for Sewerage Projects (OAR Chapter 340, Division 81)

Background

Existing rules regarding Pollution Control Bond Fund financial assistance for water pollution control facilities were enacted in 1971. At that time, use of the Bond Fund was to supplement federal grant funding. Rules were written to be consistent with federal grant rules and procedures.

In recent years, federal grant laws and rules have been substantially revised. Federal funding assistance has diminished. Project eligibilities have been modified and reduced.

The 1981 Legislature modified statutes to allow 100% loans on qualifying projects. This change recognized the need to disconnect the Bond Fund from the Federal Grant Program and provide some assistance to those cities that would not receive federal funds.

Following the 1981 legislative session, the bond fund rules have been modified by one permanent rulemaking action and the adoption of two temporary rules. These actions were intended to "get by" until the rules could be completely rewritten.

Evaluation and Alternatives

Two basic alternatives are available:

1. Make minor modifications to the existing rules to correct known problems and make the previously adopted temporary rules permanent; or
2. Repeal the existing rules and replace them with new rules designed to implement a loan program.

In order to clarify intended uses of the bond fund and clarify and simplify the application process, it is easiest to proceed with Alternative 2. Attachment I contains draft rules which would repeal the existing rules (OAR 340-81-005 to 050) and enact new rules. Following are the major topic areas and a brief discussion of significant issues:

PURPOSE

The purpose is essentially the same as the existing rules.

DEFINITIONS

Definitions are added for "Loan" and "Sewerage Facilities."

ELIGIBLE PROJECTS

Eligible projects are defined as "sewerage facilities" unless otherwise provided by law. This definition conveys basic intent and should minimize the need for rule changes in the event of legislative changes.

ELIGIBLE COSTS

Total project costs are defined as eligible unless otherwise provided by law. This definition conveys basic intent and should minimize the need for rule changes in the event of legislative changes.

NATURE AND LIMITATIONS OF FINANCIAL ASSISTANCE

This section limits financial assistance to loans unless otherwise approved by the Legislature or Emergency Board (pursuant to existing law). It further requires loans secured by other than General Obligation Bonds to be approved by the EQC. The other provisions are drawn from the existing rules.

PRELIMINARY REQUEST FOR FINANCIAL ASSISTANCE

The proposed rule requires public agencies desiring financial assistance to file a preliminary application on Department supplied forms. This is intended to standardize and organize the requests to the Department and facilitate management of the Bond Fund.

PRIORITIZATION OF PRELIMINARY APPLICATIONS

This section provides for prioritization of preliminary applications if potential demand is greater than the available funds. Otherwise, funding would be on a first-come, first-served basis.

PRIORITY POINT SCHEDULE

The proposed priority point calculation schedule emphasizes measures that reflect financial burden, financial need and the regulatory emphasis placed by the Department on the project.

LOAN AGREEMENT

The Loan Agreement is described in terms of a basic agreement with attachments to fill in details. Many of the documents requested were previously required as part of the application.

LOAN CLOSING

This section describes timing for loan closing and advancing of funds.

REJECTION OF APPLICATIONS

This section describes the basis for rejection of loan applications.

In general, the proposed new rules are intended to guide the use of the Bond Fund for sewerage facility financial assistance while, hopefully, leaving sufficient flexibility to react to potential changes without the need for rule modification.

Summation

1. Existing Bond Fund Rules adopted in 1971 to mesh with federal grant processes are now out of date and, as a result, unnecessarily restrict the use of the Bond Fund.
2. Two temporary rules have recently been adopted to correct problems and need to be made permanent.
3. Financial assistance opportunities for public agencies that are not likely to receive federal grants can be clarified and simplified by totally revising the present rules for use of bond fund monies for sewerage works construction.

Director's Recommendation

Based on the findings in the summation, it is recommended that the Commission authorize the Department to hold a public hearing to consider the adoption of revised rules for use of the bond fund for sewerage works construction (OAR 340-81-005 et. seq.) as set forth in Attachment I.



William H. Young

- Attachments: I. Proposed Rules
II. Statement of Need and Fiscal Impact Statement
III. Public Notice

H. L. Sawyer:g
229-5324
November 12, 1982

WG1742

STATE FINANCIAL ASSISTANCE
TO
PUBLIC AGENCIES
FOR
WATER POLLUTION CONTROL FACILITIES

REPEAL OF EXISTING RULES

OAR 340-81-005 through 81-050 are hereby repealed and the rules which follow are enacted in lieu thereof.

PURPOSE

340-81-100 The purpose of these rules is to prescribe procedures and requirements for obtaining state financial assistance for the construction of water pollution control facilities pursuant to Article XI-H of the Oregon Constitution and ORS 468.195 et.seq.

DEFINITIONS

340-81-105 As used in these rules, unless otherwise required by context:

- (1) "Commission" means the Environmental Quality Commission.
- (2) "Department" means the Department of Environmental Quality. Department actions shall be taken by the Director as defined herein.
- (3) "Director" means the Director of the Department of Environmental Quality as defined in ORS 468.040 and 468.045.
- (4) "Loan" means any advance of funds from the Pollution Control Fund to a Public Agency pursuant to a signed Agreement wherein the Public Agency obligates itself to repay the funds received in full together with accumulated interest in accordance with a schedule to be set forth in the Agreement. Purchase of qualifying General Obligation bonds from the Public Agency is the preferred method for securing a Loan from the Pollution Control Fund.
- (5) "Public Agency" means a municipal corporation, city, county, or agency of the State of Oregon, or combinations thereof, applying or contracting for state financial assistance under these rules.
- (6) "Sewerage Facilities" means facilities for the collection, conveyance, treatment, and ultimate disposal of sewage and includes collection sewers installed in public right-of-way, interceptor sewers, pumping stations and force mains, treatment works, outfall sewers, land treatment and disposal systems, sludge treatment, conditioning and disposal facilities, projects necessary to remove inflow and infiltration from sewer systems, and such other appurtenances as may be necessary to achieve an operable system for sewage treatment and disposal.

ELIGIBLE PROJECTS

340-81-110 Projects eligible to receive financial assistance under these rules shall be:

- (1) Sewerage Facilities as defined in OAR 340-81-105 unless otherwise provided by law, and
- (2) Self supporting and self liquidating from revenues, gifts, grants from the Federal Government, user charges, assessments, and other fees.

ELIGIBLE COSTS

340-81-115 Costs for planning, design, implementation, and construction, including essential land acquisition and related fiscal and legal costs may be included as eligible costs for projects receiving financial assistance unless otherwise provided by law. Costs shall be limited to those reasonable and necessary to complete an operable facility that will serve the projected population during the design life of the facility, consistent with the applicable Land Use Plan.

NATURE AND LIMITATIONS OF FINANCIAL ASSISTANCE

340-81-120 (1) Unless otherwise approved by the Legislature, Legislative Ways and Means Committee or Legislative Emergency Board, financial assistance shall be limited to Loans.

(2) Loans secured by means other than sale of General Obligation Bonds by the Public Agency shall be subject to approval by the Environmental Quality Commission.

(3) Loans shall not exceed 100 percent of the eligible project cost. In the event the project receives grant or loan assistance from any other sources, the total of such assistance and any loan provided from the Pollution Control Fund shall not exceed 100 percent of eligible costs.

(4) The loan interest rate paid by the Public Agency shall be equal to the interest rate on the state bonds from which the loan is made, except as provided in sections (5) and (6) of this rule.

(5) The Department shall add to the rate of interest otherwise to be charged on loans a surcharge not to exceed an annual rate of one-tenth of one percent to be applied to the outstanding principal balances in order to offset the Department's expenses of administering the loan and the Pollution Control Fund.

(6) The Department may assess a special Loan processing fee of up to \$10,000 to recover extraordinary costs for legal and financial specialists that may be needed to enable the Department to satisfy itself that the Loan is legally and financially sound.

(7) The Public Agency must retire its debt obligation to the state at least as rapidly as the state bonds from which the loan funds are derived are to be retired; except that special debt service requirements on the Public Agency's loan may be established by the Department when (a) a debt requirement schedule longer than the state's bond repayment schedule is legally required, or (b) other special circumstances are present.

(8) Interest and principal payments shall be due at least thirty days prior to the interest and principal payment dates established for the state bonds from which the loan is advanced.

(9) Any excess loan funds held by the Public Agency following completion of the project for which funds are advanced shall be used for prepayment of loan principal and interest.

PRELIMINARY REQUEST FOR FINANCIAL ASSISTANCE

A340-81-125 (1) Public agencies desiring to receive financial assistance from the Department shall file a preliminary application on forms supplied by the Department. This application will set forth:

(a) A description of the project for which funding assistance is desired.

(b) A description of the pollution control problem that the project will assist in resolving.

(c) The estimated cost of the project.

(d) The schedule for the project including the schedule for a bond election if one is necessary.

(e) The funding sources for the project.

(f) The method for securing the loan being required from the Department.

(g) Such other information as the Department deems necessary.

(2) Preliminary applications may be filed with the Department at any time.

(3) The Department may give notice of intent to receive preliminary applications by a date certain in order to prepare a priority list if such list becomes necessary to allocate anticipated available funds.

PRIORITIZATION OF PRELIMINARY APPLICATIONS

340-81-130 (1) If it appears that the potential requests for financial assistance may exceed the funds available, the Department shall notify potential applicants of the deadline for submitting preliminary applications to receive consideration in the prioritization process. Such prioritization will generally occur no more frequently than once per year. To the extent possible, the prioritization process will be completed in February in order to mesh with local budget processes and facilitate project initiation during favorable construction weather.

(2) The process for prioritization shall be as follows:

(a) Each project shall be assigned points based on the schedule contained in OAR 340-81-135.

(b) Projects shall be ranked by point total from highest to lowest with the project receiving the highest points being the highest priority for funding assistance. A fundable list shall then be established based on available funds.

(c) The Department shall notify each Public Agency within the fundable range on the list and forward a draft Loan Agreement for review, completion, and execution.

(d) If the loan agreement is not completed, executed, and returned to the Department within 60 days of notification, the Public Agency's priority position for funding assistance during that year shall be forfeited, and the funds made available in order of priority to projects below the fundable line on the list. The 60-day time limit may be extended by the Department upon request of the applicant with a demonstration of need to complete required legal and administrative processes.

(3) If funds remain after all qualifying applications on the list are funded, the Department may fund new requests from qualifying applicants on a first come-first serve basis.

PRIORITY POINT SCHEDULE

340-81-135 The priority points for each project shall be the total of the points assigned for each of the following categories:

(1) Total locally funded share of project cost per capita based on design population--priority points will be the per capita cost divided by 100 rounded to two decimal places.

(2) Outstanding general obligation bonded indebtedness for the Public Agency per capita for drinking water and sewerage facilities (excluding Bancroft Bonds) that is being repaid by Ad Valorem taxes--priority points will be the per capita debt divided by 100 rounded to two decimal places.

(3) Monthly sewer user charge--priority points will be the monthly charge for a single family residence.

(4) Water pollution control regulatory emphasis--priority points will be the point value for regulatory emphasis as set forth in OAR 340-53-015 (Table 1) divided by 5 rounded to two decimal places.

EXECUTION OF LOAN AGREEMENT

340-81-140 (1) The loan agreement shall at a minimum specify:

- (a) The specific purpose for which funds are advanced.
- (b) The security to be provided.
- (c) The schedule for payment of interest and principal.
- (d) The source of funds to be pledged for repayment of the loan.
- (e) The additional approvals that must be obtained from the Department prior to advance of funds or start of construction.

(2) The loan agreement shall have as attachments the following:

- (a) A list of general Assurances and Covenants as approved by the Attorney General.
- (b) An official resolution or record of the Public Agency's governing body authorizing the loan agreement and authorizing an official of the Public Agency to execute all documents relating to the loan.
- (c) A legal opinion of the Public Agency's attorney establishing the legal authority of the public agency to incur the indebtedness and enter into the loan agreement.
- (d) Copies of ordinances pertinent to the construction, operation, and loan repayment for the project and the Public Agency's total sewerage facility including relevant user charges, connection charges, and system development charges.
- (e) A 5-year projection of revenues and expenditures related to the construction, operation and debt service for the project and the Public Agency's total sewerage facility which assures that the project is self-supporting and self-liquidating.

LOAN CLOSING

340-81-150 (1) Upon final signature of the Loan Agreement by both the Public Agency and the Department, funds will be advanced in accordance with the terms of the Loan Agreement.

(2) The Department may schedule final signature and advancement of funds as necessary to coordinate with the schedule for state bond sales.

REJECTION OF APPLICATIONS

340-81-160 (1) The Department may reject any loan application if:

(a) The security proposed is judged to be inadequate to protect the State's interest, or the project does not appear to be conservatively self-supporting and self-liquidating from revenues, gifts, grants from the Federal Government, user charges, assessments, and other fees.

(b) The project does not comply with the requirements of ORS Chapters 454 or 468 and rules adopted by the Environmental Quality Commission pursuant to these chapters.

(2) Any action by the Department to deny an application may be appealed to the Environmental Quality Commission.

WL2126

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(2), this statement provides information on the intended action to adopt a rule.

LEGAL AUTHORITY AND PRINCIPAL DOCUMENTS RELIED UPON:

Oregon Constitution Article XI-H

ORS 468.195 et. seq.

OAR 340-81-005 et. seq.

NEED FOR THE RULE:

Existing rules regarding use of Pollution Control Bond Funds for construction of sewerage facilities were adopted in 1971 based on then existing federal grant assistance. Federal grant programs have been significantly modified. As a result, loans from the Bond Fund are unnecessarily restricted. The Department proposes to disconnect the use of the Bond Fund from the Federal Grant Program and clarify the procedures for local governments to follow to obtain loans from the fund.

FISCAL IMPACT STATEMENT

The fiscal impact of this proposed rulemaking upon the Department is minimal and a function of the amount of bond fund money available and the number of loans processed. The surcharge on interest already implemented pursuant to Chapter 312, Oregon Laws 1981 should cover Department administrative costs.

The fiscal impact upon local governments constructing sewerage facilities should be positive. Financial assistance through slightly lower interest rate money will aid in financing needed facilities.

There should be no impact on small business. However, increase sewerage facility construction activity may benefit them as contractors and material suppliers.

WG1745

October 12, 1982

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

Sewerage Facility Financing Public Hearing

Date:

WHO IS AFFECTED: Public agencies in Oregon who seek financial assistance from the Pollution Control Bond Fund for sewerage facility construction.

WHAT IS PROPOSED: Revisions to Oregon Administrative Rules Chapter 340, Division 81 "Financial Assistance to Public Agencies for Pollution Control Facilities".

Current rules were adopted in 1971 and were developed around Federal Grant procedures that were in effect at the time. Limited amendments have been adopted to respond to new laws, but a complete updating of rules is now necessary. The Department proposes to repeal the existing rules in their entirety and enact new rules in their place.

WHAT ARE THE HIGHLIGHTS:

Proposed rules would disconnect the bond Fund Financial Assistance Program from the Federal Sewerage Works Construction Grant Program, revise the definition of eligible projects and eligible costs, simplify Loan Application and Loan Agreement procedures, and establish a procedure for prioritizing loan applications.

HOW TO COMMENT: Public Hearing

Written comments should be sent to the Department of Environmental Quality, P. O. Box 1760, Portland, Oregon 97207 and should be received by 5 p.m. January 11, 1983.

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

Date: January 11, 1983
 Time: 10 a.m.
 City: Portland, Oregon
 Location: DEQ Conference Room
 Room 1400
 Yeon Building
 522 S.W. Fifth Avenue



P.O. Box 1760
 Portland, OR 97207

8/10/82

WG1744

October 12, 1982

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-7813, and ask for the Department of Environmental Quality.

WHERE TO OBTAIN ADDITIONAL INFORMATION:

Copies of the proposed rules may be obtained from:

DEQ Water Quality Division
P. O. Box 1760
Portland, Oregon 97207

Phone: (503) 229-6493

LEGAL REFERENCES IN THIS PROPOSAL:

Oregon Constitution -- Article XI-H
Oregon Revised Statutes 468.195 et. seq.
Oregon Administrative Rules Chapter 340, Division 81.

LAND USE CONSISTENCY

The proposed rule does not affect land use as defined in the Department's coordination program approved by the Land Conservation and Development Commission. The rule relates to financial assistance to public agencies for construction of sewerage facilities that are consistent with land use plans.

Considering the reduced availability of federal grant funds, the revised rules should increase assistance to local governments as they seek to construct essential sewerage facilities in conformance with their local land use plans.

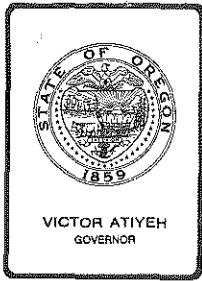
WHAT IS THE NEXT STEP:

After the public hearing, the Environmental Quality Commission may adopt rules identical to those proposed, adopt modified rules on the same subject matter, amend the proposed rule or decline to act. The Commission deliberation should come after the public hearing as part of the agenda of a regularly scheduled meeting following the hearing.

A Statement of Need and Fiscal Impact Statement are attached to this notice.

WG1744

October 12, 1982



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. E, December 3, 1982, EQC Meeting

Request for Authorization to Conduct A Public Rulemaking Hearing for:

- (1) Modifying Geographic Regional Rule OAR 340-71-400(2) for the General North Florence Aquifer, and
- (2) Establishing Special Water Quality Protection for Clear Lake and its Watershed by Adding a Special Protection Clause to the Mid Coast Basin Water Quality Management Plan [(OAR 340-41-270)(1)] and establishing a Moratorium on New On-Site Waste Disposal Systems [(OAR 340-71460(6)(f))].

Background and Problem Statement

In July 1979, DEQ supported a Lane County request for funding to undertake a Section 208 planning study on the North Florence Dunal Aquifer (208 Study). The purpose of the project was to determine the existing and potential sources of contaminants affecting the aquifer's beneficial uses and develop an aquifer protection plan to provide for these uses.

By September 1980, sufficient preliminary data had been gathered to indicate that development pressures were posing a threat to both groundwater and Clear Lake, the Heceta Water District's source of supply. Based on the EQC's Interim Groundwater Protection Policy adopted April 18, 1980, the Department provided Lane County with a policy guidance statement restricting development. Upon review of these actions, the EQC felt a more permanent control program should be implemented to protect the aquifer.

On December 19, 1980, the EQC adopted a Geographic Area Rule [OAR 340-71-400(2)] restricting septic tank development over the North Florence Dunal Aquifer. The primary purpose for enacting this Rule was to provide interim protective measures pending completion of the 208 Study.

In June 1982, the 208 Study was completed. Attachment J contains the analysis and findings of the study. In summary, it showed that:

1. The North Florence Dunal Aquifer contains two hydrologically distinct units; the General North Florence Aquifer, and the Clear Lake Watershed.
2. The primary contaminant of impact to drinking water quality in the North Florence Dunal Aquifer is nitrate-nitrogen ($\text{NO}_3\text{-N}$). The primary source of this contaminant is septic tank effluent.
3. Separate control strategies are required to protect the two hydrologically distinct aquifer units:
 - a. The General North Florence Aquifer can accommodate loadings of 58 pounds of $\text{NO}_3\text{-N}$ per acre per year without increasing the $\text{NO}_3\text{-N}$ concentrations in the underlying aquifer beyond the 5.0 mg/l $\text{NO}_3\text{-N}$ planning guideline specified in the EQC Groundwater Quality Protection Policy. The 208 Study determined that on the average 20 lbs $\text{NO}_3\text{-N}$ per acre is contributed annually to the aquifer. This loading rate is equivalent to 2.8 single family dwelling units per acre. The area is therefore not up to its saturation density.
 - b. The Clear Lake Watershed, which provides recharge to Clear Lake, can accommodate an average loading of 170 pounds of $\text{NO}_3\text{-N}$ per year within the entire watershed without impacting the quality of Clear Lake. The Clear Lake Watershed is comprised of approximately 1040 acres and has 79 parcels of land, ranging in size from large holding acreages to urban sized lots in the Collard Lake Heights Subdivision. Twenty-nine of the 79 parcels have been improved. At full occupancy, these generate a $\text{NO}_3\text{-N}$ loading in excess of the 170 pounds maximum recommended in the 208 Study. Clear Lake is still pristine but it is marginally oligotrophic. This means it is near the threshold upon which nutrient levels will support additional algal and aquatic vegetative growth.
4. Clear Lake is the sole source of potable water for the Heceta Water District. The District also, by contract sales, provides about 30 percent of Florence's water. Clear Lake has the potential to supply upwards of 2,000,000 gallons of water per day. Currently only chlorination is provided after withdrawal from the Lake.
5. There are several nutrient factors affecting algal production in lakes, including the major nutrients phosphorus, nitrogen and carbon. Unlike most lakes which are phosphorus limited, pristine lakes are often nitrogen limited. Clear Lake has adequate phosphorus and carbon for algal growth, but insufficient nitrogen. In the event $\text{NO}_3\text{-N}$ levels in Clear Lake should increase to a point where they would

support increased algal growth, either water treatment facilities or new well fields would have to be developed to accommodate domestic water supplies. Current $\text{NO}_3\text{-N}$ levels in Clear Lake average 0.05 mg/l. *

6. The 208 Study listed two alternatives for the Clear Lake Watershed; (A) the first would retain Clear Lake as a pristine domestic water supply by not allowing any new $\text{NO}_3\text{-N}$ sources and reducing existing $\text{NO}_3\text{-N}$ sources within the Clear Lake Watershed Boundaries; and (B) the second called for applying the EQC Groundwater Protection Policy of 5.0 mg/L $\text{NO}_3\text{-N}$ guideline (58 lbs. $\text{NO}_3\text{-N}$ per acre per year) to protect the aquifer in recognition that Clear Lake would be allowed to degrade and drinking water treatment facilities or alternate waters supplies would have to be developed.

The 208 Study was presented at numerous public hearings conducted by the Florence Planning Commission, the Florence City Council, and the West Lane Planning Commission. The City of Florence and the West Lane Planning Commission subsequently sent resolutions (Attachment F) to the Lane County Board of Commissioners requesting that actions be taken to protect the North Florence Dunal Aquifer, with special emphasis on the Clear Lake Watershed. The Lane County Board of Commissioners conducted a public hearing on October 27, 1982, regarding the resolutions and the recommendations of the 208 Study. Upon completion of the hearing, the Commissioners unanimously adopted an Order (Attachment F) which:

- a. Established a moratorium of local jurisdiction dealing with land division and construction within the Clear Lake Watershed;
- b. Petitioned the Environmental Quality Commission to amend OAR 340-71-400(2) in accordance with the findings and recommendations of the 208 Study.

A public hearing was conducted by the Board of Directors of the Lane Council of Governments on October 28, 1982. The Board accepted the 208 Study and endorsed the actions taken by the Board of County Commissioners on October 27, 1982.

* Nitrate levels were tested using the EPA approved "Cadmium Reduction Method" with azo dye formation and colorimetric reading. Standard procedures were supplemented with Bausch and Lomb test kit determinations (also a cadmium reduction method) following calibration of the test kits. Nitrate concentrations were recorded to ± 0.005 mg/L with an accuracy of ± 0.01 mg/L.

Based on the above, it appears that the current Geographic Area Rule, OAR 340-71-400(2), may not be adequate to protect the pristine quality of Clear Lake; and may be overly restrictive for those areas outside the Clear Lake Watershed Boundaries. To address this matter, the Department is requesting authorization to conduct a public rulemaking hearing to (1) modify the existing Geographic Area Rule; (2) establish special water quality protection for Clear Lake and its watershed; and (3) establish a moratorium on new On-Site Sewage Disposal Systems for those lands located within the Clear Lake Watershed Boundaries.

The Commission has statutory authority to act on rules under the provisions of ORS 454.625, which authorizes the EQC to adopt rules it considers necessary for the purpose of regulating subsurface sewage disposal; ORS 454.685, which authorizes the Commission to issue orders limiting or prohibiting subsurface sewage and alternative disposal systems; and ORS 468.020 which authorizes the Commission to enact such rules as are necessary to perform the functions vested by law to the Commission.

Alternatives and Evaluation

A. Clear Lake Watershed

The existing Water Quality Management Plan for the Mid Coast Basin generally recognizes public water supply as a beneficial use to be protected. Water quality standards were established to protect the fresh waters for use as a drinking water supply after normal drinking water treatment by filtration and disinfection. The 208 Study proposes to protect Clear Lake for use as a drinking water source with only disinfection for treatment. To avoid the need for filtration, strict control of nutrient levels to prevent algal growth is necessary.

In essence, the request from the local governments is to recognize the extraordinary use of "unfiltered public water supply." The alternatives are to (1) continue the existing level of protection, which will allow some deterioration in water quality of the lake, or (2) establish the extraordinary protection level requested. These alternatives are discussed further below.

Alternative 1

Continue to rely upon existing water quality rules, local land use regulations and DEQ on-site sewage disposal rules to adequately protect the beneficial uses of the Clear Lake Watershed.

Evaluation

Current land use regulations and DEQ on-site sewage disposal rules are adequate to protect the direct beneficial uses of groundwater within the Clear Lake Watershed. There are, however, many unregulated and generally uncontrollable pollution sources that simply are associated

with man's activities and/or development practices that affect lake water quality. Examples of these types of activities that can result in "indirect", but significant pollution sources to the lake include: landscaping and fertilization practices, land clearing and natural vegetation removal, forestry practices, agricultural practices, and recreational activities.

The 208 Study showed that if Clear Lake is to be maintained as a pristine source where only chlorination is required prior to its use as a public water supply, then these "indirect" pollution sources must also be addressed and controlled. Since current land use regulations and DEQ on-site sewage disposal rules, cannot in themselves attain this level of control, the Department does not recommend this alternative.

Alternative 2

Establish special water quality protection for Clear Lake and its watershed by adding a special protection clause to the Mid Coast Basin Water Quality Management Plan and establish a Moratorium on new on-site sewerage systems within the Clear Lake Watershed.

Evaluation

The protection of the Clear Lake Watershed as a pristine source of domestic water supply requires that a comprehensive management approach be implemented. The adoption of a special protection clause for the Mid Coast Basin WQMP (OAR 340-41-270) affords the Department the opportunity to specify policy and program directions needed to provide adequate protection.

Lane County local government entities have held numerous public hearings on the 208 Study, and have unanimously supported adoption of a policy that will protect Clear Lake as a pristine source of domestic water supply. Current land use regulations and DEQ on-site sewage disposal rules can only take actions to limit new developments or activities which could impact Clear Lake. They are inadequate to resolve past actions or activities which are currently overloading the Clear Lake watershed with nutrients which, over time, will adversely impact the quality of Clear Lake.

In regard to enactment of a moratorium rule, the local and county governments of Lane County are on record as to their intent to maintain Clear Lake as a pristine domestic water supply source. In addition, they have petitioned the EQC to take action to pass a moratorium rule.

Review of ORS 454.685 also shows that the 208 Study and the Lane Board of Commissions' Findings of Fact satisfactorily address all factors required under ORS 454.685(2)(a thru k) for the Commission to issue a moratorium order. If the Commission should authorize this alternative, it should be

recognized that this action by itself is only part of the final solution. The primary result of a moratorium would be to delay further degradation of Clear Lake. Lane County staff acknowledges this and have committed to continuing work to identify methods to reduce the annual loading of $\text{NO}_3\text{-N}$ to the Clear Lake Watershed to the 170 pounds annual loading rate recommended in the 208 Study. Their commitment is supported by the land use resolutions passed by the Florence City Council; the West Lane Planning Commission; and the land use restrictions ordered by the Lane County Board of Commissioners in the Clear Lake Watershed.

Based on the local government requests, evaluation of the 208 Study, and the stated intent to maintain and preserve the quality of Clear Lake, the Department supports this alternative because it provides a comprehensive method for protecting Clear Lake.

B. General North Florence Dunal Aquifer (Excluding the Clear Lake Watershed)

Alternative 1

Repeal the current Geographic Area Rule, OAR 340-71-400(2), and in the future rely upon the "standard rules" pertaining to subsurface sewage and alternative disposal systems contained in OAR 340-71-100 through 71-600, to adequately protect the beneficial uses of the General North Florence Dunal Aquifer (Excluding the Clear Lake Watershed).

Alternative 2

Retain the current Geographic Area Rule, OAR 340-71-400(2), as a means to protect the beneficial uses of the General North Florence Dunal Aquifer (excluding the Clear Lake Watershed).

Evaluation of Alternative 1 and 2

If enacted, either of these alternatives would be adequate to protect the beneficial uses of the General North Florence Aquifer, as $\text{NO}_3\text{-N}$ concentrations in the underlying aquifer would not be impacted beyond the 5.0 mg/L $\text{NO}_3\text{-N}$ Planning Guideline specified in the EQC Groundwater Protection Policy. Alternative 1 basically would limit development densities to a 2.0 dwelling unit equivalent per acre over the entire General North Florence Aquifer. Alternative 2 would continue to restrict development even further, as it currently varies from not allowing any new land partitions or subdivisions in some areas, to allowing development densities of 2.0 dwelling unit equivalents per acre in others. The 208 Study showed that as long as

NO₃-N loadings were limited to a loading rate of 58 pounds of NO₃-N per acre per year, the underlying aquifer on the average would not exceed a NO₃-N concentration of 5.0 mg/L. The 58 pound NO₃-N annual loading rate per acre is approximately equivalent to a development density of 2.8 dwelling unit equivalents per acre.

The Department does not recommended either of these alternatives as the 208 Study indicates they are overly restrictive.

Alternative 3

Modify the existing Geographic Area Rule, OAR 340--71-400(2), for those lands outside the Clear Lake Watershed Boundaries to recognize the results of the 208 Study.

Evaluation

This alternative is based primarily on the technical findings of the 208 North Florence Dunal Aquifer Study. By modifying the existing Geographic regional Rule in accordance with the technical findings of the 208 Study, current restrictions on development and development densities would be significantly relaxed with no adverse impacts to the aquifer. The 208 Study indicates that these areas could be developed by using on-site sewage disposal systems with a loading rate of 58 pounds of NO₃-N per acre per year and the aquifer will not be impacted beyond a 5.0 mg/L NO₃-N concentration. If a modified rule were enacted, it would provide a significant conservation of available land resources for future developments by allowing greater densities in most areas and by eliminating the current restrictions on no new land partitionings and subdivisions in others. Based on review of the 208 Study, the Department recommends this alternative.

Summation

1. In July 1979, DEQ provided funding to Lane County to undertake a comprehensive Section 208 Planning Study on the North Florence Dunal Aquifer.
2. On December 19, 1980, the EQC adopted a Geographic Area Rule for the lands overlaying the North Florence Dunal Aquifer to provide interim protective measures until the 208 Study was completed.
3. The 208 Study was completed in June 1982, and shows that:
 - a. The North Florence Dunal Aquifer contains two hydrologically distinct units; the General North Florence Aquifer, and the Clear Lake Watershed.

- b. The primary contaminant impacting drinking water quality in the North Florence Dunal Aquifer is $\text{NO}_3\text{-N}$. The chief source is septic tank effluent.
 - c. Separate control strategies are needed to protect the two hydrologically distinct aquifer units.
 - d. The General North Florence Aquifer can be protected by modifying the existing Geographic Area Rule to allow developments which do not exceed loading rates of 58 pounds of $\text{NO}_3\text{-N}$ per acre per year.
 - e. Clear Lake can be maintained as a pristine domestic water supply source provided current loadings of $\text{NO}_3\text{-N}$ to the Clear Lake Watershed from all sources above background are reduced to a maximum of 170 pounds of $\text{NO}_3\text{-N}$ per year.
4. The findings and recommendations of the 208 Study were presented at public hearings held by the Florence Planning Commission and City Council; and the West Lane Planning Commission. In September 1982, the City of Florence and West Lane Planning Commission adopted resolutions requesting modification of the existing Geographic Area Rule in accordance with the 208 Study recommendations, and actions taken to preserve and maintain Clear Lake as a pristine domestic water supply source.
 5. The Lane County Board of Commissioners conducted a public hearing on October 27, 1982, regarding the findings and recommendations of the 208 Study; the resolutions from the City of Florence; and the recommendations from the West Lane Planning Commission. Upon completion of the hearing, they unanimously adopted an order which established a moratorium on new development within the Clear Lake Watershed and petitioned the EQC to amend the existing Geographic Area Rule in accordance with the 208 Study recommendations.
 6. The Lane Council of Governments Board of Directors, at its October 28, 1982 meeting, reviewed the North Florence Dunal Aquifer Study. The Board formally accepted the June 1982 Final Report and endorsed the actions taken by the Lane County Commissioners on October 27, 1982, to protect the aquifer.
 7. Department review of the 208 Study and the resolutions and petitions from Lane County governmental bodies indicate the Commission should act on separate alternatives for the Clear Lake Watershed and the General North Florence Aquifer.

A. Clear Lake Watershed Alternatives:

- (1) Continue to rely on existing Water Quality Rules, local land use and DEQ On-Site Sewage Disposal Rules to protect beneficial uses of the Clear Lake Watershed.
- (2) Establish special water quality protection for Clear Lake and its watershed by adding a special protection clause to the Mid Coast Basin Water Quality Management Plan; and establish a moratorium rule on new on-site waste disposal systems.

B. General North Florence Aquifer Alternatives:

- (1) Repeal the current Geographic Area Rule, and in the future rely on the "standard" On-Site Sewage Disposal Rules to adequately protect the drinking water supplies of the North Florence Area.
- (2) Maintain the current Geographic Area Rule to protect the drinking water supplies of the North Florence Area.
- (3) Modify the current Geographic Area Rule for those lands outside the Clear Lake Watershed Boundaries to recognize the results of the 208 Study.

8. The Department recommends alternatives 7.A.(2) and 7 B.(3) above as they are based on the technical findings of the 208 Study and support local government's intent to maintain and preserve Clear Lake as a pristine domestic water supply. Specific rule language to implement these alternatives is contained in Attachments C., D. and E.

Director's Recommendation

Based on the Summation, it is recommended that the Commission authorize the Department to conduct a public rulemaking hearing to take testimony on:

1. Whether to establish special water quality protection for Clear Lake and its watershed by adding a special protection clause to the Mid Coast Basin Water Quality Management Plan (OAR 340-41-270) as set forth in Attachment D, and establish an on-site sewage disposal moratorium area (OAR 340-71-460(6)(f) for those lands within the Clear Lake Watershed Boundaries of the North Florence Dunal Aquifer as set forth in Attachment E.

2. Whether to modify the current Geographic Regional Rule 340-71-400(2), for those lands overlaying the North Florence Dunal Aquifer that are located outside of the Clear Lake Watershed Boundaries as set forth in Attachment C.

Bill

William H. Young

Attachments: 10

- ATTACHMENT A Draft Statement of Need for Rulemaking
ATTACHMENT B Draft Hearing Notice
ATTACHMENT C Proposed New Geographic Rule, OAR 340-71-400(2)
ATTACHMENT D Proposed Water Quality Management Plan Rule, OAR 340-41-270
ATTACHMENT E Proposed Moratorium Area Rule, OAR 340-71-460(6)(f)
ATTACHMENT F Lane County Board of commissioners Order 81-10-27-10 dated 10/27/82, including but not limited to the following exhibits:
- North Florence Dunal Aquifer Study, June 1982, Exhibit A (copy not attached - available in DEQ Portland and Salem offices).
 - City of Florence Resolution #108, Exhibit B
 - West Lane Planning Commission Resolution WLPC 82-8, Exhibit C
 - A tax lot map depicting the Clear Lake Watershed and Findings of Fact in support of Order 81-10-27-10, Exhibit D
- ATTACHMENT G EPA review letter of the North Florence Dunal Aquifer Stud of 10/12/82
ATTACHMENT H Lane County Council of Governments review letter of 11/4/81
ATTACHMENT I State Department of Water Resources review letter of 8/4/82
ATTACHMENT J 208 Study Findings.

John E. Borden:1
378-8240
November 17, 1982
TL2106

STATEMENT OF NEED FOR RULEMAKING

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

LEGAL AUTHORITY

ORS 454.625 and ORS 454.685

NEED FOR THE RULES

Septic tank development on lands overlaying the North Florence Dunal Aquifer in Lane County, is currently regulated by Geographic Regional Rule OAR 340-71-400(2). In June 1982, a comprehensive 208 North Florence Dunal Aquifer study was completed, and the recommendations and findings were adopted by Lane County. The study showed the current regional rule appears overly restrictive on those portions of land outside the Clear Lake Watershed Boundaries of the North Florence Dunal Aquifer. The study also showed the current rule is not adequate to protect the drinking water quality of Clear Lake, and additional protective measures (restrictions) are needed on those lands within the Clear Lake Watershed Boundaries of the North Florence Dunal Aquifer if Clear Lake is to be maintained as a pristine source of domestic water supply.

PRINCIPAL DOCUMENTS RELIED UPON IN THIS RULEMAKING

1. North Florence Dunal Aquifer Study, Final Report, June 1982
2. Lane County Board of Commissioners Order No. 82-10-27-10, dated October 27, 1982
3. West Lane Planning Commission Resolution No. WLPC 82-8, dated September 22, 1982
4. Florence City Council Resolution No. 108, dated September 14, 1982
5. U.S. Environmental Protection Agency Review Letter on the North Florence Dunal Aquifer Study dated October 12, 1982
6. State of Oregon, Department of Water Resources Review Letter on the North Florence Dunal Aquifer Study dated August 4, 1982
7. Lane Council of Governments Review Letter on the North Florence Dunal Aquifer Study dated November 4, 1982

FISCAL AND ECONOMIC IMPACT

The proposed modification of the current Geographic Regional OAR 340-71-400(2) for those lands outside the Boundaries of the Clear Lake Watershed of the North Florence Dunal Aquifer should clearly result in a positive fiscal and economic impact as development restrictions in these areas will be significantly relaxed. Thus, small business should be benefited.

The proposed Water Quality Management Plan Rule, OAR 340-41-270; and Moratorium Rule OAR 340-71-460(6)(f), for those lands within the Boundaries of the Clear Lake Watershed of the North Florence Dunal Aquifer would result in both positive and negative fiscal and economic impacts. On the positive side, the rules are being proposed to stop degradation of Clear Lake, a major domestic water supply source for the Florence area of Lane County. If degradation continues, either costly water treatment facilities or alternative sources of water supplies will have to be developed. As such, the rules have a positive impact, in that Clear Lake can continue to support and supply current and future development needs with a dependable, relatively low-cost source of domestic water supplies. On the negative side, landowners within the Clear Lake Watershed could no longer rely on development of individual septic tank systems for sewage disposal. Their alternatives may involve obtaining easements for disposal of their sewage outside the Clear Lake Watershed Boundaries by either individual or community systems. The cost for this alternative compared to development of an individual on-site sewage disposal system can be expected to be significantly higher. Other activities such as land clearing, forest practices, agricultural practices, and recreational activities may also be affected by additional controls. The proposed rules for the Clear Lake Watershed should have no significant impact on small businesses.

LAND USE CONSISTENCY

The proposed rules appear to affect land use and to be consistent with statewide planning goals.

The proposed rules relate primarily to Goals 5, 6, 10, 11, and 18.

With regard to Goal 6 (air, water, and land resource quality), the purpose of the proposed rules is to establish guidance for the protection of the quality of the North Florence Dunal Aquifer and Clear Lake for current and future drinking water supplies by preventing and controlling pollution from waste disposal activities.

With regard to Goal 11 (public facilities), the proposed rules may necessitate construction of community sewers on those lands within the Boundaries of the Clear Lake Watershed of the North Florence Dunal Aquifer to accommodate planned densities and protect the quality of Clear Lake for future drinking water supplies.

The rules does not appear to conflict with other goals.

Public comment on any land use issue involved is welcome and testimony may be submitted in the same manner as indicated in the public notice of hearing.

It is requested that local state, and federal agencies review the proposed rules 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 appropriate conflicts brought to our attention by local, state, or federal authorities.

JEB:1
TL2107

DRAFT

NOTICE OF PUBLIC HEARING

(Date)

WHO IS AFFECTED: Residents of Lane County in or near Florence, Oregon especially those which reside or own property north of Florence or near Clear Lake.

WHAT IS PROPOSED: The Department of Environmental Quality is proposing to change the present rules which restrict subsurface sewage disposal along with Florence Dunal Aquifer and the general water quality rules for the Mid-Coast Basin. The proposed rules relax the septic tank installation restrictions directly north of Florence, Oregon, but would prohibit septic tank installation and require low polluting land and water management practices in the Clear Lake Watershed.

WHAT ARE THE HIGHLIGHTS: #

SPECIAL CONDITIONS: #

HOW TO COMMENT: PUBLIC HEARING

The DEQ will hold a public hearing on the proposed rules at:

(TIME)
(DATE)
(PLACE)

Both oral and written comments will be accepted. Written comments can also be sent to the Department of Environmental Quality, ATTN: Florence Dunal Rules, 895 Summer Street NE, Salem, Oregon 97310. Written comments must be postmarked by _____ to be included in the hearing record.

WHAT IS THE NEXT STEP: #

NOTICE OF PUBLIC HEARING

(DATE)

Page 2

WHERE TO OBTAIN ADDITIONAL INFORMATION: Copies of the proposed rule changes for the Florence Dunal area may be obtained from:

Department of Environmental Quality
895 Summer Street NE
Salem, Oregon, 97310
(503) 378-8240

(or)

Department of Environmental Quality
Water Quality Division
P. O. Box 1760
522 SW Fifth Avenue
Portland, OR 97207
(503) 229-6065

FINAL ACTION: Final action on these proposed rule changes will be taken by the Environmental Quality Commission subsequent to the scheduled public hearing. An additional public hearing before the Commission is not anticipated.

LAND USE CONSISTENCE: The Lane County Board of Commissioners have taken formal action to request the proposed rule change. Citation of authority, statement of need, a statement of fiscal and economic impacts, and the detailed land use consistency statement are available from the DEQ, 895 Summer Street NE, Salem, Oregon 97310.

JAG:k
11/18/82

PUBN.H (8/82)
FK1461

Proposed Rule Amendment to Geographic Areas Considerations Rule,
OAR 340-71-400(2)

All the current language in OAR 340-71-400(2) is hereby deleted and an amended OAR 340-71-400(2) is adopted as follows:

OAR 340-71-400 (Geographic Area Special Considerations)

(2) General North Florence Aquifer, North Florence Dunal Aquifer area,
Lane County

(a) Within the area set forth in subsection 340-71-400(2)(b), the agent may issue construction permits for new on-site sewage disposal systems or favorable reports of evaluation of site suitability to construct individual or community on-site sewage disposal systems under the following circumstances:

(A) The lot and proposed system shall comply with all rules in effect at the time the permit or favorable report of site suitability is issued; or

(B) The lot and proposed system complies with paragraph 2(a)(A) of this rule, except for the projected daily sewage loading rates, and the system in combination with all other previously approved systems owned or legally controlled by the applicant shall be projected by the Department to contribute to the local groundwater not more than fifty-eight (58) pounds nitrate-nitrogen (NO₂-N) per year per acre owned or controlled by the applicant.

b. Subsection (2)(a) of this rule shall apply to all of the following area hereby known as the General North Florence Aquifer of the North Florence Dunal Area and is defined by the hydrologic boundaries identified in the June 1982, 208 North Florence Dunal Aquifer Study, which is the area bounded on the west by the Pacific Ocean; on the southwest and south by the Siuslaw River; on the east by the North Fork of the Siuslaw River and the ridge line at the approximate elevation of four hundred (400) feet above mean sea level directly east of Munsel Lake, Clear Lake and Collard Lake; and on the north by Mercer Lake, Mercer Creek, Sutton Lake and Sutton Creek; and containing all or portions of T17S, R12W, Sections 27, 28, 33, 34, 35, 36, and T18S, T12 W, Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 22, 23, 24, 25, 26, 27; W.M., Lane County, except that portion defined as the Clear Lake Watershed more particularly described by OAR 340-71-460(6)(f).

Special Policies and Guidelines

340-41-270 In order to preserve the existing high quality water in Clear Lake north of Florence for use as an unfiltered public water supply source, it is the policy of the EQC to protect the Clear Lake Watershed including both surface and ground waters, from existing and potential contamination sources by:

- a. Prohibiting new waste discharges into the lakes, streams, or groundwater within the watershed.
- b. Establishing a management goal of limiting the cumulation total quantity of $\text{NO}_2\text{-N}$ discharged to the Watershed of a maximum of 170 lbs $\text{NO}_2\text{-N}$ per year from man-controlled sources, including but not limited to On-Site Sewage Disposal systems, managed forest areas, residential areas and public facilities.
- c. Requiring that land and animal management activities be conducted utilizing state of the art best management practices to minimize nutrient, suspended solids or other pollutants from contaminating the ground and surface waters.

Proposed New Moratorium Areas Rule, OAR 340-71-460(6)(f).

A new moratorium areas rule, OAR 340-71-460(6)(f), is hereby adopted as follows:

OAR 340-71-460 Moratorium Areas

(6) Specific moratorium areas. Pursuant to ORS 454.685, the agent shall not issue sewage system construction installation permits or approved site evaluation reports within the boundaries of the following areas of the State:

(f) Lane County--Clear Lake watershed of the North Florence Dunal Aquifer Area, as follows: The area hereby known as the Clear Lake watershed of the North Florence Dunal Aquifer Area defined by the hydrologic boundaries identified in the June, 1982, 208 North Florence Dunal Aquifer Study which is the area beginning at point known as Tank One, located in Section one, Township 18 south, Range 12 west, of the Willamette Meridian, Lane County, Oregon;

Run thence north 52^o 51' 44" east 203.95 ft. to the True Point of beginning;

Run thence south 07^o 09' 30.36" west 2126.57 ft. to a point,

Run thence south 05^o 00' 55.50" east 1303.99 ft. to a point,

Run thence south 52^o 44' 00.95" west 231.20 ft. to a point,

Run thence south 15^o 20' 45.38" east 774.61 ft. to a point,

Run thence south 31^o 46' 22.10" west 522.26 ft. to a point,

Run thence south 00^o 24' 45.67" west 833.02 ft. to a point,

Run thence south 07^o 49' 25.35" west 1190.07 ft. to a point,

Run thence south 50^o 23' 06.52" west 730.83 ft. to a point,

Run thence south 03^o 01' 21.76" west 303.42 ft. to a point,

Run thence south 36^o 39' 26.19" west 916.20 ft. to a point,

Run thence south 47^o 15' 49.38" west 1324.72 ft. to a point,

Run thence south 72^o 58' 54.17" west 498.94 ft. to a point,

Which is north 01^o 32' 59" west 5394.86 ft. from a point known as Green Two (located in Section 13 in said Township and Range);

<u>Run thence south 85^o 47' 40.71" west</u>	<u>954.57 ft. to a point,</u>
<u>Run thence north 58^o 09' 44.12" west</u>	<u>1630.28 ft. to a point,</u>
<u>Run thence north 25^o 25' 29.02" west</u>	<u>1977.52 ft. to a point,</u>
<u>Run thence north 16^o 31' 52.93" west</u>	<u>1732.61 ft. to a point,</u>
<u>Run thence north 06^o 14' 17.99" west</u>	<u>745.41 ft. to a point,</u>
<u>Run thence north 03^o 45' 06.22" east</u>	<u>672.44 ft. to a point,</u>
<u>Run thence north 59^o 28' 00.83" east</u>	<u>1118.03 ft. to a point,</u>
<u>Run thence north 59^o 51' 00.64" east</u>	<u>1895.42 ft. to a point,</u>
<u>Run thence north 48^o 26' 07.56" east</u>	<u>896.80 ft. to a point,</u>
<u>Run thence north 31^o 29' 50.71" east</u>	<u>920.64 ft. to a point,</u>
<u>Run thence north 37^o 07' 15.45" east</u>	<u>1506.21 ft. to a point,</u>
<u>Run thence north 80^o 52' 11.36" east</u>	<u>340.31 ft. to a point,</u>
<u>Run thence south 57^o 48' 15.35" east</u>	<u>446.68 ft. to a point,</u>
<u>Run thence south 79^o 54' 07.14 east</u>	<u>1511.41 ft. to the True</u>

Point of Beginning; and containing all or portions of T17S, R12W,
Sections 35 and 36, and T18S, R12W, Sections 1, 2, 11, and 12; W.M.,
Lane County.

November 12, 1982

Neil J. Mullane/ak

IN THE BOARD OF COUNTY COMMISSIONERS OF LANE COUNTY, OREGON

O R D E R N O. 82-10-27-10

-) IN THE MATTER OF:
) 1. ESTABLISHING A MORATORIUM ON
) NEW DEVELOPMENT WITHIN THE
) CLEAR LAKE WATERSHED,
) 2. PETITIONING THE ENVIRONMENTAL
) QUALITY COMMISSION FOR AMEND-
) MENT OF OAR 340-71-400(2), AND
) 3. ADOPTING FINDINGS OF FACT IN
) SUPPORT THEREOF.

WHEREAS, during June of 1982, the Lane Council of Governments and Lane County completed the North Florence Dunal Aquifer Study, see attached Exhibit "A", and forwarded the same to the City of Florence and the West Lane Planning Commission, and

WHEREAS, the City of Florence reviewed the report and, by and through Resolution #108, see attached Exhibit "B", now request Lane County to take action to protect the Clear Lake Watershed for municipal water supply purposes, and

WHEREAS, the West Lane Planning Commission received the report and held public hearings thereon and, by and through West Lane Planning Commission Resolution #82-8, see attached Exhibit "C", now request Lane County to take action to protect the Clear Lake Watershed for municipal water supply purposes, and

WHEREAS, the Board, after reviewing the report and conducting public hearings on the requested action, recognizes that a safe and economical supply of water from Clear Lake is a key facility needed for citizens of the coastal area in and near Florence, now, therefore, be it

ORDERED:

1. No applications shall be approved for the following land development actions:

- a. Plan Amendments,
- b. Zone Changes,
- c. Land Divisions,
- d. New Construction Permits, and
- e. New Mobile Home Permits,

if they would have the effect of contributing to the nitrate-nitrogen content to the Clear Lake Watershed as depicted on the attached Exhibit "p". This restriction does not prevent improvements to existing structures or currently placed mobile homes.

2. Persons denied approval based upon this Order may appeal this decision pursuant to LC 10.317 (Hearings Official), and be it

Page 1 of 2

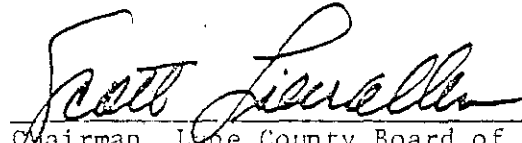
In the Matter of:

1. Establishing a Moratorium on New Development Within the Clear Lake Watershed,
2. Petitioning the Environmental Quality Commission for Amendment of OAR 340-71-400(2), and
3. Adopting Findings of Fact in Support Thereof.

RESOLVED that the Board of County Commissioners hereby petitions the Environmental Quality Commission to amend OAR 340-71-400(2) to conform to the restrictions set forth above, and be it further

ORDERED that in support of these actions, Lane County adopts the Findings set forth on attached Exhibit "E".

Adopted this 27th day of October , 1982.



Chairman, Lane County Board of
Commissioners

Page 2 of 2

In the Matter of:

1. Establishing a Moratorium on New Development Within the Clear Lake Waters
2. Petitioning the Environmental Quality Commission for Amendment of OAR 340-71-400(2), and
3. Adopting Findings of Fact in Support Thereof.

APPROVED AS TO FORM
DATE <u>10/22/82</u> <small>by</small> <u>will alt</u>
OFFICE OF LEGAL COUNSEL

North Florence Dunal Aquifer Study

June 1982

(Copy available in DEQ Portland and Salem Offices)

RESOLUTION NO. 108

A RESOLUTION ADOPTING THE NORTH FLORENCE DUNAL AQUIFER STUDY SPECIFIC RECOMMENDATIONS.

WHEREAS, Lane County recommends modifications of Oregon Administrative Rule OAR 340-71-400 (2) to conform to the technical results of the North Florence Dunal Aquifer Study concerning geographic areas and nitrate loading considerations, as defined by said study, and

WHEREAS, it has been recommended by Lane County and Lane Council of Governments that the City of Florence review and adopt the North Florence Dunal Aquifer Study, and that the City recommend a specific policy concerning protection of Clear Lake Watershed and the General North Florence Watershed, and

WHEREAS, the Florence Planning Commission reviewed the results of the study and after conducting a Public Hearing adopted Resolution 82-9-7-50, together with the Findings of Fact (Exhibit A), recommending City Council adoption of the North Florence Dunal Aquifer Study and their findings.

NOW THEREFORE, BE IT RESOLVED by the Common Council of the City of Florence that the North Florence Dunal Aquifer Study including: General Recommendations 1 through 6, General North Florence Recommendations 29 through 33, Clear Lake Watershed Recommendation 7A, and Specific Recommendations 8 through 16, and that the Planning Commission Findings of Fact attached as Exhibit "A" are adopted in support of this decision and are incorporated herein by reference.

PASSED BY THE COMMON COUNCIL, this 14th day of September 1982

APPROVED BY THE MAYOR, this 14th day of September 1982.

Roger W. McCorkle
Roger W. McCorkle, MAYOR

ATTEST:

Alice M. Hunt
Alice M. Hunt, CITY RECORDER

PLANNING COMMISSION RESOLUTION 82-9-7-50

IN THE MATTER OF FORWARDING)
A RECOMMENDATION FOR ADOPTION)
OF NORTH FLORENCE DUNAL AQUIFER)
STUDY SUMMARY SPECIFIC RECOM-)
MENDATIONS)

Proposal: Adoption of Specific Recom-
mendations Contained in
North Florence Dunal Aquifer
Study Summary, June, 1982 Draft
Impact: Affects General Florence and
Heceta Water District Area
Proponent: Study Prepared by Lane County
and Lane Council of Governments

WHEREAS, Lane County recommends modification of Oregon Administrative Rule OAR 340-71-400 (2) to conform to the technical results of the North Florence Dunal Aquifer Study concerning geographic areas and nitrate loading consideration, as defined by said study, and

WHEREAS, it has been recommended by Lane County and the Lane Council of Governments that the City of Florence review and adopt the North Florence Dunal Aquifer Study, and that the City recommend a specific policy concerning protection of Clear Lake Watershed and the General North Florence Watershed, and

WHEREAS, the Florence Planning Commission, after having reviewed the results of the study in meetings conducted on June 1, 1982 and August 17, 1982, and having conducted a public hearing on September 7, 1982, after giving all notice as required by law, to consider adoption of a specific policy, and specific recommendations, and after review of all evidence in the record and testimony presented, determined that it is in the public's best interest to protect the Clear Lake Watershed as the main source of domestic water for the City and the General North Florence Area,

NOW THEREFORE BE IT RESOLVED, that the Florence Planning Commission recommends adoption by the City Council of Policy A of said study; that policy being a commitment to retain Clear Lake as a pristine water supply, and to protect and improve its water quality, and

BE IT FURTHER RESOLVED, that the Planning Commission also recommends adoption by the City Council of the North Florence Dunal Aquifer Study including: General Recommendations 1 through 6, General North Florence Recommendations 29 through 33, Clear Lake Watershed Recommendation 7A, and Specific Recommendations 8 through 16, and that the Findings of Fact attached as Exhibit "A" are adopted in support of this decision and are incorporated herein by reference.

* See modification to Exhibit "A".

PASSED BY THE CITY OF FLORENCE PLANNING COMMISSION, this 7th day of September, 1982.

CHAIR OF THE FLORENCE PLANNING COMMISSION

EXHIBIT "A"

PLANNING COMMISSION RESOLUTION 82-9-7-50
FINDINGS OF FACT AND CONCLUSIONS OF LAW

PROPOSAL:

This is a recommendation by Lane County to modify Oregon Administrative Rule OAR 340-71-400 (2) to conform to the technical results of the North Florence Dunal Aquifer Study concerning geographic areas and nitrate loading consideration as defined by this study.

The Study defines Clear Lake Aquifer boundaries, determines the quality and quantity of water available within this aquifer, indicates the Nitrate-Nitrogen loading limits necessary to maintain the quality of water needed without additional treatment and/or alternative sources.

It has been recommended by Lane County and the Lane Council of Governments that this jurisdiction review and adopt the North Florence Dunal Aquifer Study, and that the City of Florence recommend a specific policy concerning protection of Clear Lake Watershed and the General North Florence Watershed.

They strongly recommend that the City adopt one of the following policies:

POLICY A: A commitment will be made to retain Clear Lake as a pristine domestic water supply and to protect and improve its water quality.

POLICY B: A commitment will be made to develop alternate water supplies and/or additional treatment facilities and Clear Lake will be allowed to degrade in quality.

APPLICABLE LEGAL CRITERIA:

Legal criteria applicable to this review are the City of Florence Comprehensive Plan and Statewide Planning Goals.

CONCLUSIONS OF STUDY:

The North Florence Dunal Aquifer Study indicates that Clear Lake is ideally situated to remain the main water supply for the Florence and Heceta area for many years if adequate safeguards are taken to protect the quality of this water supply.

WATER QUANTITY:

The Study further indicates this is an ideal aquifer in that it is uniform in nature and quickly recharges itself. The area tributary to Clear Lake is approximately 1040 acres with 518 to 570 acres of dunal sands. Only minor fluctuations in water levels in times of drought conditions and of heavy rainfall indicate an extremely stable quantity of water is available. The amount of water available for use has been estimated to be as high as 200,000 cubic feet per acre per year.

CONCLUSIONS OF STUDY: (Cont.)

WATER QUALITY:

The groundwater quality of Clear Lake Watershed is very good. Some iron and sulphur are present but in very low concentrations. Low nitrate levels indicate this entire watershed is relatively unpolluted at this time.

This study indicates there are sufficient phosphorus concentrations present in Clear Lake to support growth of algae and only the low concentration of nitrogen limits this growth. Any increase in nitrate levels entering the aquifer will threaten the quality of lake water.

If development is allowed to continue with on-site disposal systems, substantial quantities of effluent and other nitrates could enter the aquifer before a sufficient density of development is reached to form a sewer district.

It is estimated that pollution at the surface from septic systems will spread through the entire aquifer within 30 years and would take 30 years to flush out through natural movement of water.

Accidental discharge of any contaminant within the aquifer would result in eventual diluted contamination of a large area of the aquifer due to subsurface horizontal spread. This horizontal flow would lead to costly and ineffective contaminant cleanup.

DEVELOPMENT WITHIN THE CLEAR LAKE WATERSHED:

At this time there are 24 housing units in subdivisions north and east of Collard Lake; 7 of which are permanently occupied. There are 3 housing units; all permanently occupied, on the dunal aquifer portion of the Clear Lake Watershed. The subdivisions in the Collard Lake area contain approximately 80 undeveloped sites.

ALTERNATIVES:

Policy A would result in development within the Clear Lake Watershed only if an alternative waste disposal system could be developed outside the boundaries of the watershed.

Policy B would result in gradual degradation of Clear Lake, thus expensive treatment including filtration systems will be needed to maintain an adequate domestic supply of water. The alternative would be to locate new wells either on the western side of Clear Lake or expand the Florence Well Field. Either choice would mean expensive iron removal treatment.

COMPREHENSIVE PLAN, PART I:

Based on statistics from the City of Florence Water Department, over 30% of the City's net consumption of water comes from Clear Lake.

The importance of safeguarding the quality of water from this source is reflected in the City's Comprehensive Plan in the form of Policies and Recommendations.

With respect to water quality, Plan Policies state that land use decisions that affect the quality of water supply for residential use must be carefully reviewed.

COMPREHENSIVE PLAN, PART I: (Cont.)

SECTION IX A. Public Facilities - Recommendations:

The Plan recommendations concerning public facilities provide:

1. Adequate water storage should be provided.
2. The City should support the County's effort to determine the capacity of the aquifer north of the Siuslaw to supply long-range water needs for municipal use. The results of this hydrologic study should determine whether future water supplies will be produced by deep wells and/or surface sources.

SECTION X B. Air, Water and Land Quality - Policies:

This section of the Plan provides policies in decisions such as this, as follows:

1. Water recharge areas, lakes, and streams which have a direct bearing on the quality of the water resources shall be protected to insure the continuous quality and quantity of public water supplies.
2. Solid, liquid, gaseous and industrial waste discharges and/or disposal from septic tanks and/or sewers must not contaminate land, air, and water resources.
3. The City must also insure that its drinking water supply continues to conform with the Safe Drinking Water Act.
4. Federal and State standards shall be considered in all matters relating to air quality, water quality and noise pollution.

This section of the Plan further recommends that the County should be encouraged to maintain domestic water quality standards for Clear Lake.

STATEWIDE PLANNING GOALS:

The following Statewide Planning Goals are applicable to this matter. This proposal conforms to the Plan in all respects regarding these Goals:

- Goal 1. Citizen Involvement
- Goal 2. Land Use Planning
- Goal 5. Open Spaces, Scenic and Historic Areas, and Natural Resources
- Goal 6. Air, Water and Land Quality
- Goal 9. Economy of the State
- Goal 13. Energy Conservation
- Goal 17. Coastal Shorelands
- Goal 18. Beaches and Dunes

CONCLUSION:

The Planning Commission hereby concludes that, based on the Findings of Fact presented in this document, as well as material presented at public hearings concerning this matter, that it is in the public's interest to protect this source of domestic water.

RECOMMENDATION:

The Planning Commission hereby recommends that the City of Florence adopt the North Florence Dunal Aquifer Study including: General Recommendations numbered 1 through 6, General North Florence Recommendations numbered 29 through 33, Clear Lake Watershed Recommendation 7A, and Specific Recommendations numbered 8 through 18; all of which are contained in the North Florence Dunal Aquifer Study Summary, June, 1982 draft.

* See modification below.

ACCEPTED AND ADOPTED BY THE CITY OF FLORENCE PLANNING COMMISSION

 without modifications.

 x with the following modifications:

- Inclusion of the Planning Commission's acknowledgement of existing inequities inherent in the creation of a watershed through down-zoning, and the recommendation that this concern be addressed prior to implementation by the County of a specific policy.
- Exclusion of recommendation of Specific Recommendations numbered 17 and 18 until technical data supporting the need for their implementation can be included in the North Florence Dunal Aquifer Study.

CHAIR OF THE FLORENCE PLANNING COMMISSION

IN THE WEST LANE PLANNING COMMISSION OF LANE COUNTY, OREGON

IN THE MATTER OF RECOMMENDING)
 AND REPORTING ON THE NORTH) R E S O L U T I O N WLPC 82-8
 FLORENCE DUNAL AQUIFER REPORT)

WHEREAS, the West Lane Planning Commission evaluated the North Florence Dunal Aquifer Study, conducted public hearings on August 11, 1982, August 25, 1982 and September 8, 1982, considered public and agency testimony regarding the North Florence Dunal Aquifer, and otherwise performing its duties; AND

WHEREAS, the Lane County Board of Commissioners has requested our recommendation on the North Florence Dunal Aquifer Study; AND

WHEREAS, the West Lane Planning Commission finds a special need exists in the watershed areas which contribute to Clear Lake, Oregon as identified in the report;

IT IS HEREBY RESOLVED that the North Florence Dunal Aquifer Technical Report be accepted and forwarded to the Board of County Commissioners with a recommendation for action:

Appendix "A": Adoption of general recommendations North Florence Dunal Aquifer Report 1 - 6, pg. 1 and 29-33 pg. 4.

Appendix "B": Adoption of policy commitment to protect Clear Lake for domestic water supply purposes; and establish a moratorium.

Appendix "C": Initiate a study of appropriate alternatives to achieve protection of Clear Lake.

FURTHER, the secretary of West Lane Planning Commission is hereby directed to prepare a report of our proceedings to accompany this Resolution and to deliver the Resolution and the prepared report to the Board of County Commissioners forthwith.

Meeting of September 22, 1982

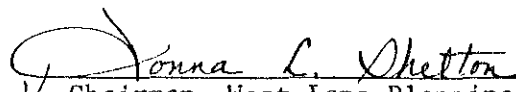
Ayes: Clifford Hughes, Fred Jensen, Steve May,
 Ken Miller, Donna Shelton, Chairperson

Nayes: Edith Laverdiere

Abstaining: NA

Absent: Si Ellingson

Not Voting: NA


 V. Chairman, West Lane Planning Commission

In the Matter of Recommending and Reporting on the North Florence Dunal Aquifer Report.

APPENDIX "A"

North Florence Dunal Aquifer Report

RECOMMENDATIONS

General

1. The existing Oregon Administrative Rule OAR 340-71-400(2) North Florence Dunal Aquifer Area, Lane County should be modified so as to conform to the technical results concerning geographical areas and nitrate loading considerations of the North Florence Dunal Aquifer Study.
2. The Aquifer Study predicts loadings for nitrate-nitrogen to the aquifer such that Oregon DEQ Planning Standards (5.0 mg/L nitrate-nitrogen average) are met. The Regional Rule as well as regional plans should be modified to reflect the Aquifer Study results.
3. It is recommended that the two identified portions of the North Florence Dunal Aquifer (the "Clear Lake Watershed" and the "General North Florence Aquifer") be recognized and so designated by the West Lane Planning Commission, the Lane County Board of Commissioners and the Environmental Quality Commission.
4. The Regional Rule should recognize and legally define the "Clear Lake Watershed" and the Rule should be modified to protect this resource according to the findings of the Aquifer Study.
5. It is recommended that the Aquifer Study be reviewed and formally accepted by the following jurisdictions and agencies.

Oregon Health Division
Water Resources Department
Lane COG Board of Directors
Coastal Ad Hoc Advisory

6. It is further recommended that the North Florence Aquifer Study be reviewed and adopted for planning and policy guidance by the following jurisdictions:

Heceta Water District
City of Florence
West Lane Planning Commission
Lane County Board of Commissioners
Environmental Quality Commission

General North Florence Recommendations

1. Measures should be taken to protect the General North Florence Aquifer from nutrient loadings from individual waste systems such that the State Planning standard of 5.0 mg/L nitrate-nitrogen is not exceeded generally in the aquifer.
2. A nutrient waste loading of 58 lb/acre nitrate-nitrogen per year is predicted by the study as being acceptable and not result in groundwater concentrations in excess of 5.0 mg/L. This waste loading should be adopted as a general standard for the dunal aquifer. This loading is

predicted to be adequate to protect water quality in the Florence well field. ^{Exhibit C}

3. The current sanitary landfill site is found to be located in an area of discharge with little measurable impact to beneficial uses of ground or surface water. The landfill site should be designated as the accepted long term landfill location to serve coastal area solid waste disposal needs. Requirements should be established such that no well development be allowed between the landfill site and the estuary.
4. It is recommended that no development be allowed that would increase the annual nitrogen loading to an amount greater than the adopted loading.
5. It is recommended that dune stablization for the protection of lakes, improvements or other valid purposes be permitted only if it can be achieved with an application of fertilizer not to exceed 58 lb/acre nitrate-nitrogen on an annual basis.

APPENDIX "B"

Clear Lake Watershed Protective Standards

Policy Statement

A commitment will be made to retain Clear Lake as a pristine domestic water supply and to protect and improve its water quality.

Requested Actions:

- 1) The Board establish a moratorium on all partitions of land within the Clear Lake Watershed; and
- 2) The Board direct County Counsel to draft an order preventing acceptance of any zone change applications for lands within the Clear Lake Watershed; and
- 3) The Board direct County Counsel to draft an order preventing acceptance of any building permits for new residences, commercial or industrial structures or for the placement of mobile homes within the Clear Lake Watershed using any on-site systems which would contribute nitrate-nitrogen to the watershed; and
- 4) The Lane County Board of Commissioners petition the Environmental Quality Commission to prohibit on-site feasibility approvals and new construction permits for subsurface sewage disposal and further evaluate reduction or limit existing on-site systems, within the Clear Lake Watershed; and
- 5) These actions should remain in effect for a maximum period of two years to provide Lane County adequate time to study and evaluate alternatives for managing the Clear Lake Watershed.

The West Lane Planning Commission believes the above actions are necessary and prudent measures within the Clear Lake Watershed based upon a need to:

- 1) Limit additional development that increases the complexity of the problem; and
- 2) Prevent overloading of limited water resources until solutions are found; and
- 3) Prioritize this geographical area for problem solving by the County and other local jurisdictions; and
- 4) Prevent increased population in an area that has potential risk to degrade a pristine water source for Florence and the North Florence area; and
- 5) Provide a reasonable period of time to address appropriate strategies that balance the needs of the people served by water from Clear Lake and the property owners in the Clear Lake Watershed. In order to evaluate progress a formal status report shall be presented every six (6) months to the West Lane Planning Commission.

APPENDIX "C"

Task Description Study Proposal Clear Lake Watershed

Introduction:

The study will need to involve employees of the County, City of Florence, and Heceta Water District as a technical group assigned to the development of structural and non-structural components of alternative strategies. Preliminary proposals include designation of the County Public Health Engineer, Planning and Community Development Department as the technical coordinator on the study. A second group of representatives from the Florence Planning Commission, Heceta Water District Board, West Lane Planning Commission and two or more citizens with ownership within the Clear Lake Watershed is recommended as a study task force. A separate staff person from Planning and Community Development would be assigned to facilitate the study task force.

The study will evaluate structural alternatives such as sewage collection, on-site alternatives which reduce nitrogenous waste contributions, water treatment facilities (drinking) and related capitol improvement options along with non-structural alternatives such as Land Use Density controls, conservation easements, best management practices for erosion control, road construction, landscaping, logging, recreation use and associated use controls regulating development.

Additional areas of consideration which will need to be developed such as the identification of lake nutrient limitations in Clear Lake which may control algae production in addition to nitrogen will be evaluated for inclusion.

This preliminary study design is not meant to be complete and will be refined and supplemented should the proposal be acceptable.

Task	Explanation
1) Alternative Description:	Development, description and definitions of all imaginable types of options for protecting water quality within the defined watershed by appointed members of the technical study team and task force.
2) Evaluation of Options:	Review of alternatives for legal, management and fiscal capabilities by affected individuals, agencies, technical study team and task force.
3) Alternative Screening:	Selection of specific alternatives. Ratification by the Board subsequent to recommendations from W.L.P.C., Florence Heceta Water District.
4) Evaluation of Selected Alternatives:	Refine selected alternatives with intensive technical evaluation.
5) Select Alternative:	Prioritization of alternative(s) for recommended action by the Board. Consensus approval by W.L.P.C., Florence Planning Commission, Heceta Water District.

- 6) Review of Alternatives: Public agency and citizen presentation and comment.
- 7) Draft Strategy Proposal: Modify, amend and incorporate changes based on public and agency comment. W.L.P.C., Florence, Heceta Water District review draft strategy and recommend public hearing(s) by the Board of Commissioners.
- 8) Public Presentation and Hearing: Conduct public hearing(s) in the affected area.
- 9) Adopt Study Board action
- 10) Implementation: Local ordinance activities as required.

MEMORANDUM

TO: Lane County Board of County Commissioners

FROM: Margaret Mahoney
Planning & Community Development

SUBJECT: Work Session/North Florence
Dunal Aquifer

DATE: October 5, 1982

RECOMMENDED ACTION:

- 1) Evaluate recommendations resulting from actions taken by the City of Florence on September 14, 1982 (Resolution 108) and the West Lane Planning Commission on September 22, 1982 (Resolution WLPC 82-8).
- 2) Conduct a public hearing and take action on October 27, 1982 to:
 - a. Adopt the North Florence Dunal Aquifer Report adoption.
 - b. Recommend actions to the Environmental Quality Commission.
 - c. Act on Resolution WLPC 82-8.

ISSUES:

The key issues to be resolved with respect to the North Florence Study area are:

- 1) Level of development suitable for the North Florence Dunal Aquifer.
- 2) Commitment to protection of Clear Lake as a source of domestic water for the City of Florence and Heceta Water District patrons.
- 3) Appropriate balance between the needs of existing and future citizens in the North Florence area utilizing water from Clear Lake versus the development rights of owners of property within the Clear Lake Watershed.

RESOLUTION PRESENTATION:

See Resolution 108 attached. See Resolution WLPC 82-8.

BACKGROUND:

In our last presentation to the Board in May, 1982 we presented a preliminary report which optimistically projected being able to complete actions prior to this date. Due to the nature of the issues involved more public hearings were conducted by the West Lane Planning Commission and Florence Planning Commission. The issues in this matter were such that extensive deliberations were necessary to arrive at the actions being recommended to the Board.

In addition to review by the West Lane Planning Commission and the City of Florence, the Heceta Water District also considered the study. A letter from the District encouraged action by Lane County and is included in the attachments.

The Board will recall that the North Florence Dunal Aquifer Study was a technical study established to provide detailed analysis of the hydrogeology and development impacts on a shallow, sensitive aquifer.

Initiation of the study was a result of citizens and elected officials recognizing that both surface and ground waters of this region are the existing source of drinking water for residents and will in the future be a water source necessary to meet development and growth demands in and near Florence. A study grant was obtained through the Environmental Protection Agency and Department of Environmental Quality in July of 1979.

During April of 1980 the Environmental Quality Commission adopted groundwater protection policies for the State of Oregon and subsequently imposed a Geographical Regional Rule: OAR 340-71-030(11) governing on-site sewage disposal systems on those lands overlying the North Florence Dunal Aquifer. The initial rule was recognized as an interim measure that required more detailed study for future modification of the rule.

The North Forence Dunal Aquifer Report was done according to professionally acceptable standards and methods. Data collection was done accurately and in a timely manner. All analysis was carefully checked for accuracy. Lab tests were done in Lane County's EPA certified laboratory where quality control was assured. The analysis of data and interpretation of all results was done with care and consultation among County staff and L-COG personnel to insure thoroughness, and to insure that supportable conclusions were drawn from the data. Care was taken that no erroneous assumptions clouded the interpretation, testing, data collection or analysis associated with this report so that it will stand as a useful planning document for the concerned agencies. The recommendations of this report are based on the data and facts developed in the report document. Specifically, the study was designed to address the potential impact of sewage disposal on the nitrate-nitrogen levels in the aquifer and subsequently Clear Lake as well.

ADDITIONAL INFORMATION EVALUATED AS REQUESTED: WLPC

Introduction:

At the request of the West Lane Planning Commission staff examined the potential costs of water treatment and waste collection and treatment. Staff were reluctant to present dollar figures for water purification of Clear Lake or for waste water collection, transport, and treatment since no formal facilities planning had been undertaken for this specific proposal. Since the issue appeared of major concern to WLPC, we prepared information from existing reports. In analyzing and attempting to use the cost information we developed, the following qualifications must be considered:

- 1) The dollar figures are not absolute and represent accuracy of -30% to +50% of actual costs that may occur if a facility is constructed.
- 2) No administrative or land use suitability analysis was performed.
- 3) You may confidently compare options such as one select facility is twice as expensive as another. As an example water treatment serving 7,000 people as compared to serving 30,000 people is over twice as costly.

Before addressing specific issues staff wishes to clarify a significant misunderstanding that was not specifically stated, but appeared to be central to a number of questions that were raised. The North Florence Dunal Aquifer Study does not recommend that **NO** development occur even in the Clear Lake Watershed. The most restrictive recommendation as contained in Policy A addresses specific controls on development and access that would impact both existing uses and future uses. We would be less than candid if we did not

state that Policy A would severely restrict and change development in the watershed.

ISSUES I & II: COST COMPARISON WATER TREATMENT AND SEWERAGE

A cost comparison between conventional treatment of the water source and collection and pumpage of sewage effluent out of the Clear Lake Watershed, to maintain the water quality of Clear Lake, gives insight into a possible course of action.

The cost figures for the water treatment facility come directly from the Lane County 1979 Coastal Domestic Water Supply Study. The study gave capital costs for water treatment facilities capable of meeting the needs of 7000 and 30,000 people. The report gives the figures in 1978 dollars and our analysis has updated them to 1982 dollars by a 1.4 factor using Engineering News Report Record factors. Also enclosed are yearly O & M costs.

For the sewage collection and disposal cost estimate, data from the 1982 Dexter Wastewater Facility Project was used. Designed for 155 connections, it incorporated septic tanks, collection facilities, pumping stations, a recirculating sand filter and a low head disposal field system. Because the size of the collection system and number of pumping stations may vary, line items were added and estimates made for those necessary components to be used in the Collard Lake area. O & M costs are also estimated from the Dexter data. If a recirculating sand filter is not necessary and a simple low head disposal field is used the capital cost could drop significantly.

Water Treatment Plant	Capital Cost	O & M Per Year
7000 person capacity	\$1,600,000.	\$ 66,000.
30,000 person capacity	\$3,400,000.	\$286,000.

**Wastewater Collection,
Transport & Treatment**

155 household capacity	\$ 700,000.	\$ 28,000.
------------------------	-------------	------------

Line Items	\$ 443,000.	recirculating sand filter & disposal field.
	50,000.	(2) pump stations
	72,000.	8000 ft. of gravity collection line at \$9./ft
	32,000.	4000 ft. of pressure line at \$8./ft.
	\$ 103,000.	Peripherals cost (manholes, clean-outs, lateral lines hoodups, septic tank replacements, etc.)
	\$ 700,000	

The total cost of the Dexter Project is \$1,086,000. due mainly to a much larger collection system than would probably be necessary in this case. The recirculating sand filter and disposal field is a set cost item and would not change. Installation of more or less manholes, cleanouts, septic tanks & hook-up lines could change the cost significantly. Not building the recirculating sand filter portion could reduce cost significantly if feasible.

ISSUE III: ACCESS LIMITATION "BOATS"

Boat traffic on Clear Lake would cause human activities in the vicinity to increase. This activity would result in an increase in pollution related to litter, sewage and the general human activities in addition to oil and gas from motorized craft.

From a technical point of view, the decision to limit boat traffic and human activities related thereto is compatible with a decision to protect the watershed and minimize treatment in lieu of extensive treatment of water which has been allowed to become contaminated.

ISSUE IV: NATURAL RESOURCE DESIGNATION AND STRATEGIES NECESSARY TO PROTECT THE CLEAR LAKE WATERSHED

Under Goal 5 the Clear Lake Watershed should be inventoried Natural Resource Area. The Goal 5 planning guidelines require that natural resources should be conserved and protected. Strategies for the protection may include the following:

1. Building or lot alteration would be prohibited within specified distances from any surface water in the watershed dependent on physical site characteristics.
2. Transport of all sewage effluent from human activity to an acceptable location outside the natural resource conservation area would be mandated.
3. Restrictions on application of fertilizers, pesticides and other potentially damaging materials within the natural resource conservation area would be established.
4. Access to watershed and associated facilities would be limited within the natural resource conservation area.
5. Specific limitations and restrictions for the use of alternate sewage treatment and disposal systems such that current nitrate impact will be diminished or eliminated would be developed.
6. Develop a plan to restrict/eliminate boat activity on Clear Lake and Collard Lake.
7. Restrict vegetation removal in the watershed such that erosion and subsequent water quality degradation are reduced. Logging may be permitted under circumstances which do not adversely impact the primary goal of the natural resource conservation area. Vegetation removal within specified distances from surface water would be prohibited in the watershed dependent on physical site characteristics.
8. Minimize road construction in all future development and design roads to

reduce runoff to surface waters within the natural resource conservation area.

9. Commercial development that might adversely affect the natural resource conservation area goals will be prohibited if potential for hazardous material spills or associated impacts are inherent in the business operations, such as service stations, marinas, auto/truck repairs facilities, or other similar proposals.
10. Control animal populations which might adversely affect the quality of the water sources within the natural resources conservation area, such as a limit on beaver populations, especially near Clear Lake.

ISSUE V: INDIVIDUAL SEWAGE TRANSPORT

The cost associated with a pumped effluent system for a single residence would be based on the following assumptions:

1. Housing in the watershed is currently required to use a pumped, low head effluent disposal system.
2. Additional costs associated with transport to disposal would be:
 - a. Cost of additional length of piping to disposal site;
 - b. Possible cost of larger diameter piping to reduce friction loss;
 - c. Possible cost of larger pump for longer pumping distances or elevation changes;
 - d. Possible cost associated with access to disposal area outside of watershed by purchase or easement agreement.

Because of the highly variable nature of the problem no set cost could be estimated.

3. Other alternatives that are possible, such as composting toilets, in some specific instances.

ATTACHMENTS:

- 1) WLPC Resolution - WLPC 82-8
- 2) City of Florence Resolution 108
- 3) Correspondence:
 - a. Heceta Water District
 - b. State Water Resource Department
 - c. State Health
- 4) Summary Report North Florence Dunal Aquifer Report

FINDINGS OF FACT

Pursuant to ORS 197.520(2), the Board finds as follows:

1. The Clear Lake Watershed provides domestic water supply through the Heceta Water District for improved property within the district boundaries and 30% of the water supply needs for the City of Florence.
2. Existing treatment facilities for water provided by the Heceta Water District do not include filtration due to the existence of a unique source of high quality raw water source currently available from Clear Lake.
3. Existing land development in the Clear Lake Watershed has brought this area to the point that new land development would exceed the carrying capacity of the Clear Lake Watershed. If this area were left to develop without restrictions at this time, improvements to Heceta Water District's facilities beyond their capability would be required. See memo of Margaret Mahoney to Board of County Commissioners of 10/5/82, additional information issue 1 and 11.
4. A period of time is required to evaluate filtration alternatives, sewerage alternatives and land use control measures within the Clear Lake Watershed to properly protect the water supply needs for existing and future residents of the North Florence area.
5. The Environmental Quality Commission has been asked to limit the area of restriction to those areas directly impacted by the limited public facility.
6. Lands are available outside the boundaries of the Clear Lake Watershed to accommodate the housing and development needs for the area during the period of time required.
7. New development may occur within the Clear Lake Watershed subject to a demonstration of removal of sewage through transport outside the defined boundaries.
8. A status report on progress towards solution of the facilities alternatives and development control strategies will be reviewed by the West Lane Planning Commission every six months during the period of time the moratorium remains in effect and the review and comments will be submitted to the Board.
9. The reports, resolutions and recommendations of the City of Florence and the West Lane Planning Commission, already Exhibits to this Order, are incorporated as Findings in support of this decision, as if fully set forth herein.

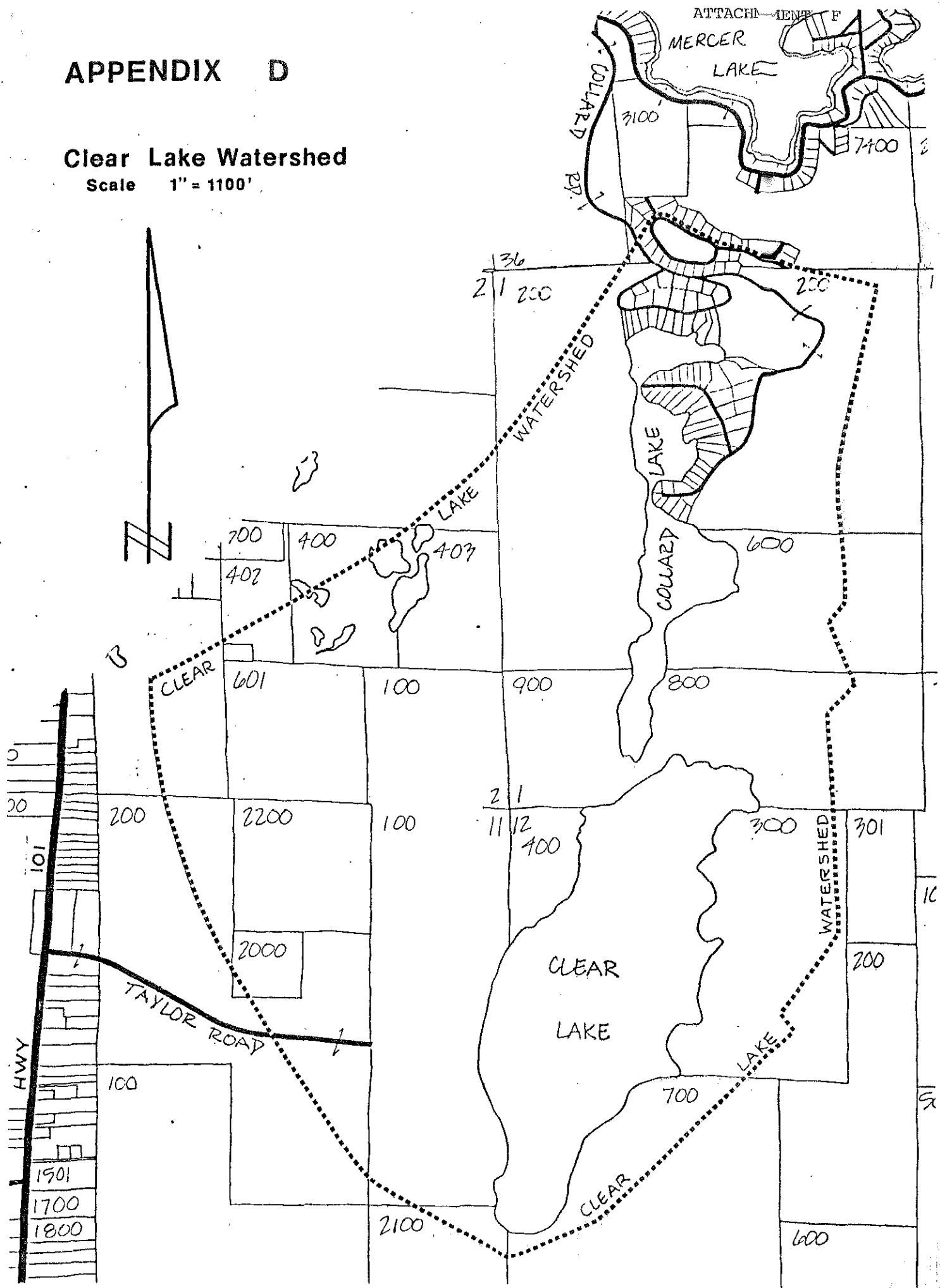
Findings of Fact

EXHIBIT "E"

APPENDIX D

Clear Lake Watershed

Scale 1" = 1100'



U.S. ENVIRONMENTAL PROTECTION AGENCY

ATTACHMENT G



REGION X

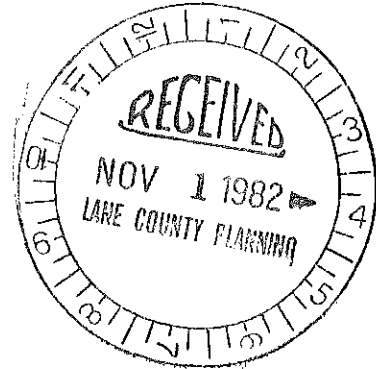
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

OCT 12 1982

REPLY TO
ATTN OF:

M/S 433

Neil J. Mullane
208 Contract Administrator
Department of Environmental Quality
PO Box 1760
Portland, OR 97207



Dear Neil:

EPA has completed its review of the final report on the North Florence Dunal Aquifer Study prepared under EPA grant #P000166. The final report recommends adequate measures for protection of the aquifer and is hereby approved. For the record, the report incorrectly references (on page 67) EPA's turbidity standards for drinking water. The correct standards are enclosed and should be forwarded to Lane COG.

Our review of this project indicates that all work plan commitments have been met except for adoption of the aquifer protection alternatives by the Lane County Board of Commissioners and the Environmental Quality Commission (EQC). EPA hereby authorizes final payment of this project on the understanding that County adoption will take place by December. In addition, the North Florence Aquifer Study supplement (Task E., Analysis-Monitoring) funded under grant P000182, is also approved and final payment on this task is also authorized.

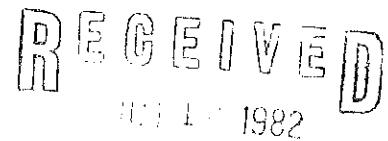
We look forward to County and EQC adoption of the North Florence Dunal Aquifer Study and the Governor's certification in December. Formal EPA approval of this project as part of the Oregon Statewide Water Quality Management Plan will take place after certification.

Should you have any questions, do not hesitate to call me or Debby Yamamoto at (206) 442-1217.

Sincerely,

Lisa Corbyn
Chief, Water Quality Branch

Enclosure

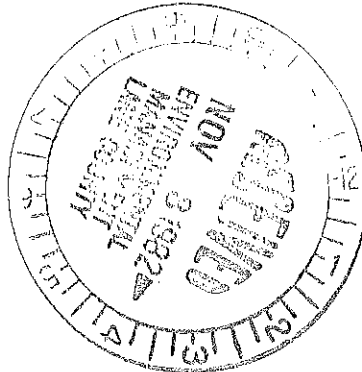


Water Quality Division
Dept. of Environmental Quality

LCOG Lane Council of Governments

NORTH PLAZA LEVEL PSB / 125 EAST EIGHTH AVENUE / EUGENE, OREGON 97401 / TELEPHONE (503) 687-4283

November 4, 1982



Mr. Roy Burns
Manager
Lane County Building
and Sanitation Division
125 East 8th Avenue
Eugene, Oregon 97401

Dear Roy:

The Lane Council of Governments Board of Directors, at its October 28, 1982 meeting, reviewed the North Florence Dunal Aquifer Study. The Board formally accepted the June, 1982 Final Report and endorsed the actions taken by the Lane County Commissioners on October 27, 1982 to protect the aquifer.

Sincerely,

A handwritten signature in cursive script that reads "Ollie".

Oliver P. Snowden, P.E.
Division Manager, Transportation,
Energy and Environmental Quality

OPS:bp/DB



Water Resources Department

MILL CREEK OFFICE PARK

555 13th STREET N.E., SALEM, OREGON 97310

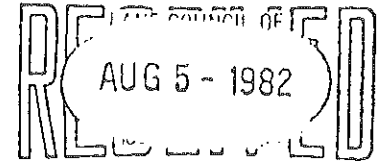
PHONE 378-8455

OR
1-800-452-7813

(message line)

August 4, 1982

Roy Burns, John Stoner,
and Gerritt Rosenthal
Lane County and
Lane County Council of Governments
125 East 8th Avenue
Eugene, OR 97401



Gentlemen:

Thank you for the opportunity to review the recently completed dunal aquifer study in North Florence, Oregon.

The report recognizes the sensitive nature of porous dunal aquifer sheets located along the Oregon coast and provides excellent data for control and management of land and water uses within the study area. The report is a valuable addition to the technical literature and will be of great assistance to future investigations of coastal aquifers in Oregon.

The hydrology modeling of the area was a significant part of the study and provides rate of recharge and subsequent loading rates for waste discharge to the aquifer.

Protecting the pristine nature and drinking water quality of the Clear Lake Watershed will be an important accomplishment for all levels of city, county, and state government. The Water Resources Department will support a positive plan of sewage collection, treatment, and local controls to reduce loading of waste water to the sensitive dunal aquifers at Florence. Protection of the coastal sand dune aquifers is necessary to insure long term public water supplies for the future.

The technical report is excellent and all participants should be congratulated.

Sincerely,

William S. Bartholomew

WILLIAM S. BARTHOLOMEW
Hydrogeologist

WSB:wpc
1965B

ANALYSIS AND FINDINGS

General Findings

1. The Florence dunal sand aquifer is of a generally uniform nature and is approximately 100 feet thick. It is an unconfined aquifer.
2. The North Florence Dunal Aquifer contains only two hydrologically distinct units; the Clear Lake Watershed; and the general North Florence Aquifer.
3. Flow in the aquifer tends to move radially away from a recharge zone about one mile west of Collard Lake. Most flow is toward the Pacific Ocean. The Siuslaw River and Sutton Creek are also boundaries.
4. Annual recharge averages 4.36 feet per year over the aquifer. Recharge water in the dunal sands tends to stack in layers and move vertically, as well as horizontally up to a depth of 100-130 feet. The water from each recharge season is largely unmixed with water from the previous recharge season.
5. The Major controlling factors of the aquifer hydrology are the uniformity of the sands and variations in recharge. Recharge is dependent primarily on rainfall variations and differences in evapotranspiration between vegetation, open sand and water areas.
6. Modeling was useful in predicting the boundaries between the Clear Lake watershed and the general North Florence Aquifer and necessary to predict changes in those boundaries between normal and drought conditions. These watershed boundaries do not change dramatically between normal and drought or increased pumpage conditions.

Water Quality

7. The dunal sand aquifer is a generally uncontaminated aquifer that shows sensitivity to human development.
8. Average nitrate-nitrogen levels range between 0.03 and 0.06 mg/L throughout the aquifer except where influenced by fertilization, on-site sewage and solid waste disposal.
9. Indicators of bacterial contamination are uncommon throughout the aquifer except near sources of local contamination. Most positive tests were at surface sites.
10. Iron concentrations are low (.05-.15 mg/L) in the shallow recharge portions of the aquifer. Discharge area concentrations are in the 0.2 to 0.7 mg/L range. Iron concentrations greater than 0.3 mg/L generally require treatment.

11. Analysis of water from deeper levels of the aquifer (below the top 30 feet) showed iron concentrations in excess of 5.0 mg/L.
12. The water quality of surface waters in the area is generally good but shows some indication of bacterial contamination. Clear Lake is generally least contaminated (<1/100 ml). The lakes and streams also show significant seasonal variation in nutrient levels. Clear Lake is the lowest in nitrate and Sutton Lake (Sutton Creek outflow) is the highest. Reduction in water quality appears to be directly related to the increase in human activity on or near those waters.
13. Generally, vegetation appears to contribute only a small portion of the nitrate-nitrogen found in ground or surface waters compared to human waste disposal. Shore pine forests appear to reduce nitrate-nitrogen below background levels.
14. Subsurface disposal of sewage waste is the primary human caused source of nitrate-nitrogen. Except for the landfill, the school district and the golf course, there are no other significant human caused nitrate sources within the North Florence watershed.

Clear Lake

15. Water flows southeastward into Clear Lake from an aquifer recharge zone one mile west of Collard and Clear Lakes, as well as from the north through the Collard Lake drainage and from runoff on the hills to the east.
16. The Clear Lake Watershed (dunal aquifer plus uplands) comprises approximately 1040 acres with 190 acres of lake area and 850 acres of land area. The Dunal Aquifer portion is 518 acres and the uplands 332 acres in size.
17. Current nitrate-nitrogen levels in Clear Lake average 0.05 mg/L which is 67% greater than the concentrations in the dunal aquifer to the west (.03 mg/L). Indications are that the Collard Lake area and the uplands presently contribute one-half to two-thirds of the nutrient loadings to Clear Lake.
18. Clear Lake is currently marginally "oligotrophic," meaning that it is on the threshold at which increased nutrient levels will stimulate increased algal growth. Clear Lake is nitrate-limited and has sufficient phosphorous for such increased growth. Best estimates indicate that any nitrate-nitrogen increases beyond the current average of 0.05 mg/L will lead to algal growth:
19. In order to prevent increases to Clear Lake nitrate-nitrogen levels, increases in nitrate-nitrogen concentration in the dunal aquifer or upland watersheds must be less than 0.01 mg/L.
20. Based on a policy of no degradation of Clear Lake a total of 8.7 dwelling units should be allowed on the entire 1040 acre watershed.

(850 acres of land surface). There are currently 30 units in the watershed on septic systems, 10 of which are permanently occupied. The impact from the current systems on nitrate-nitrogen levels in Collard Lake may be only partially seen at this time.

General North Florence Aquifer

21. Throughout much of the remainder of the aquifer, nitrate-nitrogen levels are near background levels of 0.03 mg/L. This level assumes contributions only from rainfall and is represented by the open dune areas.
22. Based on the planning standard of 5.0 mg/L nitrate-nitrogen calculations indicate an additional loading of 58 lbs. per acre per year nitrate-nitrogen will not exceed this value using a stirred tank model. This translates to 2.9 d.u. per acre with on-site systems using loading rates of 20 lbs. per d.u. per year.
23. Nitrate-Nitrogen loading considerations for the Florence Well Field are identical with those for the general North Florence Aquifer.

Landfill

24. Flows in the area of the Florence landfill show that the site is a discharge zone with rapid outlet to the Siuslaw Estuary.
25. Ground water quality downgradient of the landfill shows noticeable aquifer degradation from organic materials, ammonia and minerals.
26. There are no current or predicted uses of the groundwater downgradient from the landfill, based on the model prediction of flow channels. The concentration of landfill materials in the ground water does not appear to have a significant impact on the estuary.

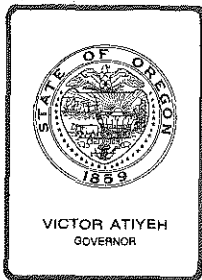
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23. Nitrate-Nitrogen loading considerations for the Florence Well Field are identical with those for the general North Florence Aquifer.

Landfill

24. Flows in the area of the Florence landfill show that the site is a discharge zone with rapid outlet to the Siuslaw Estuary.
25. Ground water quality downgradient of the landfill shows noticable aquifer degradation from organic materials, ammonia and minerals.
26. There are no current or predicted uses of the groundwater downgradient from the landfill, based on the model prediction of flow channels. The concentration of landfill materials in the ground water does not appear to have a significant impact on the estuary.



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, December 3, 1982, EQC Meeting

Request for Authorization to Conduct a Public Hearing on General Modifications to Noise Control Related Rules; OAR 340-35-015, 35-025, 35-030, 35-035, 35-040 and 35-045 and Procedure Manuals; NPC-1, 2, 21, and 35.

Background and Problem Statement

Oregon Revised Statutes Chapter 467 directs the Environmental Quality Commission to "investigate and after appropriate public hearing, establish maximum permissible levels of noise emission for each category established, as well as the method of measurement of the levels of noise emission." Beginning in late 1973, the Department proposed rules establishing maximum permissible levels of noise emission for various categories of sources and held public hearings on the proposed rules throughout the state. To date, the Commission has approved rules for five categories of noise emission sources (new motor vehicles, in-use motor vehicles, industry and commerce, motor racing, and airports) and associated procedure manuals. Three of these rules have not been amended for housekeeping purposes since 1977 and the other two rules were approved in 1979 and 1980. After this period of time it is desirable to incorporate minor adjustments to these rules in order to enhance their effectiveness, eliminate misinterpretations, and streamline the implementation of these rules.

The Environmental Quality Commission has legal authority to adopt and amend noise control regulations pursuant to ORS Chapter 467.

Evaluation

Department staff, over time, has recognized that the present rules contain deficiencies and are sometimes subject to misinterpretation. Therefore, amendments are proposed to remedy these problems. In addition, with reduced noise program resources, these proposals are also intended to increase the efficiency of implementation of these rules. The major elements contained in this proposal are as follows:

Definitions OAR 340-35-015

Several definitions would be amended primarily to provide clarification or to achieve or accommodate amendments discussed below.

Sale of New Motor Vehicles OAR 340-35-025

The standards for the sale of motorcycles (Table 1) would be amended to reflect federal Environmental Protection Agency rules that become effective for models manufactured after December 31, 1982. These federal standards are preemptive of any state and local standards.

Presently new motorboats powered by an outboard motor exhausting beneath the surface of the water are exempt from the standards in Table 1. It is proposed to also exempt, by means of amending definition 25 (OAR 340-35-015(25)), those motorboats powered by an inboard/outboard power package designed to exhaust beneath the surface of the water.

In-Use Motor Vehicles OAR 340-35-030

The standards contained in Table 3, establishing limits for motor vehicles traveling on public roads, are primarily used by local police agencies. These standards are somewhat difficult to implement, as the model year of the vehicle must be determined in order to determine the allowable limit. Recent studies by a national organization of noise control officials, with assistance from vehicle manufacturers and enforcement experts, has provided the basis for a revised table of proposed limits for vehicles operated on public roads. This revision eliminates the need for model year designation.

Table 4 provides limits for off-road recreational vehicles. The U.S. Forest Service - Hebo Ranger District, has requested that better enforcement techniques be developed to control noise emissions from these vehicles. It is therefore proposed to reestablish limits for motorcycles and other off-road vehicles under moving conditions, as well as the stationary test.

The new product standards for snowmobiles were amended in late 1978 to rescind the 75 dBA limit and retain 78 dBA as the final limit in the schedule. The in-use standards in Table 4 for snowmobiles are therefore proposed to be amended to be compatible with the new product limits in Table 1.

Emission limits for auxiliary equipment driven by the primary engine of a motor vehicle were established in 1974. However, no limits were proposed for auxiliary equipment on motor vehicles powered by secondary power units. Staff does not believe that additional emission standards are needed in this rule, but an ambient noise standard would provide the capability to control excessive noise from

these operations near noise sensitive uses at night. Therefore, it is proposed to expand the emission limits for auxiliary equipment in Table 6 to apply to all auxiliary motor vehicle equipment driven by either the primary or a secondary power unit. In addition, it is proposed to limit the operation of any auxiliary motor vehicle equipment near noise sensitive uses to a maximum of 30 minutes during nighttime when exceeding 50 dBA. An exemption was also added that would clearly exclude auxiliary equipment noise in situations where it is excluded under the rules for industry and commerce, such as for construction, agriculture and on forest lands. This would make the rule consistent with other rules and legislative exemption.

In order to take advantage of the new federal regulations for motorcycles, it is proposed to add sections that incorporate federal labeling and non-tampering rules for noise control equipment and to restrict the operation of non-complying competition motorcycles to racing facilities.

It is proposed to add Table 3, the moving vehicle standards for on-road vehicles, to the equivalency section 35-030(4) in order to provide more flexibility to police enforcing the motor vehicle noise limits. This amendment allows direct enforcement of DEQ standards by police through the uniform motor vehicle code by showing these moving vehicle standards also meet the State equivalency test required under ORS 483.449.

Industry and Commerce OAR 340-35-035

As the interim (1975-1977) standards for industrial and commercial noise sources are no longer applicable, all reference to these standards will be deleted as they are often confusing to those not familiar with these rules. Therefore, Table 7 would be amended to delete the interim standards and the portion of the rule pertaining to modified noise sources, subsection (1)(c), would be rescinded, as this rule is no longer relevant past the term of the interim standards.

The impulse sound limits were established to control repetitive sounds that have individual durations of less than one second, such as sounds from a punch press or drop forge. This rule is not well suited to sounds from rock quarry blasts and they often exceeded these standards. Noise controls are available through implementation of various blasting practices, however, the impulse standards often cannot be met and therefore Department granted variances (exceptions) are granted in these cases as blasting is normally an infrequent event and typically occurs only several times per month during daytime hours. The Department, therefore, proposes to amend this rule to add an impulse standard that is appropriate for blasting. This amendment would provide a reasonable blasting standard that is both achievable by industry and protective of the public health and welfare. In addition, this proposal would eliminate most needs for evaluating and granting exceptions and also allow blast noise to be measured on noise monitoring equipment that is now available at all DEQ field offices.

Motor Sports Vehicles and Facilities OAR 340-35-040

The motor racing rules have been effective since January 1, 1982. With the assistance of a citizen advisory committee composed of racing and citizen interests, this rule has been successfully implemented. However, the committee has recommended several amendments that should improve the implementation and effectiveness of the rule.

First, it is proposed to expand the advisory committee by adding two members, an attorney and an acoustical engineer. Members with this expertise should be of added assistance to the overall committee.

The current rule for drag race vehicles does not specify a noise emission limit but requires very specific muffler lengths. The committee believes that a 105 dBA emission limit should be added with the deletion of muffler lengths. Such a change gives more flexibility to race competitors but adds responsibility to the facility operator to ensure all vehicles meet the emission standard.

A request to the committee from Jackson County Sports Park asked that provisions be available to continue an event the following day if circumstances caused the event to otherwise exceed the curfew provisions. The committee concurred in this recommendation. Another request from Jackson County Sports Park was to provide an exemption from muffler requirements to a track that incorporated a noise berm or barrier into its design. The committee recommended against this request.

Jet engine powered drag race vehicles are one of the loudest types of racing vehicles, although these vehicles are typically not operated in racing events, they are often operated as an exhibition in conjunction with other racing events. There does not appear to be any reasonable method to quiet these vehicles, however, as an "exhibition" attraction, they are most likely an important part of a drag racing "show". Therefore, it is proposed to exempt these vehicles from the requirements of this rule between 11 a.m. and 10 p.m.

Some race facilities provide the opportunity for competitors to practice and otherwise operate race vehicles under non-racing conditions. Some of the vehicles are not muffled as they may be designed for special non-muffled, or non-Oregon events. The committee recommends these vehicles only be allowed to practice between 12 noon and 3 p.m. or when specifically authorized by the Director.

Airports OAR 340-35-045

Several amendments are proposed within the noise control rule for airports. Amendments are necessary for the clarification of requirements for any airport that becomes an "air carrier airport". The rule now requires air carrier airports to develop noise contours within twelve months after the rule was adopted in 1979. It is proposed that any newly designated air carrier airport develop contours within twelve months of designation.

Other amendments would clarify the requirement for the submittal of field verification of the impact boundary. At the time of adoption, the Commission made several amendments concerning field verification. It is now proposed to make clear that no field verification is necessary unless required under section (7) of this rule.

Proposed new airports are required to submit information on noise impacts prior to construction or operation. The purpose of this requirement is to describe the extent of impacts and to assist local government in its land use decisions. As most of these proposed airports have gained local land use approval prior to the submittal of noise impact information, it is desirable to require this information prior to local land use approval. Therefore, it is proposed to require the submittal of the noise impact information prior to local land use approval, if land use approval is required. Also, it would be required that the noise impact information would also be submitted to the local planning unit and the Department of Land Conservation and Development.

Procedure Manuals NPCS-1 (Noise Pollution Control Section -1), NPCS-2, NPCS-21 and NPCS-35

Pursuant to ORS 467.030 several procedure manuals have been approved by the Commission that are necessary to specify requirements and specifications for noise monitoring equipment and procedures for the collection, reporting and interpretation of monitoring data. Several minor amendments are now desirable to clarify portions of these manuals or to reflect proposed amendments in the regulations.

Summation

After a period of several years, it is now found desirable to modify portions of the noise control rules and procedure manuals as provided in Attachment 3 to this report. These modifications include the following:

1. Clarifying amendments are proposed for the Definitions.
2. Minor amendments are proposed for rules controlling the sale of new motorcycles and motorboats.
3. Operational standards for motor vehicles would be updated and amendments to auxiliary vehicle equipment are proposed.
4. The impulses standards for blasting would be modified.
5. Amendments to the motor racing standards would establish provisions for "exhibition" events and enhance enforcement of the drag race rule.
6. The airport rule would be amended to provide noise impact information to local land use authorities prior to construction of any new airport.

7. Clarifying amendments would be made to the procedure manuals.

Director's Recommendation

Based on the Summation, it is recommended that the Commission authorize public hearings to take testimony on proposed amendments to noise control rules OAR 340-35-015, 35-025, 35-030, 35-035, 35-040 and 35-045 and the Procedure Manuals NPC-1, 2, 21 and 35 as shown in Attachment 3.

Bill

William H. Young

Attachments:

1. Draft Statement of Need for Rulemaking
2. Draft Hearings Notice
3. Draft Rule and Procedure Amendments

John Hector:a
229-5989
November 9, 1982
NA2749

STATEMENT OF NEED AND FISCAL IMPACT FOR RULEMAKING

Pursuant to ORS 183.335(2), this statement provides information on the intended action to amend a rule.

Legal Authority

This proposal may be adopted under authority of ORS 467.030.

Need for the Rule

Excessive emissions of noise cause impacts detrimental to the health, safety or welfare of Oregon's citizens.

Principal Documents Relied Upon

- a. Existing noise control regulations, OAR 340-35-015, 35-025, 35-030, 35-035, 35-040, and 35-045.
- b. Existing noise control procedure manuals NPCS-1, 2, 21, and 35.

The above documents may be reviewed at the Department's offices at 522 S.W. Fifth Avenue, Portland, Oregon.

Fiscal and Economic Impact

As these proposals are minor amendments to existing rules, it is not expected that more than minimal beneficial or minimal adverse impacts may result in any of these amendments being adopted.

John Hector:a
229-5989
NA2750

Attachment 2
Prepared: 11/3/82
Hearing Date:

NOTICE OF PUBLIC HEARING

A CHANCE TO BE HEARD ABOUT:

EQC SOLICITS TESTIMONY ON PROPOSED AMENDMENTS TO NOISE CONTROL REGULATIONS

The Oregon Department of Environmental Quality (DEQ) has scheduled public hearings to consider testimony on a proposal to amend various portions of regulations for the control of noise emissions. Hearings will be held on this proposal on _____.

WHAT IS THE DEQ PROPOSING:

Interested parties should request a copy of the complete proposed rule package. Some highlights are:

DEQ is proposing general amendments to the following noise control rules and procedure manuals:

1. OAR 340-35-015 Definitions
2. OAR 340-35-025 Noise Control Regulations for the Sale of New Motor Vehicles.
3. OAR 340-35-030 Noise Control Regulations for In Use Motor Vehicles.
4. OAR 340-35-035 Noise Control Regulations for Industry and Commerce.
5. OAR 340-35-040 Noise Control Regulations for Motor Sports Vehicles and Facilities.
6. OAR 340-35-045 Noise Control Regulations for Airports.
7. NPC-1 Sound Measurement Procedure Manual.

8. NPC-2 Requirements for Sound Measuring Instruments and Personnel.
9. NPC-21 Motor Vehicle Sound Measurement Procedures Manual.
10. NPC-35 Motor Race Vehicles and Facility Sound Measurement and Procedure Manual.

WHO IS AFFECTED BY THIS PROPOSAL:

The public is affected by excessive noise emissions. The motor vehicle industry, the motoring public, industry and commerce, motor racing participants and facility owners, and airport operators are directly affected by these proposed amendments.

HOW TO PROVIDE YOUR INFORMATION:

Written comments should be sent to the Department of Environmental Quality, Noise Control Section, Box 1760, Portland, Oregon 97207, and should be received by _____.

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

<u>City</u>	<u>Time</u>	<u>Date</u>	<u>Location</u>
-------------	-------------	-------------	-----------------

WHERE TO OBTAIN ADDITIONAL INFORMATION:

Copies of the proposed rules may be obtained from:

DEQ Noise Control Section
Box 1760
Portland, Oregon 97207

LEGAL REFERENCES FOR THIS PROPOSAL:

This proposal Chapter 340 Section 35 and procedure manuals under authority of ORS Chapter 467.

This proposal does not appear to conflict with Land Use Goals. Public comment on land use issues involved is welcome, and may be submitted in the same fashions as are indicated for testimony in this Public Notice of Hearing. The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any apparent conflicts brought to our attention by local, state or federal authorities.

Final Action

After public hearing, the Commission may adopt a rule identical to the one proposed, adopt a modified rule on the same subject, or decline to act. The Commission's deliberation should come in _____ as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need and Fiscal Impact Statement are attached to this notice.

John Hector:a
November 3, 1982
NA2751

PROPOSED AMENDMENTS

December 1982

December 3, 1982
EQC Meeting

DEPARTMENT OF ENVIRONMENTAL QUALITY

CHAPTER 340, OREGON ADMINISTRATIVE RULES

DIVISION 35

NOISE CONTROL REGULATIONS

General

Added material is underlined and deleted material is [bracketed].

Policy

340-35-005 In the interest of public health and welfare, and in accordance with ORS 467.010, it is declared to be the public policy of the State of Oregon:

(1) To provide a coordinated state-wide program of noise control to protect the health, safety, and welfare of Oregon citizens from the hazards and deterioration of the quality of life imposed by excessive noise emissions;

(2) To facilitate cooperation among units of state and local governments in establishing and supporting noise control programs consistent with the State program and to encourage the enforcement of viable local noise control regulations by the appropriate local jurisdiction;

(3) To develop a program for the control of excessive noise sources which shall be undertaken in a progressive manner, and each of its objectives shall be accomplished by cooperation among all parties concerned.

Exceptions

340-35-010 (1) Upon written request from the owner or controller of a noise source, the Department may authorize exceptions as specifically listed in these rules.

(2) In establishing exceptions, the Department shall consider the protection of health, safety, and welfare of Oregon citizens as well as the feasibility and cost of noise abatement; the past, present, and future patterns of land use; the relative timing of land use changes and other legal constraints. For those exceptions which it authorizes, the Department shall specify the times during which the noise rules can be exceeded and the quantity and quality of the noise generated, and when appropriate shall specify the increments of progress of the noise source toward meeting the noise rules.

Definitions

340-35-015 As used in this division:

(1) "Air Carrier Airport" means any airport that serves air carriers holding Certificates of Public Convenience and Necessity issued by the Civil Aeronautic Board.

(2) "Airport Master Plan" means any long-term development plan for the airport established by the airport proprietor.

(3) "Airport Noise Abatement Program" means a Commission-approved program designed to achieve noise compatibility between an airport and its environs.

(4) "Airport Proprietor" means the person who holds title to an airport.

(5) "Ambient Noise" means the all-encompassing noise associated with a given environment, being usually a composite of sounds from any sources near and far.

(6) "Annual Average Day-Night Airport Noise Level" means the average, on an energy basis, of the daily Day-Night Airport Noise Level [of] over a 12-month period.

(7) "Any one hour" means any period of 60 consecutive minutes during the 24-hour day.

(8) "Closed Course Motorcycle Racing Vehicle" means any motorcycle racing vehicle that is operated in competition or practice session on a closed course motor sports facility, i.e. where public access is restricted and admission is generally charged.

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

(10) "Construction" shall mean building or demolition work and shall include all activities thereto such as clearing of land, earthmoving, and landscaping, but shall not include the production of construction materials.

(11) "Day-Night Airport Noise Level (Ldn)" means the Equivalent Noise Level produced by airport/aircraft operations during a 24-hour time period, with a 10 decibel penalty applied to the level measured during the nighttime hours of 10 pm to 7 am.

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

(13) "Director" means the Director of the Department.

(14) "Drag Racing Vehicle" means any racing vehicle used to compete in any acceleration competition initiated from a standing start and continued over a straight line course.

(15) "Emergency Equipment" means noise emitting devices required to avoid or reduce severity of accidents. Such equipment includes, but is not limited to, safety valves and other unregulated pressure relief devices.

(16) "Equivalent Noise Level (Leq)" means the equivalent steady state sound level in A-weighted decibels for a stated period of time which contains the same acoustic energy as the actual time-varying sound level for the same period of time.

(17) "Existing Industrial or Commercial Noise Source" means any Industrial or Commercial Noise Source for which installation or construction was commenced prior to January 1, 1975.

(18) "Farm Tractor" means any Motor Vehicle designed primarily for use in agricultural operations for drawing or operating plows, mowing machines, or other implements of husbandry.

(19) "Four Wheel Drive Racing Vehicle" means any four-wheeled racing vehicle with at least one wheel on the front and rear axle driven by the engine or any racing vehicle participating in an event with predominantly four wheel drive racing vehicles.

(20) "Go-Kart Racing Vehicle" means a light-weight four-wheeled racing vehicle of the type commonly known as a go-kart.

(21) "Impulse Sound" means either a single pressure peak or single burst (multiple pressure peaks) for a duration of less than one second as measured on a peak unweighted sound pressure measuring instrument or "C" weighted, slow response instrument and specified by dB and dBC respectively.

(22) "In-Use Motor Vehicle" means any Motor Vehicle which is not a New Motor Vehicle.

(23) "Industrial or Commercial Noise Source" means that source of noise which generates Industrial or Commercial Noise Levels.

(24) "Industrial or Commercial Noise Levels" means those noises generated by a combination of equipment, facilities, operations, or activities employed in the production, storage, handling, sale, purchase, exchange, or maintenance of a product, commodity, or service and those noise levels generated in the storage or disposal of waste products.

(25) "Motorboat" as used in OAR 340-35-025 means a watercraft propelled by an internal combustion engine but does not include a boat powered by an outboard motor or an inboard/outboard power package designed to exhaust beneath the surface of the water.

(26) "Motorcycle" means any Motor Vehicle, except Farm Tractors, designed to travel on not more than three wheels which are in contact with the ground.

(27) "Motor Sports Advisory Committee" means a committee appointed by the Director, from among the nominees, for the purpose of technical advice on racing activities and to recommend Exceptions to these rules as specified in OAR 340-35-040(12). This Committee shall consist of:

(a) One permanent public member nominated by a noise impacted group or association; and

(b) One representative of each of the racing vehicle types identified in OAR 340-35-040(2) as nominated by the respective sanctioning bodies; and

(c) The program manager of the Department's noise pollution control section who shall also serve as the departmental staff liaison to this body[.]; and

(d) An attorney; and

(e) An acoustical engineer.

(28) "Motor Sports Facility" means any facility, track or course upon which racing events are conducted.

(29) "Motor Sports Facility Noise Impact Boundaries" means the daily 55 dBA day-night (Ldn) noise contours around the motor sports facility representing events that may occur on the day of maximum projected use.

(30) "Motor Sports Facility Owner" means the owner or operator of a motor sports facility or an agent or designee of the owner or operator. When a Racing Event is held on public land, the event organizer (i.e., promoter) shall be considered the motor sports facility owner for the purposes of these rules.

(31) "Motor Vehicle" means any vehicle which is, or is designed to be self-propelled or is designed or used for transporting persons or property. This definition excludes airplanes, but includes watercraft.

(32) "New Airport" means any airport for which installation, construction, or expansion of a runway commenced after January 1, 1980.

(33) "New Industrial or Commercial Noise Source" means any Industrial or Commercial Noise Source for which installation or construction was commenced after January 1, 1975 on a site not previously occupied by the industrial or commercial noise source in question.

(34) "New Motor Sports Facility" is any permanent motor sports facility for which construction or installation was commenced after [the effective date of these rules] January 1, 1982. Any recreational park or similar facility which initiates sanctioned racing after [the effective date] this date [of these rules] shall be considered a new motor sports facility.

(35) "New Motor Vehicle" means a Motor Vehicle whose equitable or legal title has never been transferred to a Person who in good faith purchases the New Motor Vehicle for purposes other than resale. The model year of such vehicle shall be the year so specified by the manufacturer, or if not so specified, the calendar year in which the new motor vehicle was manufactured.

(36) "Noise Impact Boundary" means a contour around the airport, any point on which is equal to the airport noise criterion.

(37) "Noise Level" means weighted Sound Pressure Level measured by use of a metering characteristic with an "A" frequency weighting network and reported as dBA.

(38) "Noise Sensitive Property" means real property normally used for sleeping, or normally used as schools, churches, hospitals or public libraries. Property used in industrial or agricultural activities is not Noise Sensitive Property unless it meets the above criteria in more than an incidental manner.

(39) "Octave Band Sound Pressure Level" means the sound pressure level for the sound being measured within the specified octave band. The reference pressure is 20 micropascals (20 micronewtons per square meter).

(40) "Off-Road Recreational Vehicle" means any Motor Vehicle, including watercraft, used off Public Roads for recreational purposes. When a Road Vehicle is operated off-road, the vehicle shall be considered an Off-Road Recreational Vehicle if it is being operated for recreational purposes.

(41) "One-Third Octave Band Sound Pressure Level" means the sound pressure level for the sound being measured within the specified one-third octave band at the Preferred Frequencies. The reference pressure is 20 micropascals (20 micronewtons per square meter).

(42) "Open Course Motorcycle Racing Vehicle" means any motorcycle racing vehicle that is operated in competition on an open course motor sports facility, i.e. where public access is not generally restricted. This definition is intended to include the several types of motorcycles such as "enduro" and "cross country" that are used in events held in trail or other off-road environments.

(43) "Oval Course Racing Vehicle" means any racing vehicle, not a motorcycle and not a sports car, which is operated upon a closed, oval-type motor sports facility.

(44) "Person" means the United States Government and agencies thereof, any state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatever.

(45) "Practice Sessions" means any period of time during which racing vehicles are operated at a motor sports facility, other than during racing events. Driver training sessions or similar activities which are not held in anticipation of a subsequent racing event, and which include only vehicles with a stock exhaust system, shall not be considered practice sessions.

(46) "Preferred Frequencies" means those mean frequencies in Hertz preferred for acoustical measurements which for this purpose shall consist of the following set of values: 20, 25, 31.5, 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, 10,000, 12,500.

(47) "Previously Unused Industrial or Commercial Site" means property which has not been used by any industrial or commercial noise source during the 20 years immediately preceding commencement of construction of a new industrial or commercial source on that property. Agricultural activities and silvicultural activities [of an incidental nature] generating infrequent noise emissions shall not be considered as industrial or commercial operations for the purposes of this definition.

(48) "Propulsion Noise" means that noise created in the propulsion of a Motor Vehicle. This includes, but is not limited to exhaust system noise, induction system noise, tire noise, cooling system noise, aerodynamic noise and where appropriate in the test procedure, braking system noise. This does not include noise created by Road Vehicle Auxiliary Equipment such as power take-offs and compressors.

(49) "Public Roads" means any street, alley, road, highway, freeway, thoroughfare, or section thereof in this state used by the public or dedicated or appropriated to public use.

(50) "Quiet Area" means any land or facility designated by the Commission as an appropriate area where the qualities of serenity, tranquility, and quiet are of extraordinary significance and serve an important public need, such as, without being limited to, a wilderness area, national park, state park, game reserve, wildlife breeding area or amphitheater. The Department shall submit areas suggested by the public as Quiet Areas, to the Commission, with the Department's recommendation.

(51) "Racing Event" means any time, speed or distance competition using motor vehicles conducted under a permit issued by the governmental authority having jurisdiction, or under the auspices of a recognized sanctioning body. This definition includes, but is not limited to, events on the surface of land and water. Any motor sports event not meeting this definition shall be subject to the ambient noise limits of OAR 340-35-030(1)(d).

(52) "Racing Vehicle" means any Motor Vehicle that is designed to be used exclusively in Racing Events or any New Motor Vehicle that has not been certified by its manufacturer as meeting the applicable noise limits of OAR 340-35-025 or any vehicle participating in or practicing for a Racing Event.

(53) "Recreational Park" means a facility open to the public for the operation of off-road recreational vehicles.

(54) "Road Vehicle" means any Motor Vehicle registered for use on Public Roads, including any attached trailing vehicles.

(55) "Road Vehicle Auxiliary Equipment" means those mechanical devices which are built in or attached to a Road Vehicle and are used primarily for the handling or storage of products in that Motor Vehicle. This includes, but is not limited to, refrigeration units, compressors, compactors, chippers, power lifts, mixers, pumps, blowers, and other mechanical devices.

(56) "Sound Pressure Level (SPL)" means 20 times the logarithm to the base 10 of the ratio of the root-mean-square pressure of the sound to the reference pressure. SPL is given in decibels (dB). The reference pressure is 20 micropascals (20 micronewtons per square meter).

(57) "Special Motor Racing Event" means any racing event in which either a substantial [or significant] number of out-of-state racing vehicles are competing or any event which has a special significance to the community and which has been recommended as a special motor racing event by the motor sports advisory committee and approved by the Department.

(58) "Sports Car Racing Vehicle" means any racing vehicle which meets the requirements and specifications of the competition rules of any sports car organization.

(59) "Statistical Noise Level" means the Noise Level which is equalled or exceeded a stated percentage of the time.

An $L_{10} = 65$ dBA implies that in any hour of the day 65 dBA can be equalled or exceeded only 10 percent of the time, or for six minutes.

(60) "Stock Exhaust System" means an original equipment manufacturer exhaust system or a replacement for original equipment for a street legal vehicle whose noise emissions do not exceed those of the original equipment.

(61) "Temporary Autocross or Solo Course" means any area upon which a paved course motor sports facility is temporarily established. Typically such courses are placed on parking lots, or other large paved areas, for periods of one or two days.

(62) "Top Fuel-Burning Drag Racing Vehicle" means a drag racing vehicle that operates using principally alcohol (more than 50 percent) or utilizes nitromethane as a component of its operating fuel and commonly known as top fuel and funny cars.

(63) "Trackside" means a sound measuring point of 50 feet from the racing vehicle and specified in Motor Race Vehicle and Facility Sound Measurement and Procedure Manual, NPC5-35.

(64) "Warning Device" means any device which signals an unsafe or potentially dangerous situation.

(65) "Watercraft Racing Vehicle" means any racing vehicle which is operated upon or immediately above the surface of water.

(66) "Well Maintained Muffler" means a device or combination of devices which effectively decreases the sound energy of internal combustion engine exhaust without a muffler by a minimum of 5 dBA at trackside. A well maintained muffler shall be free of defects or modifications that reduce its sound reduction capabilities. Each outlet of a multiple exhaust system shall comply with the requirements of this subsection, notwithstanding the total engine displacement versus muffler length requirements. Such a muffler shall be a:

(a) Reverse gas flow device incorporating a multitube and baffle design; or a

(b) Perforated straight core device, fully surrounded from beginning to end with a sound absorbing medium, not installed on a rotary engine[, and:] ; or an

[(A) at least 20 inches in inner core length when installed on any engine exceeding 1600 cc (96.7 cubic inches) displacement; or]

[(B) at least 12 inches in inner core length when installed on any non-motorcycle engine equal to or less than 1600 cc (96.7 cubic inches) displacement; or]

[(C) at least 6 inches in inner core length and installed at the outlet end of any four-cycle motorcycle engine; or]

[(D) at least 8 inches in inner core length when installed on any two-cycle motorcycle engine; or an]

(c) Annular swirl flow (auger-type) device [of:] ; or a

[(A) at least 16 inches in swirl chamber length when installed on any engine exceeding 1600 cc (96.7 cubic inches) displacement; or]

[(B) at least 10 inches in swirl chamber length when installed on any engine equal to or less than 1600 cc (96.7 cubic inches) displacement; or a]

(d) Stacked 360° diffuser disc device; or a

(e) Turbocharger; or a

(f) Go-Kart muffler as defined by the International Karting Federation as specified in Motor Race Vehicle and Facility Sound Measurement and Procedure Manual, NPC-35; or an

(g) Original equipment manufacturer motorcycle muffler when installed on a motorcycle model such muffler was designated for by the manufacturer; or

(h) [Outboard] Boat motor whose exhaust exits beneath the water surface during operation; or a

(i) Formula Vee four-into-one header/collector; or a

(j) Hughes Racing muffler; or

(k) Any other device demonstrated effective and approved by the motor sports advisory committee and the Department.

Noise Control Regulations for the Sale of New Motor Vehicles

340-35-025 (1) Standards and Regulations:

(a) No person shall sell or offer for sale any new motor vehicle designated in this section which produces a propulsion noise exceeding the noise limits specified in Table 1, except as otherwise provided in these rules.

(b) Subsequent to the adoption of a Federal Environmental Protection Agency procedure to determine sound levels of passenger cars and light trucks, or a nationally accepted procedure for these vehicles not similar to those specified and approved under subsection (2)(a), the Department shall conduct an evaluation under such new procedure.

(c) After an appropriate evaluation of noise emission data measured under the procedure specified under subsection (1)(b), the Department shall make recommendations to the Commission on the adequacy of the procedure and the necessity of amendments to this rule for incorporation of the procedure and associated standards.

(d) [Notwithstanding the provisions of the subsections (1)(b) and (1)(c) the Department shall present a progress and status report on passenger car and light truck noise emission controls to the Commission no later than July 1, 1982.] Repealed

(e) No person shall sell or offer to sell any new motorcycle, new motorcycle exhaust system or new motorcycle exhaust system component manufactured after January 1, 1983 unless the motorcycle, exhaust system, or exhaust component is properly labeled in accordance with Federal noise regulations specified in Part 205 Subpart E of Title 40 of the Code of Federal Regulations.

(2) Measurement:

(a) Sound measurements shall conform to test procedures adopted by the Commission in Motor Vehicle Sound Measurement Procedures Manual (NPC-21), or to standard methods approved in writing by the Department. These measurements will generally

be carried out by the motor vehicle manufacturer on a sample of either prototype or production vehicles. A certification program shall be devised by the manufacturer and submitted to the Department for approval within 60 days after the adoption of this rule.

(b) Nothing in this section shall preclude the Department from conducting separate or additional noise level tests and measurements on new motor vehicles being offered for sale. Therefore, when requested by the Department, a new motor vehicle dealer or manufacturer shall cooperate in reasonable noise testing of a specific class of motor vehicle being offered for sale.

(3) Manufacturer's Certification:

(a) Prior to the sale or offer for sale of any new motor vehicle designated in Table 1, the manufacturer or a designated representative shall certify in writing to the Department that vehicles listed in Table 1 made by that manufacturer and offered for sale in the State of Oregon meet applicable noise limits. Such certification will include a statement by the manufacturer that:

(A) The manufacturer has tested sample or prototype vehicles.

(B) That such samples or prototypes met applicable noise limits when tested in accordance with the procedures specified.

(C) That vehicles offered for sale in Oregon are substantially identical in construction to such samples or prototypes.

(b) Nothing in this section shall preclude the Department from obtaining specific noise measurement data gathered by the manufacturer on prototype or production vehicles for a class of vehicles for which the Department has reasonable grounds to believe is not in conformity with the applicable noise limits.

(4) Exceptions. Upon prior written request from the manufacturer or designated representative, the Department may authorize an exception to this noise rule for a class of motor vehicles, if it can be demonstrated to the Department that for that specific class a vehicle manufacturer has not had adequate lead-time or does not have the technical capability to either bring the motor vehicle noise into compliance or to conduct new motor vehicle noise tests.

(5) Exemptions:

(a) All racing vehicles, except racing motorcycles, and racing motorboats, shall be exempt from the requirements of this section provided that such vehicles are operated only at facilities used for sanctioned racing events.

(b) Racing motorcycles and racing motorboats shall be exempt from the requirements of this section provided that racing motorcycles are operated only at facilities used for sanctioned racing events, racing motorboats are operated only at areas designated by the State Marine Board for testing or at an approved racing event, and the following conditions are complied with:

(A) Prior to the sale of a racing motorcycle or racing motorboat, the prospective purchaser shall file a notarized affidavit with the Department, on a Departmentally approved form, stating that it is the intention of such prospective purchaser to operate the vehicle only at facilities used for sanctioned racing events; and

(B) No racing vehicle shall be displayed for sale in the State of Oregon without notice prominently affixed thereto:

(i) That such vehicle will be exempt from the requirements of this section only upon demonstration to the Department that the vehicle will be operated only at facilities used for sanctioned racing events; and

(ii) That a notarized affidavit will be required of the prospective purchaser stating that it is the intention of such prospective purchaser to operate the vehicle only at facilities used for sanctioned racing events; and

(C) No racing vehicle shall be locally advertised in the State of Oregon as being for sale without notice included:

(i) which is substantially similar to that required in (B)(i) and (B)(ii) above, and

(ii) Which is unambiguous as to which vehicle such notice applies.

Noise Control Regulations for In-Use Motor Vehicles

340-35-030 (1) Standards and Regulations:

(a) Road Vehicles

(A) No person shall operate any road vehicle which exceeds the noise level limits specified in Table 2 or 3, except as otherwise provided in these rules.

(B) No person shall operate a road vehicle with any of the following defects:

(i) No muffler

(ii) Leaks in the exhaust system

(iii) Pinched outlet pipe

(C) Non-conforming "classic" and other "special interest" vehicles may be granted an exception to this rule, pursuant to Rule 340-35-010, for the purpose of maintaining authentic equipment.

(b) Off-Road Recreational Vehicles.

(A) No person shall operate any off-road recreational vehicle which exceeds the noise level limits specified in Table 4.

(B) No person shall operate an off-road recreational vehicle with any of the following defects:

(i) No muffler

(ii) Leaks in the exhaust system

(iii) Pinched outlet pipe

(c) Trucks Engaged in Interstate Commerce. Motor vehicles with a GVWR or GCWR in excess of 10,000 pounds which are engaged in interstate commerce by trucking and are regulated by Part 202 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1978, 86.

Stat. 1248, Pub. L. 92-574, shall be:

(A) Free from defects which adversely affect sound reduction;

(B) Equipped with a muffler or other noise dissipative device;

(C) Not equipped with any "cut-out" devices, "by-pass" devices, or any other similar devices; and

(D) Not equipped with any tire which as originally manufactured or newly retreaded having a tread pattern composed primarily of cavities in the tread, excluding sipes and local chunking, not vented by grooves to the tire shoulder or vented circumferentially to each other around the tire.

(d) Ambient Noise Limits.

(A) No person shall cause, allow, permit, or fail to control the operation of motor vehicles, including motorcycles, on property which he owns or controls, nor shall any person operate any such motor vehicle if the operation thereof increases the ambient noise level such that the appropriate noise level specified in Table 5 is exceeded as measured from either of the following points, if located within 1000 feet (305 meters) of the motor vehicle:

(i) Noise sensitive property, or

(ii) [The boundary of] A quiet area.

(B) Exempt from the requirements of this subsection shall be:

(i) Motor vehicles operating in racing events;

(ii) Motor vehicles initially entering or leaving property which is more than 1000 feet (305 meters) from the nearest noise sensitive property or [boundary of a] quiet area;

(iii) Motor vehicles operating on public roads; and

(iv) Motor vehicles operating off-road for non-recreational purposes.

(e) Auxiliary Equipment Noise Limits.

(A) No person shall operate any road vehicle auxiliary equipment [powered by the road vehicle's primary power source] which exceeds the noise limits specified in Table 6, except as otherwise provided in these rules.

(B) [As of June 1974, the Department does not have sufficient information to determine the maximum noise levels for road vehicle auxiliary equipment powered by a secondary source. Research on this noise source will be carried out with the goal of setting noise level limits by January 1, 1975.]

No person shall cause, allow, permit, or fail to control the operation of any road vehicle auxiliary equipment that exceeds 50 dBA for more than 30 minutes between 10 p.m. and 7 a.m. at any appropriate noise sensitive property measurement point as specified in OAR 340-35-035 (3)(b).

(f) Motorcycles manufactured after December 31, 1982 to Federal Noise Regulations (40 CFR Part 205):

(A) No person shall remove or render inoperative, or cause to be removed or rendered inoperative, other than for the purposes of maintenance, repair, or replacement of any device or element of design incorporated in the motorcycle for the purpose of noise control.

(B) No person shall remove or deface any noise label required by Federal law which is affixed to any motorcycle or motorcycle part for purposes of identifying the motorcycle or motorcycle part as a federally regulated product.

(C) No person shall operate any road or off-road motorcycle manufactured to federal noise law that does not bear a label on the exhaust system that matches the model of the motorcycle on which the system is installed.

(D) No person shall operate, nor shall any person cause, allow, permit or fail to control the operation of any competition motorcycle identified for "competition use only" by the noise label required by federal law on any property other than a motor sports facility in a practice session or a racing event.

(E) No person shall operate, nor shall any person cause, allow, permit or fail to control the operation of any motorcycle fitted with an exhaust system or exhaust system component identified for "competition motorcycles only" by the noise label required by federal law on any property other than a motor sports facility in a practice session or a racing event.

(2) Measurement. Sound measurement shall conform to test procedures adopted by the Commission in Sound Measurement Procedures Manual (NPCS-1) and Motor Vehicle Sound Measurement Procedures Manual (NPCS-21) or to standard methods approved in writing by the Department.

(3) Exemptions:

(a) Motor Vehicles registered as antique or historical motor vehicles licensed in accordance with ORS 481.205(4) are exempt from these regulations.

(b) Motor vehicle warning devices are exempt from these regulations.

(c) Vehicles equipped with at least two snowtread tires are exempt from the noise limits of Table 3.

(d) Motor vehicles described in subsection (1)(c), which are demonstrated by the operator to be in compliance with the noise levels in Table 3, for operation greater than 35 mph, are exempt from these regulations.

(e) Auxiliary equipment operated on construction sites or in the maintenance of capital equipment or to avoid or reduce the severity of accidents or operated on a farm for agricultural purposes or operated on forest land as defined in Subsection (1) of ORS 526.324 for activities related to the growing or harvesting of forest tree species are exempt from these regulations.

(4) Equivalency:

(a) The in-use motor vehicle standards specified in Table 2 and Table 3 have been determined by the Department to be substantially equivalent to the 25 foot stationary test standards set forth in 1977

Oregon Laws Chapter 273 (ORS 483.449).

(b) Tests shall be conducted according to the procedures in Motor Vehicle Sound Measurement Procedures Manual (NPCS-21) or to standard methods approved in writing by the Department.

Noise Control Regulations for Industry and Commerce

340-35-035 (1) Standards and Regulations:

(a) Existing Noise Sources. No person owning or controlling an existing industrial or commercial noise source shall cause or permit the operation of that noise source if the statistical noise levels generated by that source and measured at an appropriate measurement point, specified in subsection (3)(b) of this section, exceed the levels specified in Table 7, except as otherwise provided in these rules.

(b) New Noise Sources.

(A) New Sources Located on Previously Used Sites. No person owning or controlling a new industrial or commercial noise source located on a previously used industrial or commercial site shall cause or permit the operation of that noise source if the statistical noise levels generated by that new source and measured at an appropriate measurement point, specified in subsection (3)(b) of this section, exceed the levels specified in Table 8, except as otherwise provided in these rules.

(B) New Sources Located on Previously Unused Site.

(i) No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels L_{10} or L_{50} , by more than 10 dBA in any one hour, or exceed the levels specified in Table 8, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule.

(ii) The ambient statistical noise level of a new industrial or commercial noise source on a previously unused industrial or commercial site shall include all noises generated or indirectly caused by or attributable to that source, including all of its related activities. Sources exempted from the requirements of section (1) of this rule, which are identified in subsection (5)(b), (5)(c), (5)(d), (5)(e), (5)(f), (5)(j), and (5)(k) [and (5)(1)] of this rule, shall not be excluded from this ambient measurement.

(c) [Modified Noise Sources. After January 1, 1975 and before January 1, 1978, no person owning or controlling an existing industrial or commercial noise source shall modify that noise source so as to violate the following rules:

(A) If prior to modification an industrial or commercial noise source does not exceed the noise levels in Table 8, the modified industrial or commercial noise source shall not exceed the noise levels in Table 8, except as otherwise provided in these rules.

(B) If prior to modification an existing industrial or commercial noise source exceeds the noise levels in Table 8, but does not exceed the noise levels in Table 7, then the modification shall not cause an increase in the existing statistical noise levels, except as otherwise provided in these rules.] Repealed

(d) Quiet Areas. No person owning or controlling an industrial or commercial noise source located either within the boundaries of a Quiet Area or outside its boundaries shall cause or permit the operation of that noise source if the statistical noise levels generated by that source exceed the levels specified in Table 9 as measured within the Quiet Area and not less than 400 feet (122 meters) from the noise source.

(e) Impulse Sound. Notwithstanding the noise rules in Tables 7 through 9, no person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if an impulsive sound is emitted in air by that source which exceeds the [peak] sound pressure levels specified below, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule: [100 dB during the hours 7 am to 10 pm and 80 dB between the hours of 10 pm and 7 am.]

(A) Blasting, 98 dBC, slow response, between the hours of 7 am and 10 pm and 93 dBC, slow response, between the hours of 10 pm and 7 am.

(B) All Other Impulse Sounds, 100 db, peak response, between the hours of 7 am and 10 pm and 80 dB, peak response, between the hours of 10 pm and 7 am.

(f) Octave Bands and Audible Discrete Tones. When the Director has reasonable cause to believe that the requirements of subsections (1)(a), (1)(b), [(1)(c)] or (1)(d) of this rule do not adequately protect the health, safety or welfare of the public as provided for in ORS Chapter 467, the Department may require the noise source to meet the following rules:

(A) Octave Bands. No person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if such operation generates a median octave band sound pressure level which, as measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceeds applicable levels specified in Table 10.

(B) One-third Octave Bands. No person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if such operation generates a median one-third octave band sound pressure level which, as measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, and in a one-third octave band at a preferred frequency, exceeds the arithmetic average of the median sound pressure levels of the two adjacent one-third octave bands by:

(1) 5 dB for such one-third octave band with a center frequency from 500 Hertz to 10,000 Hertz, inclusive. Provided:

such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band, or;

(ii) 8 dB for such one-third octave band with a center frequency from 160 Hertz to 400 Hertz, inclusive. Provided: such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band, or;

(iii) 15 dB for such one-third octave band with a center frequency from 25 Hertz to 125 Hertz, inclusive. Provided: such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band.

This rule shall not apply to audible discrete tones having a one-third octave band sound pressure level 10 dB or more below the allowable sound pressure levels specified in Table 10 for the octave band which contains such one-third octave band.

(2) Compliance. Upon written notification from the Director, the owner or controller of an industrial or commercial noise source operating in violation of the adopted rules shall submit a compliance schedule acceptable to the Department. The schedule will set forth the dates, terms, and conditions by which the person responsible for the noise source shall comply with the adopted rules.

(3) Measurement:

(a) Sound measurement procedures shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1) or to such other procedures as are approved in writing by the Department.

(b) Unless otherwise specified the appropriate measurement point shall be that point on the noise sensitive property, described below, which is further from the noise source:

(A) 25 feet (7.6 meters) toward the noise source from that point on the noise sensitive building nearest the noise source,

(B) That point on the noise sensitive property line nearest the noise source.

(4) Monitoring and Reporting:

(a) Upon written notification from the Department, persons owning or controlling an industrial or commercial noise source shall monitor and record the statistical noise levels and operating times of equipment, facilities, operations, and activities, and shall submit such data to the Department in the form and on the schedule requested by the Department. Procedures for such measurements shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1).

(b) Nothing in this section shall preclude the Department from conducting separate or additional noise tests and measurements. Therefore, when requested by the Department, the owner or operator of an industrial or commercial noise source shall provide the following:

(A) Access to the site,

(B) Reasonable facilities, where available, including but not limited to electric power and ladders adequate to perform the testing,

(C) Cooperation in the reasonable operation, manipulation, or shutdown of various equipment or operations as needed to ascertain the source of sound and measure its emission.

(5) Exemptions. Except as otherwise provided in subsection (1)(b)(B)(ii), the rules in section (1) of this rule shall not apply to:

(a) Emergency equipment not operated on a regular or scheduled basis.

(b) Warning devices not operating continuously for more than 5 minutes.

(c) Sounds created by the tires or motor used to propel any road vehicle complying with the noise standards for road vehicles.

(d) Sounds resulting from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad only to the extent that such equipment or facility is regulated by preemptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Pub. L. 92-576; but this exemption does not apply to any standard, control, license, regulation, or restriction necessitated by special local conditions which is approved by the Administrator of the EPA after consultation with the Secretary of Transportation pursuant to procedures set forth in section 17(c)(2) of the Act.

(e) Sounds created by bells, chimes, or carillons.

(f) Sounds not electronically amplified which are created by or generated at sporting, amusement, and entertainment events, except those sounds which are regulated under other noise standards. An event is a noteworthy happening and does not include informal, frequent or ongoing activities such as, but not limited to, those which normally occur at bowling alleys or amusement parks operating in one location for a significant period of time.

(g) Sounds that originate on construction sites.

(h) Sounds created in construction or maintenance of capital equipment.

(i) Sounds created by lawn care maintenance and snow removal equipment.

(j) Sounds generated by the operation of aircraft and subject to preemptive federal regulation. This exception does not apply to aircraft engine testing, activity conducted at the airport that is not directly related to flight operations, and any other activity not preemptively regulated by the federal government or controlled under OAR 340-35-045.

(k) Sounds created by the operation of road vehicle auxiliary equipment complying with the noise rules for such equipment as specified in OAR 340-35-030(1)(e).

- (l) Sounds created by agricultural activities.
- (m) Sounds created by activities related to the growing or harvesting of forest tree species on forest land as defined in subsection (1) of ORS 526.324.
- (6) Exceptions: Upon written request from the owner or controller of an industrial or commercial noise source, the Department may authorize exceptions to section 340-35-035(1), pursuant to rule 340-35-010, for:
 - (a) Unusual and/or infrequent events.
 - (b) Industrial or commercial facilities previously established in areas of new development of noise sensitive property.
 - (c) Those industrial or commercial noise sources whose statistical noise levels at the appropriate measurement point are exceeded by any noise source external to the industrial or commercial noise source in question.
 - (d) Noise sensitive property owned or controlled by the person who controls or owns the noise source [or]
 - (e) Noise sensitive property located on land zoned exclusively for industrial or commercial use.

Noise Control Regulations for Motor Sports Vehicles and Facilities

340-35-040 (1) Statement of Purpose. (a) The Commission finds that the periodic noise pollution caused by Oregon motor sports activities threatens the environment of citizens residing in the vicinity of motor sports facilities. To mitigate motor sports noise impacts, a coordinated statewide program is desirable to ensure that effective noise abatement programs are developed and implemented where needed. This abatement program includes measures to limit the creation of new noise impacts and the reduction of existing noise impacts to the extent necessary and practicable.

(b) Since the Commission also recognizes the need of Oregon's citizens to participate in recreational activities of their choice, these rules balance those citizen needs which may conflict when motor sports facilities are in operation. Therefore, a policy of continuing participation in standards development through the active cooperation of interested parties is adopted. The choice of these parties is to limit the noise emission levels of racing and recreational vehicles, to designate equipment requirements, and to establish appropriate hours of operation. It is anticipated that safety factors, limited technology, special circumstances, and special events may require exceptions to these rules in some instances; therefore, a mechanism to accommodate this necessity is included in this rule.

(c) This rule is designed to encourage the motor sports facility owner, the vehicle operator, and government to cooperate to limit and diminish noise and its impacts. These ends can be accomplished by encouraging compatible land uses and controlling and reducing the racing vehicle noise impacts on communities in the vicinity of motor sports facilities to acceptable levels.

the racing vehicle noise impacts on communities in the vicinity of motor sports facilities to acceptable levels.

(d) This rule is enforceable by the Department and civil penalties ranging from a minimum of \$25 to a maximum of \$500 may be assessed for each violation. The motor sports facility owner, the racing vehicle owner and the racing vehicle driver are held responsible for compliance with provisions of this rule. A schedule of civil penalties for noise control may be found under OAR 340-12-052.

(2) Standards:

(a) Drag Racing Vehicle. No motor sports facility owner and no person owning or controlling a drag racing vehicle shall cause or permit its operation at any motor sports facility unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions from its operation do not exceed 105 dBA at trackside.

(b) Oval Course Racing Vehicle. No motor sports facility owner and no person owning or controlling an oval course racing vehicle shall cause or permit its operation at any motor sports facility unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions from its operation do not exceed 105 dBA at trackside.

(c) Sports Car Racing Vehicle. No motor sports facility owner and no person owning or controlling a sports car racing vehicle shall cause or permit its operation at any motor sports facility unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions from its operation do not exceed 105 dBA at trackside.

(d) Closed Course Motorcycle Racing Vehicle. No motor sports facility owner and no person owning or controlling a closed course motorcycle racing vehicle shall cause or permit its operation at any motor sports facility unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions from its operation do not exceed 105 dBA at trackside or 105 dBA at 20 inches (.5 meter) from the exhaust outlet during the stationary measurement procedure.

(e) Open Course Motorcycle Racing Vehicle. No motor sports facility owner and no person owning or controlling an open course motorcycle racing vehicle shall cause or permit its operation at any motor sports facility unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions do not exceed 105 dBA at 20 inches (.5 meter) from the exhaust outlet during the stationary measurement procedure.

(f) Four Wheel Drive Racing Vehicles. No motor sports facility owner and no person owning or controlling a four wheel drive racing vehicle shall cause or permit its operation at any motor sports facility unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions from its operation do not exceed 105 dBA at trackside.

(g) Watercraft Racing Vehicle. No motor sports facility owner and no person owning or controlling a watercraft racing vehicle shall cause or permit its operation at any motor sports

facility unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions from its operation do not exceed 105 dBA at trackside.

(h) Autocross or Solo Racing Vehicle. No motor sports facility owner and no person owning or controlling an autocross or solo racing vehicle shall cause or permit its operation on any temporary autocross or solo course unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions from its operation do not exceed 90 dBA at trackside. Autocross and solo events conducted on a permanent motor sports facility, such as a sports car or go kart course, shall comply with the requirements for sports car racing vehicles specified in subsection (2)(c) of this section.

(i) Go Kart Racing Vehicle. No motor sports facility owner and no person owning or controlling a go kart racing vehicle shall cause or permit its operation at any motor sports facility unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions from its operation do not exceed 105 dBA at trackside.

(3) New Motor Sports Facilities. Prior to the construction or operation of any permanent new motor sports facility, the facility owner shall submit for Department approval the projected motor sports facility noise impact boundaries. The data and analysis used to determine the boundary shall also be submitted to the Department for evaluation. Upon approval of the boundaries, this information shall be submitted to the appropriate local planning unit and the Department of Land Conservation and Development for their review and appropriate action.

(4) Practice Sessions. Notwithstanding section (2) of this rule, all racing vehicles in order to operate in practice sessions, shall comply with a noise mitigation plan which shall have been submitted to and approved by the motor sports advisory committee and the Director. Such plans may be developed and submitted prior to each racing season. An approved plan may be varied with prior written approval of the Department.

(5) Recreational Park. When a motor sports facility is used as a recreational park for the operation of off-road recreational vehicles, the ambient noise limits of OAR 340-35-030(1)(d) shall apply.

(6) Operations:

(a) General. No motor sports facility owner and no person owning or controlling a racing vehicle shall permit its use or operation at any time other than the following:

(A) Sunday through Thursday during the hours 8 a.m. to 10 p.m. local time; and

(B) Friday through Saturday, state and national holidays and the day preceding, not to exceed three consecutive days, during the hours 8 a.m. to 11 p.m. local time.

(b) Overruns. Each motor sports facility may overrun the specified curfew times, not to exceed 30 minutes, no more than six (6) days per year due to conditions beyond the control of the

owner. Each overrun shall be documented to the Department within 10 days of the occurrence.

(c) Special Events. Any approved special motor racing event may also be authorized to exceed this curfew pursuant to subsection (12)(a) of this rule.

(d) Continued Special Events. Any approved special event that cannot be completed within established curfew times due to circumstances beyond the control of the owner, such as but not limited to oil spills and accidents, may be continued the following day under the same conditions provided in the special event exception. The Department shall be notified within 10 days of any continued special event.

(7) Measurement and Procedures. All instruments, procedures and personnel involved in performing sound level measurements shall conform to the requirements specified in Motor Race Vehicle and Facility Sound Measurement and Procedure Manual, NPCS-35, or to standard methods approved in writing by the Department.

(8) Monitoring and Reporting:

(a) It shall be the responsibility of the motor sports facility owner to measure and record the required noise level data as specified under [section] Subsections (2) (b)-(1) of this rule and the Motor Race Vehicle and Facility Sound Measurement and Procedure Manual, NPCS-35. The owner shall either keep such recorded noise data available for a period of at least one calendar year or submit such data to the Department for storage. Upon request the owner shall make such recorded noise data available to the Department.

(b) When requested by the Department, any motor sports facility owner shall provide the following:

(A) Free access to the facility

(B) Free observation of noise level monitoring

(C) Cooperation and assistance in obtaining the reasonable operation of any Racing Vehicle using the facility as needed to ascertain its noise emission level.

(9) Vehicle Standards. No motor sports facility owner and no person owning or controlling a racing vehicle shall cause or permit a racing event or practice session unless the vehicle is equipped and operated in accordance with these rules.

(10) Vehicle Testing. Nothing in this section shall preclude the motor sports facility owner from testing or barring the participation of any racing vehicle for non-compliance with these rules.

(11) Exemptions:

(a) Any motor sports facility whose racing surface is located more than 2 miles from the nearest noise sensitive property shall be exempt from this rule.

(b) Any top fuel-burning drag racing vehicle shall be exempt from the requirements of subsection (2)(a) of this section. No later than January 31, 1985 the Department shall report to the

Commission on progress toward muffler technology development for this vehicle class and propose any necessary recommendations to amend this exemption.

(c) Operation of non-complying exhibition vehicles, such as but not limited to, jet powered dragsters, between the hours of 11 am and 10 pm.

(d) Operation of non-muffled racing vehicles at practice sessions between 12:00 noon and 3:00 p.m. as part of an approved plan as required pursuant to Section (4) of this rule.

(12) Exceptions. The Department shall consider the majority and minority recommendations of the motor sports advisory committee prior to the approval or denial of any exception to these rules. Exceptions may be authorized by the Department for the following pursuant to OAR 340-35-010:

(a) Special motor racing events.

(b) Race vehicle or class of vehicles whose design or mode of operation makes operation with a muffler inherently unsafe or technically unfeasible.

(c) Motor sports facilities previously established in areas of new development of noise sensitive property.

(d) Noise sensitive property owned or controlled by a motor sports facility owner.

(e) Noise sensitive property located on land zoned exclusively for industrial or commercial use.

(f) Any motor sports facility owner or race sanctioning body that proposes a racing vehicle noise control program that accomplishes the intended results of the standards of section (2), the measurement and procedures of section (7), the monitoring and the reporting of section (8), of this rule.

(g) Any motor sports facility demonstrating that noise sensitive properties do not fall within the motor sports facility noise impact boundaries may be exempt from the curfew limits of section (6) and the monitoring and reporting requirements of section (8) of this rule.

(h) Any practice session for non-muffled racing vehicles that does not meet the exemption requirements specified in Subsection (11) (e) of this rule.

(13) Motor Sports Advisory Committee Actions. The committee shall serve at the call of the chairman who shall be elected by the members in accordance with the rules adopted by the committee for its official action.

(14) Effective Date. These rules shall be effective January 1, 1982.

Noise Control Regulations for Airports

340-35-045 (1) Statement of Purpose. (a) The Commission finds that noise pollution caused by Oregon airports threatens the public health and welfare of citizens residing in the vicinity of airports. To mitigate airport noise impacts a coordinated statewide program is desirable to ensure that effective Airport Noise Abatement Programs are developed and

implemented where needed. An abatement program includes measures to prevent the creation of new noise impacts or the expansion of existing noise impacts to the extent necessary and practicable. Each abatement program will primarily focus on airport operational measures to prevent increased, and to lessen existing, noise levels. The program will also analyze the effects of airport noise emission regulations and land use controls.

(b) The principal goal of an airport proprietor who may be required to develop an Airport Noise Abatement program under this rule should be to reduce noise impacts caused by aircraft operations, and to address in an appropriate manner the conflicts which occur within the higher noise contours.

(c) The Airport Noise Criterion is established to define a perimeter for study and for noise sensitive use planning purposes. It is recognized that some or many means of addressing aircraft/airport noise at the Airport Noise Criterion Level may be beyond the control of the airport proprietor. It is therefore necessary that abatement programs be developed, whenever possible, with the cooperation of federal, state and local governments to ensure that all potential noise abatement measures are fully evaluated.

(d) This rule is designed to encourage the airport proprietor, aircraft operator, and government at all levels to cooperate to prevent and diminish noise and its impacts. These ends may be accomplished by encouraging compatible land uses and controlling and reducing the airport/aircraft noise impacts on communities in the vicinity of airports to acceptable levels.

(2) Airport Noise Criterion. The criterion for airport noise is an Annual Average Day-Night Airport Noise Level of 55 dBA. The Airport Noise Criterion is not designed to be a standard for imposing liability or any other legal obligation except as specifically designated within this Section.

(3) Airport Noise Impact Boundary:

(a) [Existing] Air Carrier Airports. Within twelve months of designation [the adoption of this rule], the proprietor of any [existing] Air Carrier Airport shall submit for Department approval, the existing airport Noise Impact Boundary. The data and analysis used to determine the boundary [and the field verification] shall also be submitted to the Department for evaluation.

(b) Existing Non-Air Carrier Airports. After an unsuccessful effort to resolve a noise problem pursuant to subsection (5), the Director may require the proprietor of any existing non-air carrier airport to submit for Department approval, all information reasonably necessary for the calculation of the existing airport Noise Impact Boundary. This information is specified in the Department's Airport Noise Control Procedure Manual (NPCS-37), as approved by the Commission. The proprietor shall submit the required information within twelve months of receipt of the Director's written notification.

(c) New Airports. Prior to the construction or operation and any required local government land-use approval of any New Airport, the proprietor shall submit for Department approval the projected airport Noise Impact Boundary for the first full calendar year of operation. The data and analysis used to determine the boundary shall also be submitted to the Department for evaluation. Upon approval of the boundary, this information shall be submitted to the appropriate local planning unit and to the Department of Land Conservation and Development.

(d) Airport Master Planning. Any airport proprietor who obtains funding to develop an Airport Master Plan shall submit for Department approval an existing noise impact boundary and projected noise impact boundaries at five, ten, and twenty years into the future. The data and analysis used to determine the boundaries [and the field verification] shall also be submitted to the Department for evaluation.

(e) Impact Boundary Approval. Within 60 days of the receipt of a completed airport noise impact boundary, the Department shall either consider the boundary approved or provide written notification to the airport proprietor of deficiencies in the analysis.

(4) Airport Noise Abatement Program and Methodology:

(a) Abatement Program. The proprietor of an existing or new airport whose airport Noise Impact Boundary includes Noise Sensitive Property, or may include Noise Sensitive Property, shall submit a proposed Airport Noise Abatement Program for Commission approval within 12 months of notification, in writing, by the Director. The Director shall give such notification when the Commission has reasonable cause to believe that an abatement program is necessary to protect the health, safety or welfare of the public following a public informational hearing on the question of such necessity. Reasonable cause shall be based upon a determination that: 1) Present or planned airport operations cause or may cause noise impacts that interfere with noise sensitive use activities such as communication and sleep to the extent that the public health, safety or welfare is threatened; 2) These noise impacts will occur on property presently used for noise sensitive purposes, or where noise sensitive use is permitted by zone or comprehensive plan; and 3) It appears likely that a feasible noise abatement program may be developed.

(b) Program Elements. An Airport Noise Abatement Program shall consist of all of the following elements, but if it is determined by the Department that any element will not aid the development of the program, it may be excluded.

(A) Maps of the airport and its environs, and supplemental information, providing:

(i) Projected airport noise contours from the Noise Impact Boundary to the airport property line in 5 dBA increments under current year of operations and at periods of five, ten, and twenty years into the future with proposed operational noise

control measures designated in subsection (4)(b)(B);

(ii) All existing Noise Sensitive Property within the airport Noise Impact Boundary;

(iii) Present zoning and comprehensive land use plan permitted uses and related policies;

(iv) Physical layout of the airport including the size and location of the runways, taxiways, maintenance and parking areas;

(v) Location of present and proposed future flight tracks;

(vi) Number of aircraft flight operations used in the calculation of the airport noise levels. This information shall be characterized by flight track, aircraft type, flight operation, number of daytime and nighttime operations, and takeoff weight of commercial jet transports.

(B) An airport operational plan designed to reduce airport noise impacts at Noise Sensitive Property to the Airport Noise Criterion to the greatest extent practicable. The plan shall include an evaluation of the appropriateness and effectiveness of the following noise abatement operations by estimating potential reductions in the airport Noise Impact Boundary and numbers of Noise Sensitive Properties impacted within the boundary, incorporating such options to the fullest extent practicable into any proposed Airport Noise Abatement Program:

(i) Takeoff and landing noise abatement procedures such as thrust reduction or maximum climb on takeoff;

(ii) Preferential and priority runway use systems;

(iii) Modification in approach and departure flight tracks;

(iv) Rotational runway use systems;

(v) Higher glide slope angles and glide slope intercept altitudes on approach;

(vi) Dispaced runway thresholds;

(vii) Limitations on the operation of a particular type or class of aircraft, based upon aircraft noise emission characteristics;

(viii) Limitations on operations at certain hours of the day;

(ix) Limitations of the number of operations per day or year;

(x) Establishment of landing fees based on aircraft noise emission characteristics or time of day;

(xi) Rescheduling of operations by aircraft type or time of day;

(xii) Shifting operations to neighboring airports;

(xiii) Location of engine run-up areas;

(xiv) Times when engine run-up for maintenance can be done;

(xv) Acquisition of noise suppressing equipment and construction of physical barriers for the purpose of reducing aircraft noise impact;

(xvi) Development of new runways or extended runways that would shift noise away from populated areas or reduce the noise impact within the Airport Noise Impact Boundary.

(C) A proposed land use and development control plan, and evidence of good faith efforts by the proprietor to obtain its

approval, to protect the area within the airport Noise Impact Boundary from encroachment by non-compatible noise sensitive uses and to resolve conflicts with existing unprotected noise sensitive uses within the boundary. The Plan is not intended to be a community-wide comprehensive plan; it should be airport-specific, and should be of a scope appropriate to the size of the airport facility and the nature of the land uses in the immediate area. Affected local governments shall have an opportunity to participate in the development of the plan, and any written comments offered by an affected local government shall be made available to the Commission. The Department shall review the comprehensive land use plan of the affected local governments to ensure that reasonable policies have been adopted recognizing the local government's responsibility to support the proprietor's efforts to protect the public from excessive airport noise. The plan may include, but not be limited to, the following actions within the specified noise impact zones:

(i) Changes in land use through non-noise sensitive zoning and revision of comprehensive plans, within the Noise Impact Boundary (55 dBA);

(ii) Influencing land use through the programming of public improvement projects within the Noise Impact Boundary (55 dBA);

(iii) Purchase assurance programs within the 65 dBA boundary;

(iv) Voluntary relocation programs within the 65 dBA boundary;

(v) Soundproofing programs within the 65 dBA boundary, or within the Noise Impact Boundary (55 dBA) if the governmental entity with land use planning responsibility desires, and will play a major role in implementation.

(vi) Purchase of land for airport use within the 65 dBA boundary;

(vii) Purchase of land for airport related uses within the 65 dBA boundary;

(viii) Purchase of land for non-noise sensitive public use within the Noise Impact Boundary (55 dBA);

(ix) Purchase of land for resale for airport noise compatible purposes within the 65 dBA boundary;

(x) Noise impact disclosure to purchaser within the Noise Impact Boundary (55 dBA);

(xi) Modifications to Uniform State Building Code for areas of airport noise impact within the Noise Impact Boundary (55 dBA).

(c) Federal Aviation Administration Concurrence. The proprietor shall use good faith efforts to obtain concurrence or approval for any portions of the proposed Airport Noise Abatement Program for which the airport proprietor believes that Federal Aviation Administration concurrence or approval is required. Documentation of each such effort and a written statement from FAA containing its response shall be made available to the Commission.

(d) Commission Approval. Not later than twelve months

after notification by the Director pursuant to subsection (4)(a), the proprietor shall submit a proposed Airport Noise Abatement Program to the Commission for approval. Upon approval, the abatement program shall have the force and effect of an order of the Commission. The Commission may direct the Department to undertake such monitoring or compliance assurance work as the Commission deems necessary to ensure compliance with the terms of its order. The Commission shall base its approval or disapproval of a proposed Noise Abatement Program upon:

- (A) The completeness of the information provided;
- (B) The comprehensiveness and reasonableness of the proprietor's evaluation of the operational plan elements listed under subsection (4)(b)(B);
- (C) The presence of an implementation scheme for the operational plan elements, to the extent feasible;
- (D) The comprehensiveness and reasonableness of the proprietor's evaluation of land use and development plan elements listed under subsection (4)(b)(C);
- (E) Evidence of good faith efforts to adopt the land use and development plan, or obtain its adoption by the responsible governmental body, to the extent feasible;
- (F) The nature and magnitude of existing and potential noise impacts;
- (G) Testimony of interested and affected persons; and
- (H) Any other relevant factors.

(e) Program Renewal. No later than six (6) months prior to the end of a five year period following the Commission's approval, each current airport Noise Abatement Program shall be reviewed and revised by the proprietor, as necessary, and submitted to the Commission for consideration for renewal.

(f) Program/Revisions. If the Director determines that circumstances warrant a program revision prior to the scheduled five (5) year review, the Airport Proprietor shall submit to the Commission a revised program within twelve (12) months of written notification by the Director. The Director shall make such determination based upon an expansion of airport capacity, increase in use, change in the types or mix of various aircraft utilizing the airport, or changes in land use and development in the impact areas that were unforeseen in earlier abatement plans. Any program revision is subject to all requirements of this rule.

(5) Consultation. The Director shall consult with the airport proprietor, members of the public, the Oregon Departments of Transportation, Land Conservation and Development and any affected local government in an effort to resolve informally a noise problem prior to issuing a notification under subsection (3)(b), (4)(a), and (4)(f) of this section.

(6) Noise Sensitive Use Deviations. The airport noise criterion is designed to provide adequate protection of noise sensitive uses based on out-of-doors airport noise levels. Certain noise sensitive use classes may be acceptable within

the airport Noise Impact Boundary if all measures necessary to protect interior activities are taken.

(7) Airport Noise Monitoring. The Department may request certification of the airport noise impact boundary by actual noise monitoring, where it is deemed necessary to approve the boundary pursuant to subsection (3)(e).

(8) Exceptions. Upon written request from the Airport Proprietor, the Department may authorize exceptions to this section, pursuant to rule 340-35-010, for:

(a) Unusual or infrequent events;

(b) Noise sensitive property owned or controlled by the airport;

(c) Noise sensitive property located on land zoned exclusively for industrial or commercial use.

Variances

340-35-100 (1) Conditions for Granting. The Commission may grant specific variances from the particular requirements of any rule, regulation, or order to such specific persons or class of persons or such specific noise source upon such conditions as it may deem necessary to protect the public health and welfare, if it finds that strict compliance with such rule, regulation, or order is inappropriate because of conditions beyond the control of the persons granted such variance or because of special circumstances which would render strict compliance unreasonable or impractical due to special physical conditions or cause, or because strict compliance would result in substantial curtailment of closing down of a business, plant, or operation, or because no other alternative facility or method of handling is yet available. Such variances may be limited in time.

(2) Procedure for Requesting. Any person requesting a variance shall make his request in writing to the Department for consideration by the Commission and shall state in a concise manner the facts to show cause why such variance should be granted.

(3) Revocation or Modification. A variance granted may be revoked or modified by the Commission after a public hearing held upon not less than 20 days notice. Such notice shall be served upon the holder of the variance by certified mail and all persons who have filed with the Commission a written request for such notification.

TABLE 1

(340-035-025)

New Motor Vehicle Standards
Moving Test at 50 Feet (15.2 Meters)

Vehicle Type	Effective For	Maximum Noise Level, dBA
Motorcycles	1975 Model	86
	1976 Model	83
	1977-1982 Models	81
	[1983-1987 Models]	[78]
	[Models after 1987]	[75]
	<u>1983-1985 Street Models</u>	<u>83</u>
	<u>Street Models after 1985</u>	<u>80</u>
	<u>Moped Models after 1982</u>	<u>70</u>
	<u>Off-Road Models with engine displacements of 170 cc and lower:</u>	
	<u>1983-1985 Models</u>	<u>83</u>
	<u>Models after 1985</u>	<u>80</u>
	<u>Off-Road Models with engine displacement greater than 170 cc:</u>	
	<u>1983-1985 Models</u>	<u>86</u>
	<u>Models after 1985</u>	<u>82</u>
Snowmobiles as defined in ORS 481.048	1975 Model	82
	Models after 1975	78
Trucks and school buses in excess of 10,000 pounds (4536 kg) GVWR	1975 Model	86
	1976-1981 Models or Models manufactured after January 1, 1978 and before January 1, 1986	83
	Models manufactured after January 1, 1986 and before (Reserved)	80
	Models manufactured after (Reserved)	(Reserved)
Automobiles, Light Trucks, and All Other Road Vehicles	1975 Model	83
	Models after 1975	80
Buses except school buses, as defined under ORS 481.030	1975 Model	86
	1976-1978 Models	83
	Models after 1978	80
Motorboats	Models offered for sale after June 30, 1980	82

TABLE 2
 (340-35-030)
 In-Use Road Vehicle Standards
 Stationary Test

Vehicle Type	Model Year	Maximum Noise Level, dBA	Minimum Distance from Vehicle to Measurement Point
All vehicles described in ORS 481.205(2)(a)	Before 1976	94	25 feet (7.6 meters)
	1976 and After	91	25 feet (7.6 meters)
All other trucks in excess of 8,000 pounds (3629 kg) GVWR	Before 1976	94	25 feet (7.6 meters)
	1976-1981	91	25 feet (7.6 meters)
	After 1981	88	25 feet (7.6 meters)
Motorcycles	1975 and Before	102	20 inches (1/2 meter)
	After 1975	99	20 inches (1/2 meter)
Front-engine automobiles, light trucks and all other front-engine road vehicles	All	95	20 inches (1/2 meter)
Rear-engine automobiles and light trucks and mid-engine automobiles and light trucks	All	97	20 inches (1/2 meter)
Buses as defined under ORS 481.030	Before 1976	94	25 feet (7.6 meters)
	1976 and After	91	25 feet (7.6 meters)

TABLE 3

(340-35-030)

In-Use Road Vehicle Standards

Moving Test at 50 Feet (15.2 meters) or Greater [at Vehicle Speed]

[Vehicle Type]	[Model Year]	[Maximum Noise Level, dBA]	
		[35 mph (56 kph) or less]	[Greater than 35 mph (56 kph)]
[Vehicles in excess of 10,000 pounds (4536 kg) GVWR or GCWR engaged in interstate commerce as permitted by Title 40, Code of Federal Regulations, Part 202, Environmental Protection Agency (Noise Emission Standards-Motor Carriers Engaged in Interstate Commerce)]	[All]	86	90]
[All Other Trucks in excess of 10,000 pounds (4536kg) GVWR]	[Before 1976]	86	90]
	[1976-1981]	85	87]
	[After 1981]	82	84]
[Motorcycles]	[Before 1976]	84	88]
	[1976]	81	85]
	[1977-1982]	79	83]
	[1983-1987]	76	80]
	[After 1987]	73	77]
[Automobiles, Light Trucks and All Other Road Vehicles]	[Before 1976]	81	85]
	[1976-1980]	78	82]
	[After 1980]	73	77]
[Buses as defined under ORS 481.030]	[Before 1976]	86	90]
	[1976-1978]	85	87]
	[After 1978]	82	84]

Maximum Noise Level, dBA

<u>Operating Conditions</u>	<u>Trucks and Buses exceeding 10,000 pounds GVWR</u>	<u>Automobiles and light trucks</u>	<u>Motorcycles</u>
<u>Posted 45 mph or less under any grade, load, acceleration or deceleration.</u>	<u>86</u>	<u>72</u>	<u>78</u>
<u>Posted greater than 45 mph under any grade, load, acceleration or deceleration.</u>	<u>90</u>	<u>78</u>	<u>82</u>
<u>Moving at 35 mph or less on level roadway under constant speed more than 200 feet from stop.</u>	<u>84</u>	<u>70</u>	<u>74</u>

TABLE 4
 (340-35-030)
 Off-Road Recreational Vehicle Standards
 Allowable Noise Limits

Vehicle Type	Model Year	Maximum Noise Level (dBA) and Distance from Vehicle to Measurement Point	
		Stationary Test 20 Inches (1/2 Meter)	Moving Test at 50 Feet (15.2 Meters)
Motorcycles	1975 and Before	102	<u>85</u>
	After 1975	99	<u>82</u>
Snowmobiles	1971 and Before		86
	1972-1975		84
	[1976-1978] <u>After 1975</u>		80
	[After 1978]		[77]
Boats	Underwater exhaust	All	84
	Atmosphere exhaust	All	100 84
All Others	Front engine	All	95 <u>78</u>
	Mid and rear		
	engines	All	97 <u>78</u>

TABLE 5
(340-35-030)

Ambient Standards for Vehicles Operated
Near Noise Sensitive Property

Allowable Noise Limits

Time	Maximum Noise Level, dBA
7 a.m. - 10 p.m.	60
10 p.m. - 7 a.m.	55

TABLE 6
(340-35-030)

Motor Vehicle Auxiliary Equipment [Driven by Primary Engine] Noise Standards

Stationary Test at 50 Feet (15.2 Meters) or Greater

Model Year	Maximum Noise Level, dBA
Before 1976	88
1976 - 1978	85
After 1978	82

TABLE 7
(340-35-035)

Existing Industrial and Commercial Noise Source Standards

Allowable Statistical Noise Levels in Any One Hour

[Pre-1978]		[Post-1977]	
[7 a.m.-10 p.m.]	10 p.m.-7 a.m.]	7 a.m.-10 p.m.]	10 p.m.-7 a.m.]
[L ₅₀ - 60 dBA	L ₅₀ - 55 dBA]	L ₅₀ - 55 dBA	L ₅₀ - 50 dBA
[L ₁₀ - 65 dBA	L ₁₀ - 60 dBA]	L ₁₀ - 60 dBA	L ₁₀ - 55 dBA
[L ₁ - 80 dBA	L ₁ - 65 dBA]	L ₁ - 75 dBA	L ₁ - 60 dBA

TABLE 8

(340-35-035)

New Industrial and Commercial Noise Source Standards

Allowable Statistical Noise Levels in Any One Hour

7 a.m. - 10 p.m.	10 p.m. - 7 a.m.
L ₅₀ - 55 dBA	L ₅₀ - 50 dBA
L ₁₀ - 60 dBA	L ₁₀ - 55 dBA
L ₁ - 75 dBA	L ₁ - 60 dBA

TABLE 9

(340-35-035)

Industrial and Commercial Noise Source Standards for Quiet Areas

Allowable Statistical Noise Levels in Any One Hour

7 a.m. - 10 p.m.	10 p.m. - 7 a.m.
L ₅₀ - 50 dBA	L ₅₀ - 45 dBA
L ₁₀ - 55 dBA	L ₁₀ - 50 dBA
L ₁ - 60 dBA	L ₁ - 55 dBA

TABLE 10

(340-35-035)

Median Octave Band Standards for
Industrial and Commercial Noise Sources

Allowable Octave Band Sound Pressure Levels

Octave Band Center Frequency, Hz	7 a.m. - 10 p.m.	10 p.m. - 7 a.m.
31.5	68	65
63	65	62
125	61	56
250	55	50
500	52	46
1000	49	43
2000	46	40
4000	43	37
8000	40	34

Any attachments not included after this point
are available for review at DEQ Headquarters,
522 S. W. Fifth Avenue, Portland.

Index of Proposed Amendments
Procedure Manual NPCS - 1

Attachment 3
Agenda Item F
December 3, 1982
EQC Meeting

<u>Page No.</u>	<u>Paragraph</u>	<u>Description</u>
1	1.1.1	Deletion of incorrect material
	1.1.2	Deletion of incorrect material
	1.1.3	Deletion of incorrect material
	1.2	Clarification added
2	2.1	Grammatical correction
	2.2	Deletion of incorrect material and addition of needed material
3	2.7	Addition of new blasting measurement material
5	4.1	Clarification
7	4.5.2b	Reduction of restriction for monitoring during rain
	4.5.3a	Clarification of comments
8	4.5.3b	Clarification of comments
9	4.5.6	Reduction of recommended criteria for ambient monitoring
10	4.5.10	Addition of blasting procedures
11	Fig.4-3	Deletion of unnecessary material
15	Fig.4-5	Deletion of unnecessary material
19	Fig.4-7	Deletion of unnecessary material
21-23	4.6.1	Clarification of comments
24	Fig.4-9	Deletion of unnecessary material



SOUND
MEASUREMENT
PROCEDURES
MANUAL

PROPOSED AMENDMENTS

December 1982

Proposed additions are underlined.

Proposed deletions are [bracketed].

Index of Proposed Amendments
Procedure Manual NPCS - 1

<u>Page No.</u>	<u>Paragraph</u>	<u>Description</u>
1	1.1.1	Deletion of incorrect material
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8	4.5.3b	Clarification of comments
9	4.5.6	Reduction of recommended criteria for ambient monitoring
10	4.5.10	Addition of blasting procedures
11	Fig.4-3	Deletion of unnecessary material
15	Fig.4-5	Deletion of unnecessary material
19	Fig.4-7	Deletion of unnecessary material
21-23	4.6.1	Clarification of comments
24	Fig.4-9	Deletion of unnecessary material

REVISION RECORD

INSTRUCTIONS FOR USE: All revisions of this manual will be numbered to assure each manual holder that he has received all revisions. The date and initials of the person inserting revisions to the manual should be entered on this revision record opposite the appropriate revision number. If the sequence is broken, copies of the missing revisions may be requested from the Noise Control Section.

<u>Rev. No.</u>	<u>Date Inserted</u>	<u>Initials</u>
1.	<u>4-30-74</u>	<u>JH</u> '3 act - inv.
2.	<u>8-16-74</u>	<u>JH</u> 4.5.6 x 3 14
3.	<u>11-25-74</u>	<u>NJ</u> NPCS - 10-1 ; 10-3
4.	<u>8-27-76</u>	<u>JH</u> EQC Amendments
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
9.	_____	_____
10.	_____	_____
11.	_____	_____
12.	_____	_____
13.	_____	_____
14.	_____	_____
15.	_____	_____
16.	_____	_____
17.	_____	_____
18.	_____	_____
19.	_____	_____

FOREWORD

The Sound Measurement Procedures Manual has been prepared to specify the equipment to be used and the procedures to be followed when measuring environmental noise. The procedures established in the manual, when carefully followed, will ensure that the noise readings obtained are accurate, will support enforcement action, and aid in reducing environmental noise.

The scope of this manual includes industrial noise, commercial noise, noise from races and racetracks, noise from public roads and ambient noise measurements. Individual motor vehicle noise measurements are covered in a separate manual.

The objective of the manual is to establish procedures to implement the provisions of the Environmental Quality Commission. Further, if the practices and procedures herein are adhered to, the result will be a uniform enforcement program which will accomplish the intent of the Legislature and fulfill the Commission's responsibility under ORS Chapter 467.

Office of the Administrator
Air Quality Control Division
Department of Environmental Quality

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CHAPTER 1

INTRODUCTION

1.1 Policy

1.1.1 The Department of Environmental Quality, through the Noise Pollution Control Section shall establish a noise measurement program to implement the laws and regulations applying to environmental noise. [The program shall include industrial and commercial noise measurements and noise from races, racetracks, and public roads.]

1.1.2 The Noise Pollution Control Section [and Enforcement Division, through the Regional Offices,] shall be responsible for the conformity of environmental noise measurement.

1.1.3 This manual contains procedures for the Noise Pollution Control Section, [Enforcement Division,] and all other persons taking environmental noise measurements. Guidance is provided in the "Comments".

1.2 Authority

Statutory and administrative law governing authority to the guidance and direction contained in the following sources:

- a. Oregon Revised Statutes, Chapter 467, Sections 467.010, 467.020, 467.030, 467.040, 467.050, 467.990.
- b. Oregon Administrative Rules, Chapter 340, Division 35, Department of Environmental Quality[, Air Quality Control Division].

1.3 Instruments and Training

1.3.1 Specific requirements for instruments and personnel are defined under procedure manual, Noise Pollution Control Section - 2, Requirements for Sound Measuring Instruments and Personnel.

CHAPTER 2
INSTRUMENTATION

2.1 Sound Level Meters

The specifications for sound level meters (SLM) [is] are defined in manual Noise Pollution Control Section (NPCS-2) Requirements for Sound Measuring Instruments and Personnel. The minimum meter required is a Type II as defined by American National Standard Institute Number S1.4-1971.

2.2 Accessories

The minimum accessories shall be [a random incidence microphone] a windscreen and an acoustically coupled calibrator.

Comment: Additional accessories that have been found to be valuable in gathering data are tabulated below:

- (1) Noise data forms
- (2) Clipboard
- (3) Tripod
- (4) Wind meter
- (5) Sling psychrometer
- (6) Screwdriver
- (7) Spare batteries
- (8) Watch with sweep second hand or digital equivalent

2.3 Tape Recorders and Level Recorders

Recording systems shall conform to NPCS-2.

Comment: The recording system should be able to duplicate the measurements as taken in the field. For tape recorders, a table of frequency response tolerances is given in SAE standards. Graphic level recorder systems standards are also described in the manual.

2.4 Octave Band Filter Sets

The octave band filter sets shall be those defined in NPCS-2.

Comment: These sets may either be integral to a sound level meter or they may be a separate piece of equipment.

2.5 Special Study Instruments

Comment: In some instances, special types of equipment may be found to be useful in studying a noise problem. The Department has several specialized noise instruments to be used in study situations. These instruments include a random noise generator, a loud speaker system, and a one-third octave band filter set.

2.6 One-Third Octave Band Filter Sets

The one-third octave band filter sets shall be those defined in NPCS-2.

Comment: These sets may be integral to a sound level meter or they may be a separate piece of equipment. Sets shall contain the preferred one-third octave band filters.

2.7 Impulse Meters

Impulse meters shall be those defined in NPCS-2.

Comment: These meters are integral to some Type I precision sound level meters set for a peak unweighted response. Blasting impulse noise is measured on a standard Type I or Type II meter set to the "C" weighting scale and the "SLOW" dumping response.

CHAPTER 3

INSTRUMENT CALIBRATION

3.1 General

All types of sound level meters shall be field calibrated immediately prior to use, using the procedures described in the factory instruction manual.

3.2 Battery Check

Batteries in both the meter and the calibrator shall be checked before calibration.

3.3 Instrument Calibration

The instrument shall be set to the correct level range, weighting scale and meter response. The calibrator shall be placed on the microphone of the meter. The output indicated on the meter shall then be adjusted to the correct calibration level.

3.4 Annual Calibration

Within a year prior to use, each sound level meter, including octave band filter and calibrator, shall receive a laboratory calibration in accordance with the manufacturer's specifications. This calibration shall be traceable to the National Bureau of Standards.

Comment: An inspection label may be attached to each instrument set to determine when the calibration was performed.

CHAPTER 4

ENVIRONMENTAL NOISE MEASUREMENT

4.1 Application

This chapter applies to ambient measurements, noise emissions from industrial facilities, and commercial facilities, [racetracks, and public roads,] and to ambient noise limits from motor vehicles. Individual motor vehicle noise measurements airports and racetracks are covered in [a] separate manuals.

- 4.1.2 Persons selected to measure environmental noise shall meet the requirements of NPCS-2 Requirements for Sound Measuring Instruments and Personnel.

4.2 Site Selection

- 4.2.1 The measurement location shall be at any point, no more than 25 feet from the noise sensitive building where the noise level is generally greatest, as illustrated in Figure 4-1.

If the noise sensitive building is closer than 25 feet from the property line, the measurement location shall be at any point on the property line, providing it is no more than 25 feet from the building, or at any other point within the noise sensitive property no more than 25 feet from the noise sensitive building, wherever the noise level is generally greatest, as illustrated in Figure 4-2. For any measurement, sound reflective surfaces shall not be closer than 10 feet from the measurement point.

Comment: Sound reflective surfaces do not include trees, shrubs, hedges or other vegetation.

Comment: Measurements for noise sensitive property on which the noise sensitive building lies within 10 feet of the noise sensitive property line may require sound level projection techniques described in 4.8 of the manual.

4.3 Equipment Set-Up

- 4.3.1 The sound level meter or microphone, either hand held or placed on a tripod, shall be 4 feet or more above the ground or floor surface.

- 4.3.2 Comment: A microphone extension cable may be used in areas where accessibility is difficult. Example: Changes in ground elevation, reflective surfaces, height or source or receiver.

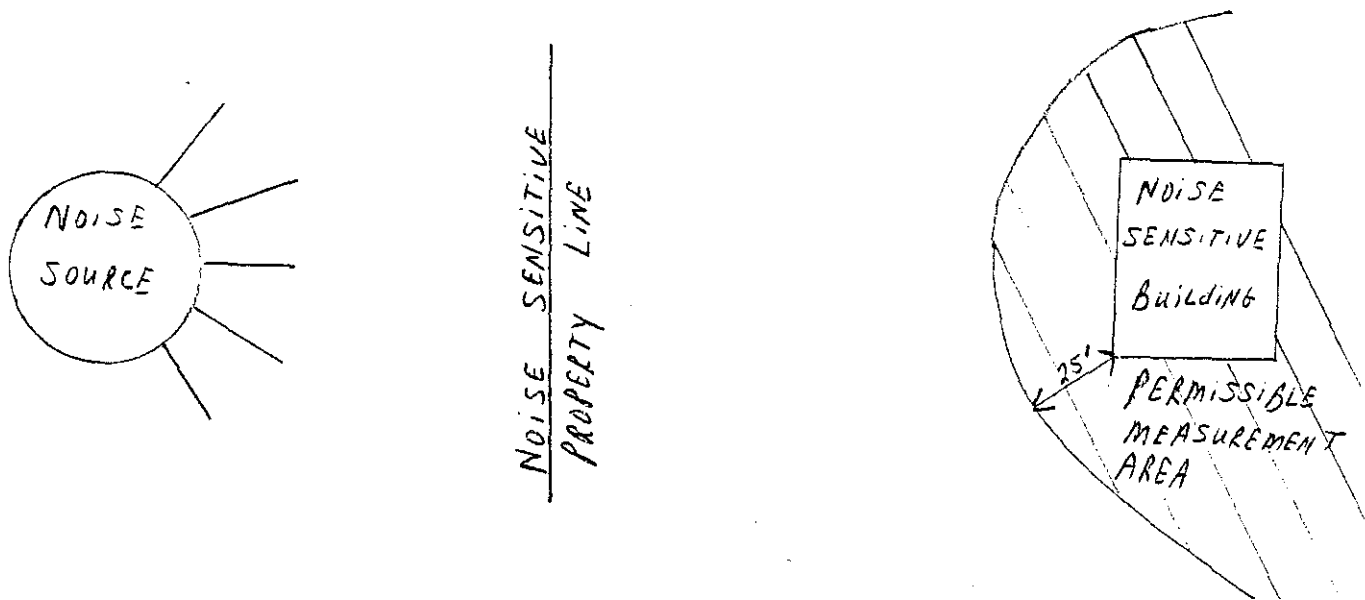


Figure 4-1 Measurement Point 25 Feet From Building

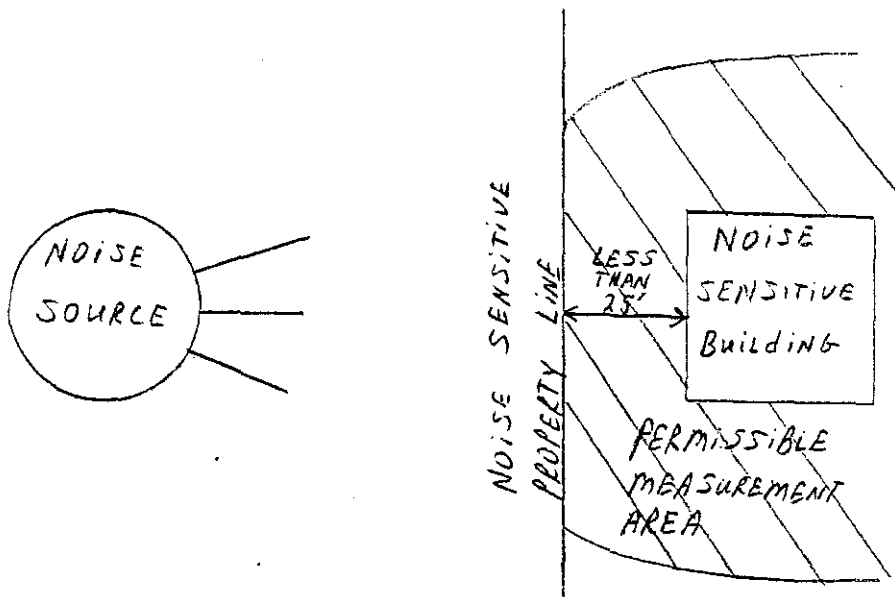


Figure 4-2 Measurement Point on Property Line

4.4 Instrument Calibration and Battery Check

4.4.1 Refer to Chapter 3 of NPCS-1 for instructions.

4.5 Noise Level Measurements

4.5.1 Comment: That information and data submitted to the Department should be recorded on Forms NPCS-4 and NPCS-5 as shown in Figure 4-3 and Figure 4-5, or on forms approved in writing by the Department.

4.5.2 Weather Conditions

a. The wind speed and direction shall be determined before measurements are taken and recorded on a form. Measurements shall not be taken when the wind speed exceeds 10 mph. The sound level meter windscreen shall always be installed on the microphone while taking measurements.

b. The relative humidity [shall] may be determined for the time measurements are taken. Measurements shall not be taken when precipitation [is falling.] affects results.

Comment: Measurements may be taken when the ground is wet if the readings are not influenced by motor vehicle tire noise on wet pavement.

c. Comment: The barometric pressure has an effect on the calibration level of most calibrators. This effect is usually small but can introduce some error under very low atmospheric pressure conditions or at high elevations. Typically no correction is needed at elevations below 2,000 feet. Above 2,000 feet elevation, the manufacturers correction factor must be applied to the instrument during calibration.

4.5.3 Determination of Meter Speed

a. Comment: The "FAST" meter speed is used for sounds of an essentially continuous nature. This speed is such that the indication instrument attains its final reading in approximately 0.2 seconds[, and is unsuitable for measuring shorter pulses]. In general, the "FAST" meter is used [for steady or, varying sound levels] where meter fluctuations do not exceed 3 dB, or where the meter is required to follow fast changes in level such as an automobile or aircraft pass-by measurements.

- b. Comment: The "SLOW" meter speed is used for sounds where the noise level fluctuates by + or - 3 dB and meter variations make the instrument display unreadable. The slower action of the meter provides an averaging effect that is helpful in measuring sounds of [essentially continuous character but varying in amplitude. For] a rapidly varying nature or of low frequencies. However, for a noise pulse of 0.5 second duration, such a meter will typically read 2 to 6 dB low. It is not satisfactory for measuring intermittent sounds. [The "SLOW" meter will give a more accurate result than the "FAST" meter when the signal is of sufficient duration to allow the meter pointer time to settle, or, for a time varying signal, if the level does not change too quickly versus time.]

4.5.4 "A" Weighting Scale Measurements

Comment: Maximum noise level measurements with the "A" network weighting scale are taken with the sound level meter switched to the "A" network per the manufacturer's instructions. The meter must be properly positioned with respect to the noise source per the manufacturer's instructions. Information and data taken during the measurements should be recorded on Form NPCS-4 or equivalent as shown in Figure 4-3.

4.5.5 Statistical Noise

Comment: The statistical noise level is that noise level exceeded a stated percentage of the time. An $L_{10} = 65$ dBA means that in any consecutive 60 minute period of the day 65 dBA is equalled or exceeded only 10% of the time, or for a total of 6 minutes. Several procedures are in use by the Department to determine statistical noise levels and other methods may be approved in writing from the Department. Three acceptable procedures to determine the statistical noise level are presented in Section 6 of this Chapter. Information and data taken during the measurements should be recorded on Form NPCS-10-1 or equivalent as shown in Figure 4-9. Statistical calculations can be carried out on Forms NPCS-10-2 and NPCS-10-3 and should be summarized in "L" terminology on Form NPCS-4. An example of a completed Form NPCS-4 is presented in Figure 4.4.

4.5.6 Ambient Noise Determination

Comment: The ambient noise level is a composite of sounds from many sources near and afar. As the ambient noise level will be compared to the noise level with the source included in any consecutive 60 minute period, it is important that data is obtained in time periods of interest during the day and also both the week and the weekend to obtain data which are representative. It is also important to note that the data must be taken without emphasis on either noise peaks or unusual quiet.

Measurements should not be taken in weather conditions which may create a bias in the data. Wet streets or snow accumulations could bias the data unless these conditions are typical for the community.

Measurements should be made at least at [five or more] several appropriate locations within the sampling area under consideration. Measurements should be made randomly in the sense that each location and each sampling time has the same chance of being sampled and that the selection of any one factor in no way influences the choice of another. Measurements should be made on at least three separate days.

The ambient statistical noise levels obtained or predicted with the noise source in question operating, should include all noises generated by that source. This may include such sources as increased motor vehicle traffic noise, safety warning device noise, and other sounds that may be exempted from the rules due to other considerations.

Procedures to determine the L_{10} and L_{50} , statistical noise levels are presented in Section 6 of this Chapter. Information and data taken during the measurements should be recorded on Form NPC-4 or equivalent as shown in Figure 4-4.

4.5.7 Octave Band Noise Measurement

Octave band noise measurements shall be made on an octave band frequency analyzer per document NPC-2, Requirements for Sound Measuring Instruments and Personnel.

Comment: Octave band sound pressure levels may be measured in the same manner as the "A" weighting scale measurements, except that the octave band filters

shall be used in place of the "A" weighting network. Information and data taken during the measurements should be recorded on Form NPC5-5 or equivalent as shown in Figure 4.5. An example of a completed form NPC5-5 is presented in Fig. 4-6.

4.5.8 Tape Recording

Comment: Tape recording of the noise [with] and a calibration signal is optional. The tape recorder system must conform to the specifications defined in document NPC5-2 Requirements for Sound Measuring Instruments and Personnel.

4.5.9 One-Third Octave Band Noise Measurement

One-third octave band noise measurements shall be made on a one-third octave band frequency analyzer per document NPC5-2, Requirements for Sound Measuring Instruments and Personnel.

Comment: One-third octave band sound pressure levels may be measured in the same manner as the "A" weighting scale measurements, except that the one-third octave band filter shall be used in place of the "A" weighting network. Information and data taken during the measurements should be recorded on form NPC5-29 or equivalent as shown in Figure 4-7. An example is shown in Figure 4-8.

4.5.10 Impulse Measurements

Impulse measurements shall be made on meters per document NPC5-2, Requirements for Sound Measuring Instruments and Personnel. Impulse sound pressure levels are to be taken with the meter set to the linear unweighted scale with the peak detector circuit engaged[.] for unweighted (dB) impulse measurements. For "C" weighted (dBC) impulse measurements the meter is set to the "C" weighting scale and the meter speed is set to the "SLOW" damping response.

Comment: Information and data should be recorded on Form NPC5-4 or equivalent as shown in Figure 4-3. An example of a completed form is presented in Figure 4-4.

DEPARTMENT OF ENVIRONMENTAL QUALITY

SOUND PRESSURE LEVEL DATA SHEETS

File _____

County _____

SOURCE _____

BY _____

DATE _____

SHEET _____ / _____

COMPLAINANT: _____

COMPLAINT DATE: _____

INSTRUMENTATION		
EQPT	TYPE	SERIAL
SLM		
MIC		
FLTR		
CAL		
Windscreen ON OFF		
R. I. C. ON OFF		

Time	Bat. Ck.	Calibration dB	°F dry bulb	°F wet bulb	%RH	Press. mm Hg	Wind mph	Wind Direct

Measurement Position	Meter Fast/Slow	A Scale	C Scale	Linear Scale	L ₁	L ₁₀	L ₅₀	Peak Impulse

Comments _____

Figure 4-3 Form NPC5-4

INSTRUMENT SET-UP
CHECK-OFF LIST

- Site Selection
- SLM Position
- Battery Check
- Calibration Adjustment
- Wind Below 10 MPH
- Humidity Below 95%
- Windscreen

1. Days of Operation
 - A. Mon. - Fri.
 - B. Mon. - Sat.
 - C. Mon. - Sun.
2. Time of Operation
 - A. 8 a.m. - 5 p.m.
 - B. _ a.m. - _ p.m.
3. Number of Shifts
 - A. One
 - B. Two
 - C. Three
4. Distance from Receiver to source _____ feet.
5. Visibility to Source
 - A. Direct _____
 - B. Hill or Berm _____
 - C. Trees _____
 - D. Other _____
6. Zoning
 - A. Residence _____
 - B. Plant or Facility _____
7. Who came first?
 - A. Residence...Date _____
 - B. Plant or Facility _____
8. Petition Submitted
 - A. Yes... Number _____
 - B. No

SKETCH OF MEASUREMENT SITE AND SOURCE

Figure 4-3 Reverse Side Form NPC5-4

DEPARTMENT OF ENVIRONMENTAL QUALITY

I+C

SOUND PRESSURE LEVEL DATA SHEETS

File NP-ACME W.P.

County MULTNOMAH

SOURCE ACME WOOD PRODUCTS, INC.
1581 S.W. 76TH Av. (PH 264-5365)
PORTLAND, OR 97225

BY GTW
 DATE 9-16-81
 SHEET 1/4

COMPLAINANT MR + MRS. A. J. JONES (PH 251-3768)
1576 S.W. 76TH, PORTLAND

COMPLAINT DATE 9-15-81

INSTRUMENTATION		
EQT	TYPE	SERIAL
SLM	GR 1565	12345
MIC	1"	—
FLTR		
CAL	GR 1987	1790
IMP SLM	B+K 2218	98765
Windscreen <input checked="" type="radio"/> ON <input type="radio"/> OFF		
[R. I. C. <input type="checkbox"/> ON <input checked="" type="checkbox"/> OFF]		

Time	Bat. Ck.	Cal. dB	°F dry bulb	°F wet bulb	% RH	Press. mm Hg	Wind mph	Wind Direct
1410 PDT	✓	114.0	72°	CLEAR DRY			0-5	NW
1440 PDT	✓	114.0	"	"			2-6	NW
1515 PDT	✓	114.0	75°	"			0-4	NW

Measurement Position	Meter Fast/Slow	A Scale	C Scale	Linear Scale	L ₁	L ₁₀	L ₅₀	[Peak] Impulse
1420 To 1438 SITE 1 1576 S.W. 76 TH	F				72	66	63	
1445 SITE 1								106 dB PK

Comments PRIMARY NOISE SOURCES: ROSSERHEAD
DEBARKER, CUTOFF SAW, CHIPPER. IMPULSE
NOISE FROM HAMMERING ON A WOOD CHIP BIN.
AMBIENT WITHOUT MILL IS APPROXIMATELY 48 dBA.

Figure 4-4 Example Form NPCS-4

INSTRUMENT SET-UP
CHECK-OFF LIST

- Site Selection
- SLM Position
- Battery Check
- Calibration Adjustment
- Wind Below 10 MPH
- Humidity Below 95%
- Windscreen

1. Days of Operation

- A. Mon. - Fri.
- B. Mon. - Sat.
- C. Mon. - Sun.

2. Time of Operation

- A. 8 a.m. - 5 p.m.
- B. 7 a.m. - 4 p.m.

3. Number of Shifts

- A. One
- B. Two
- C. Three

4. Distance from Receiver to source ~100 feet.

5. Visibility to Source

- A. Direct
- B. Hill or Berm _____
- C. Trees _____
- D. Other _____

6. Zoning

- A. Residence _____
- B. Plant or Facility _____

7. Who came first?

- A. Residence...Date _____
- B. Plant or Facility _____

8. Petition Submitted

- A. Yes... Number _____
- B. No

SKETCH OF MEASUREMENT SITE AND SOURCE

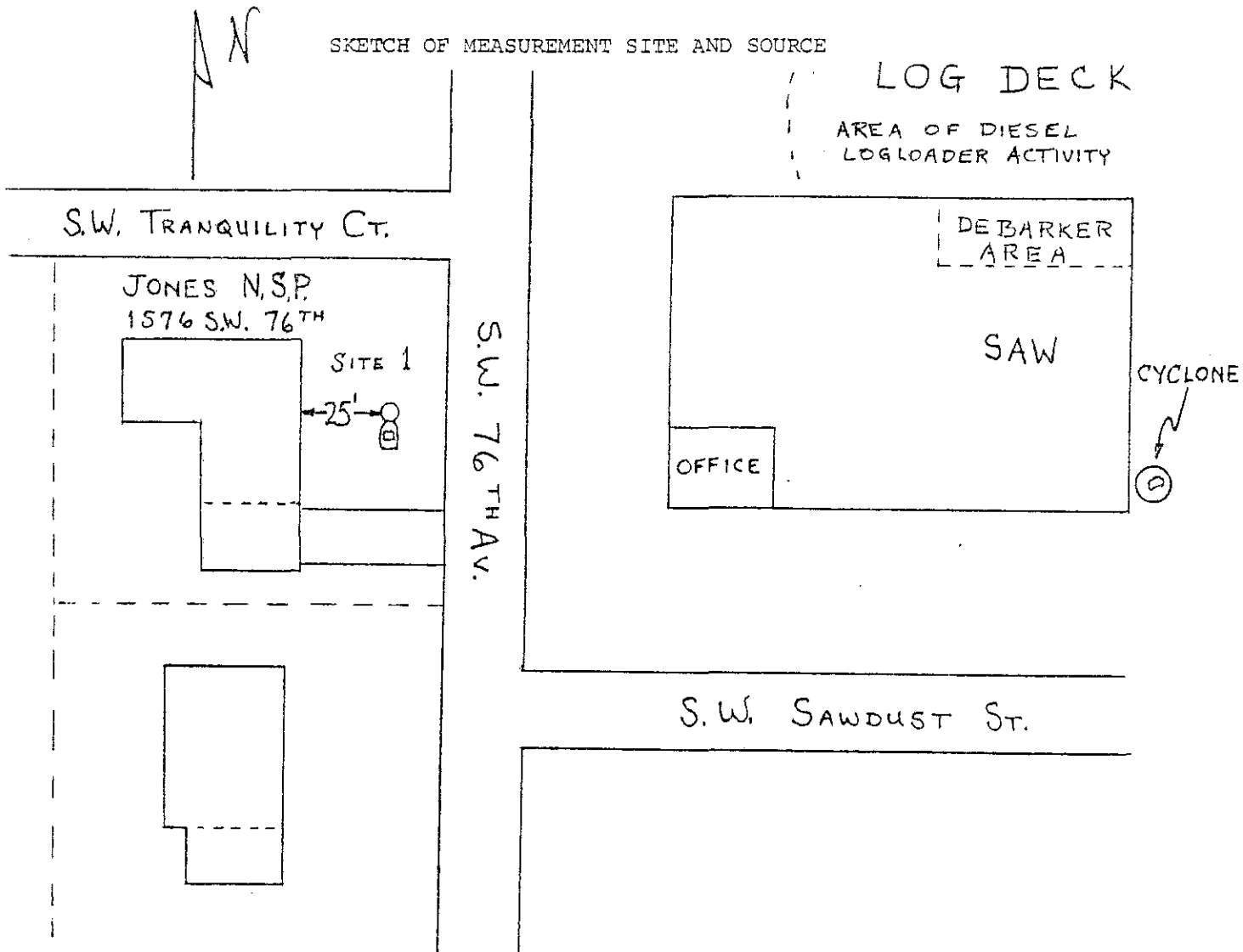


Figure 4-4 Reverse Side Example Form NPC5-4

DEPARTMENT OF ENVIRONMENTAL QUALITY

SOUND PRESSURE LEVEL DATA SHEETS

File _____

County _____

SOURCE _____

BY _____

DATE _____

SHEET _____ / _____

COMPLAINANT: _____

COMPLAINT DATE: _____

INSTRUMENTATION		
EQPT	TYPE	SERIAL
SLM		
MIC		
FLTR		
CAL		
Windscreen ON OFF		
[R. I. C. ON OFF]		

Time	Bat Ck.	Calibra- tion dB	°F dry bulb	°F wet bulb	%RH	Press. mm Hg	Wind mph	Wind Direct

Position	METER Fast/ Slow	A SCALE	Lin. Scale	31.5 HZ	63 HZ	125 HZ	250 HZ	500 HZ	1000 HZ	2000 HZ	4000 HZ	8000 HZ

Comments _____

INSTRUMENT SET-UP
CHECK-OFF LIST

- Site Selection
- SLM Position
- Battery Check
- Calibration Adjustment
- Wind Below 10 MPH
- Humidity Below 95%
- Windscreen

1. Days of Operation
 - A. Mon. - Fri.
 - B. Mon. - Sat.
 - C. Mon. - Sun.
2. Time of Operation
 - A. 8 a.m. - 5 p.m.
 - B. _ a.m. - _ p.m.
3. Number of Shifts
 - A. One
 - B. Two
 - C. Three
4. Distance from Receiver to source _____ feet
5. Visibility to Source
 - A. Direct _____
 - B. Hill or Berm _____
 - C. Trees _____
 - D. Other _____
6. Zoning
 - A. Residence _____
 - B. Plant or Facility _____
7. Who came first?
 - A. Residence...Date _____
 - B. Plant or Facility...Date _____
8. Petition Submitted
 - A. Yes....Number _____
 - B. No

SKETCH OF MEASUREMENT SITE AND SOURCE

DEPARTMENT OF ENVIRONMENTAL QUALITY

SOUND PRESSURE LEVEL DATA SHEETS

File Industry

County Lane

SOURCE Sam's Sawmill
1200 East Road
Eugene

BY WVR - GCS

DATE 4/27/74

SHEET 1 / 1

COMPLAINANT Mr. Ed. Jones
100 North St., Eugene

COMPLAINT DATE April 19, 1974

INSTRUMENTATION		
EQT	TYPE	SERIAL
SLM	G.R. 1935	DEQ 1891
MIC	G.R.	G.R. 961
FLTR	G.R.	DEQ 1891
CAL	G.R. 1892A	G.R. 9651
Windscreen ON OFF		
[R. I. C. ON OFF]		

Time	Bat. Ck.	Cal. dB	°F dry bulb	°F wet bulb	% RH	Press. mm Hg	Wind mph	Wind Direct
3:40 pm	OK	114	67	51	29	-	4	W
4:07 pm	OK	114.0						

Position	Fast/Slow	A Scale	Lin. Scale	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
1	S	47	63	55	55	54	54	50	44	38	30	22

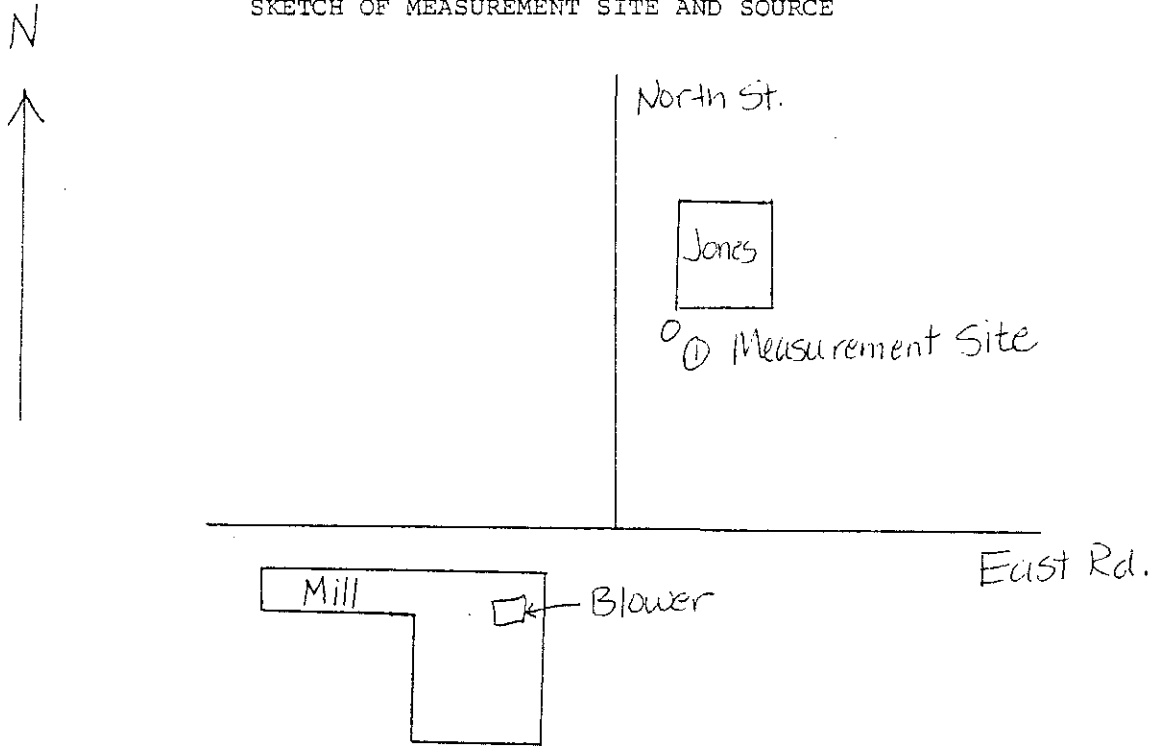
Comments Measurements taken during "blower"
operation. Readings taken from
3:51 through 4:02 pm.

INSTRUMENT SET-UP
CHECK-OFF LIST

- Site Selection
- SLM Position
- Battery Check
- Calibration Adjustment
- Wind Below 10 MPH
- Humidity Below 95%
- Windscreen

1. Days of Operation
 - A. Mon. - Fri.
 - B. Mon. - Sat.
 - C. Mon. - Sun.
2. Time of Operation
 - A. 3 a.m. - 3 p.m.
 - B. 10 a.m. - 11 p.m.
3. Number of Shifts
 - A. One
 - B. Two
 - C. Three
4. Distance from Receiver to source ≈ 300 feet.
5. Visibility to Source
 - A. Direct
 - B. Hill or Berm _____
 - C. Trees _____
 - D. Other _____
6. Zoning
 - A. Residence
 - B. Plant or Facility _____
7. Who came first?
 - A. Residence... Date 1952
 - B. Plant or Facility _____
8. Petition Submitted
 - A. Yes... Number _____
 - B. No

SKETCH OF MEASUREMENT SITE AND SOURCE



Example Form NPCS-5
Figure 4-6
REVERSE SIDE OF FORM

DEPARTMENT OF ENVIRONMENTAL QUALITY

1/3 OCTAVE BAND DATA SHEET

File _____

County _____

SOURCE _____

BY _____

DATE _____

SHEET _____

COMPLAINANT _____

COMPLAINT DATE _____

INSTRUMENTATION		
EQT	TYPE	SERIAL
SLM		
MIC		
FLTR		
CAL		
Windscreen ON OFF		
[R. I. C. ON OFF]		

Time	Bat. Ck.	Cal. dB	°F dry bulb	°F wet bulb	% RH	Press. mm Hg	Wind mph	Wind Direct

PREFERRED CENTER FREQUENCIES FOR 1/3 OCTAVE BANDS

Position	Lin. Scale	20 Hz	25 Hz	30 Hz	40 Hz	50 Hz	63 Hz	80 Hz	100 Hz	125 Hz	160 Hz	200 Hz	250 Hz	315 Hz	400 Hz
Position	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10,000	12,500

Comments _____

DEPARTMENT OF ENVIRONMENTAL QUALITY

1/3 OCTAVE BAND DATA SHEET

I+C

File NP-ABC LUMBER

County Coos

SOURCE ABC LUMBER Co.
1000 "F" ST.
COOS BAY, OR

BY B. HAMMON

DATE 9-18-81

SHEET _____

COMPLAINANT MR. JOE SMITH
1245 "D" ST., COOS BAY
 COMPLAINT DATE 9-16-81

INSTRUMENTATION		
EQT	TYPE	SERIAL
SLM	B+K 2209	396472
MIC	B+K 4145	311347
FLTR	B+K 1618	923111
CAL	B+K 4220	376062
MAG TAPE	B+K 7003	704619
Windscreen		<input checked="" type="radio"/> ON <input type="radio"/> OFF
R. I. C.		<input type="radio"/> ON <input checked="" type="radio"/> OFF

Time	Bat. Ck.	Cal. dB	°F dry bulb	°F wet bulb	% RH	Press. mm Hg	Wind mph	Wind Direct
2:00 PM	✓	124.0	66°	PARTLY CLOUDY			4-6	SW
3:10 PM	✓	124.0	69°	"			2-4	"

PREFERRED CENTER FREQUENCIES FOR 1/3 OCTAVE BANDS

Position	Lin. Scale	20 Hz	25 Hz	30 Hz	40 Hz	50 Hz	63 Hz	80 Hz	100 Hz	125 Hz	160 Hz	200 Hz	250 Hz	315 Hz	400 Hz
1	70	58	60	59	58	59	60	59	59	58	57	56	54	52	51

Position	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10,000	12,500
1	50	48	46	45	53	43	41	40	40	37	38	36	37	32	28

Comments SAMPLE TAKEN 2:13 TO 2:35 PM PDT. PRIMARY
IS A LARGE SAW. PRODUCES WHINE IN 1250 HZ.
BAND.

4.6 Statistical Noise Level Calculations

4.6.1 Hand Sample Method (Comment)

- a. For this method use forms NPCS-10-1, NPCS-10-2, and NPCS-10-3 as shown in Figures 4-9 through 4-11 or equivalent.
- b. Perform a short noise survey to determine the approximate range of sound levels produced by the noise source being investigated. Enter the approximate high and low noise levels as well as the central tendency on form NPCS-10-1. Use the minimum and maximum sound levels and the table at the back-bottom of form NPCS-10-1 to estimate the minimum number of good sound samples needed to be taken from the source in question. For example, in Figure 4-12 the noise varied from a high of approximately 67 dBA to a low of 61 dBA. This is a 6 dBA variation. The table on NPCS-10-1 indicates that a minimum of 132 good readings needs to be taken.

The table on NPCS-10-1 is designed to give an acceptable statistical confidence in the L₁₀ and L₅₀ noise level. For determining the L₁ noise level with confidence or for more complex noise sources, more noise samples than indicated in the table may be necessary.

- [b.] c. Record the noise levels in dBA on Form NPCS-10-1 at five second intervals [for ten minutes], at ten second intervals [for twenty minutes], or at fifteen second intervals [for thirty minutes]. An example of such a measurement is presented in Figure 4-12. Note any unusual activity from the noise source in question. Also indicate all external or extraneous noise sources which may contaminate the noise reading. Examples include sounds from passing vehicle traffic and aircraft. The sound readings associated with these external sources will not be included in the statistical noise level calculations. If external sounds contaminate the measurements for a significant amount of time, it may be necessary to conduct the survey during a period of the day in which these other sources are absent or quieter.
- [c.] d. Using Form NPCS-10-2 [record the maximum, minimum and intermediate] tally the recorded noise levels in 1 dBA increments as the example shows in Figure 4-13. Record on NPCS-2 only those sound levels which are legitimately associated with the source in question, ignoring all other contaminating sound levels.

In the "Number of Readings" column, sum the total readings at each dBA level. Using the "Number Greater Than" column, calculate the number of readings taken that are greater than each particular level. For example, in Figure 4-13 there are no readings greater than 74 dBA, hence the "Number Greater Than" is zero. There is one reading taken at a level greater than 73 dBA, and three (1 plus 2) readings greater than 72 dBA.

The percent greater than (% Greater Than) column contains the statistical percent for each dBA level. The percent is calculated by dividing the numbers in the "Number Greater Than" column by the total number of readings times 100. For example, the percent of 73 dBA is calculated as $(1/194) \times 100 = 0.5\%$, and the percent at 72 dBA is $(3/194) \times 100 = 1.5\%$.

- [d.] e. Using Form NPCS-10-3, the dBA levels versus the "percent greater than" numbers are plotted. An example of this is shown in Figure 4-14.

From the resulting graph, the statistical noise level at any required percentage may be found. For example, the L_{50} and L_{10} are found to be 63 dBA and 66 dBA, respectively. Note that a normalized or randomly varying noise source will result in a straight line when plotted on form NPCS-10-3.

- f. The results from the statistical survey are then summarized on form NPCS-4 (see Figure 4-4). On the back of NPCS-4 a sketch of the measurement site should be drawn.
- g. A typical noise survey will require approximately 20 minutes of measuring to record the required number of samples at a 5-second sample interval. However, the noise standards for industrial and commercial noise sources (OAR 340-35-035) are specified for a one-hour (60 minute) period. Therefore, the noise investigator must ensure that the noise survey represents sounds that are typical of a full 60-minute operation of the noise source. If the source significantly changes its operation for the remainder of the hour, it is recommended that a full 60 minutes of samples are measured and recorded for the statistical analysis.
- h. The documentation of the L_1 statistical noise level is often better accomplished by the "time above" method. For noise sources that operate for a short period of time at a constant sound level, an accurate determination of the L_1 noise level can be determined by measuring the total amount of time the noise source operates in a one-hour period. If

the source operates for a period of 36 seconds or greater within the hour (but less than 6 minutes), then the L₁ is equal to the measured noise level. If the source operates for 6 minutes or more during the hour, then the measured level is the L₁₀ statistical noise level.

4.6.2 Noise Exposure Counter or Monitor Method

Comment: Statistical noise levels may be obtained through the use of several commercially designed devices that sample and classify the data. [The Bruel & Kjaer Model 166 Environmental Noise Classifier is a self-contained instrument that can be used to obtain the statistical distribution of noise. The data obtained from this instrument may be recorded on Forms NPCS-10 and calculated in the same manner as described in Section 6.1 of this Chapter. Other equivalent systems may be used with the approval of the Department.]

4.6.3 Programmable Calculator Method

Comment: The noise staff of the Department has developed a program to calculate statistical noise levels on a Wang 600 series programmable calculator. This method will digitally make the necessary calculations after the analog noise data has been converted to digital data. As this method is specialized to the Department's facilities, it will not be presented here. A complete explanation of the method and program listing is on file at the Department in Manual NPCS-22, Analysis of Ambient Noise with the Wang 600 Series Programmable Calculator.

DEPARTMENT OF ENVIRONMENTAL QUALITY
STATISTICAL NOISE SURVEY

SOURCE: _____ DATE: _____

BY: _____

MEASUREMENT SITE: _____ COUNTY: _____

SHEET: /

Time	Pat.	Calibration dB	F dry bulb	F wet bulb	%RH	Press. mm Hg.	Wind MPH	Wind direct.	INSTRUMENTATION		
									EQU	TYPE	SERIAL
									SLM		
									MIC		
~ Range of Noise: Hi Low Central Tend. dBA dBA dBA									CAL		
Start Time: _____ Sample Interval: 5 10 15 seconds									WINDSCREEN: ON OFF		
									R. I. C.: ON OFF		

DATA POINTS	SOUND PRESSURE LEVEL dBA					
1 - 6						
7 - 12						
13 - 18						
19 - 24						
25 - 30						
31 - 36						
37 - 42						
43 - 48						
47 - 54						
55 - 60						
61 - 66						
67 - 72						
73 - 78						
79 - 84						
85 - 90						
91 - 96						
97 - 102						
103 - 108						
109 - 114						
115 - 120						
121 - 126						
127 - 132						

Figure 4-9
Form NPCS-10-1

Note: See back for the minimum number of samples.
 Indicate any missing data points and give an explanation.

NPCS-10-1

STATISTICAL NOISE SURVEY

DATE: _____

SHEET: _____

BY: _____

SOURCE: _____

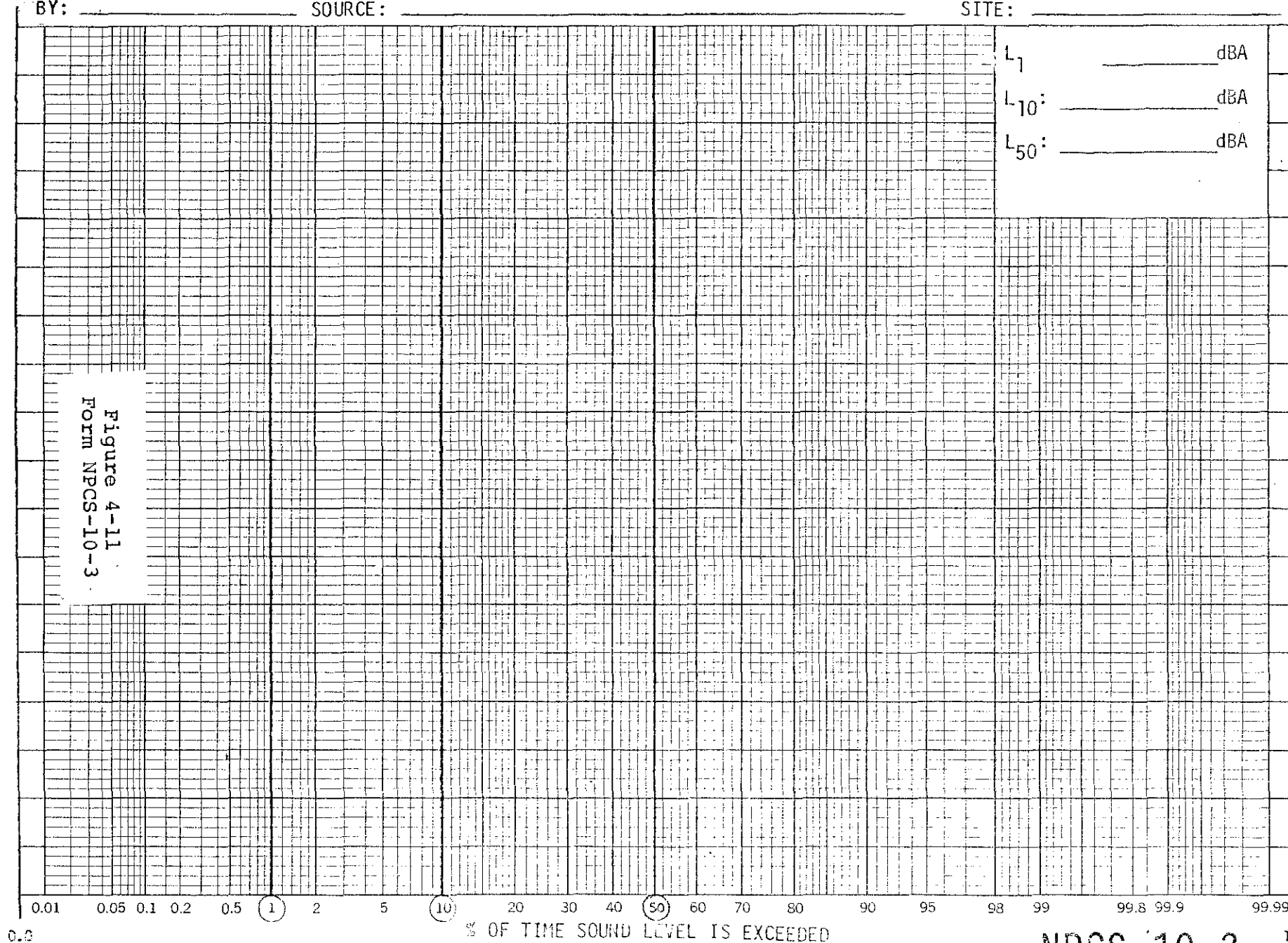
MEASUREMENT

SITE: _____

L₁: _____ dBA
 L₁₀: _____ dBA
 L₅₀: _____ dBA

SOUND LEVELS (dBA)
-27-

Figure 4-11
Form NPCS-10-3



0.0

% OF TIME SOUND LEVEL IS EXCEEDED

Note: A normalized distribution will produce a straight line on this graph

NPCS-10-3

100

6/76

DEPARTMENT OF ENVIRONMENTAL QUALITY

STATISTICAL NOISE SURVEY

SOURCE: ACME WOOD PRODUCTS INC. DATE: 9-16-81
1581 S.W. 76TH (DEBARKER, SAW CHIPPER) BY: GTW
 MEASUREMENT SITE: SITE 1, MR & MRS. JONES' NSP COUNTY: MULT.
1576 S.W. 76TH, PORTLAND SHEET: 2 / 4

Time	Bat.	Calibration dB	F dry bulb	F wet bulb	%RH	Press. mm Hg.	Wind MPH	Wind direct.	INSTRUMENTATION		
									EQU	TYPE	SERIAL
1410	✓	114.0					0-5	NW	SLM	GR 1565	12345
1515	✓	114.0					2-6	NW	MIC	1"	
~ Range of Noise: Hi. <u>67</u> dBA Low <u>61</u> dBA Central <u>63</u> dBA Tend.									CAL	GR 1987	1790
Start Time: <u>1420 PDT</u> Sample Interval: <u>(5)</u> 10 15 seconds									WINDSCREEN: <input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF		
									R. I. C.: ON OFF		

DATA POINTS	SOUND PRESSURE LEVEL dBA					
1 - 6	65	63	62	61	64	65
7 - 12	63	61	65	CAR	CAR	64
13 - 18	63	62	70	65	63	62
19 - 24	70	62	DOG	64	63	61
25 - 30	62	63	63	61	67	67
31 - 36	TRUCK →	T	T	64	66	65
37 - 42	62	63	64	63	62	64
43 - 48	63	63	64	63	73 R	62
47 - 54	63	63	65	62	64	63
55 - 60	61	64	65	63	63	65
61 - 66	65	66	64	61	62	66
67 - 72	60	61	63	63	64	70
73 - 78	72	61	73 R	74 R	64	64
79 - 84	63	62	60	65	62	64
85 - 90	61	62	67	63	JET	JET →
91 - 96	JET	JET	65	64	64	64
97 - 102	70 R	63	64	63	62	65
103 - 108	66	65	66	62	64	63
109 - 114	64	64	62	63	65	64
115 - 120	64	67	63	64	DOG	DOG
121 - 126	65	66	67	64	66	69
127 - 132	69	CAR	CAR	63	66	64

Note: See back for the minimum number of samples.
 Indicate all missing data points and give an explanation.

NPCS-10-1

133 - 138	63	66	65	64	63	66
139 - 144	62	63	65	64	63	64
145 - 150	64	64	65	66	62	64
151 - 156	66	63	68	63	63	63
157 - 162	62	63	64	63	63	62
163 - 168	63	65	64	62	63	68
169 - 174	← COMPLAINT TALKING →			64	61	
175 - 180	63	63	63	64	63	65
181 - 186	64	61	61	BIRDS →	B	63
187 - 192	64	63	64	62	65	64
193 - 198	62	64	63	62	64	62
199 - 204	CAR	CAR	63	64	60	63
205 - 210	64	62	62	TRUCK →	T	T
211 - 216	T	T	T	63	64	64
217 - 222	69	63	65	63	65	63
223 - 228						
229 - 234						
235 - 240						
241 - 246						
247 - 252						
253 - 258						
259 - 264						
265 - 270						
271 - 276						
277 - 282						
283 - 288						
289 - 294						
295 - 300						
301 - 306						
307 - 312						
313 - 318						
319 - 324						
325 - 330						
331 - 336						

Figure 4-12
Example of Form NPCS-10-1
Reverse Side

Maximum - Minimum Levels (difference in range)													
0-8	9	10	11	12	13	14	15	16	17	18	19	20	21
132	138	174	210	246	288	336	384	438	498	558	618	684	756
Minimum Number "Good" Samples													

Note: Indicate all missing data points and give an explanation. Additional data points may be needed to document an L₁ violation.

NPCS-10-1

DEPARTMENT OF ENVIRONMENTAL QUALITY
 STATISTICAL COMPUTATION SHEET

Date: 9-16-81 Source: ACME WOOD PRODUCTS INC. Sheet 3 / 4
1420 PDT

Level dBA	10	20	30	40	No. Readings	No. Greater Than	% Greater Than
76							
75					0		
74					1	0	0
73					2	1	0.5
72					1	3	1.5
71					0	4	2.1
70					4	4	2.1
69					3	8	4.1
68					2	11	5.7
67					5	13	6.7
66					12	18	9.3
65					23	30	15.5
64					46	53	27.3
63					53	99	51.0
62					27	152	78.4
61					12	179	92.3
60					3	191	98.5
59						194	100
58							

Figure 4-13
 Example of Form NPCS-10-2

DATE: 9-16-81

STATISTICAL NOISE SURVEY

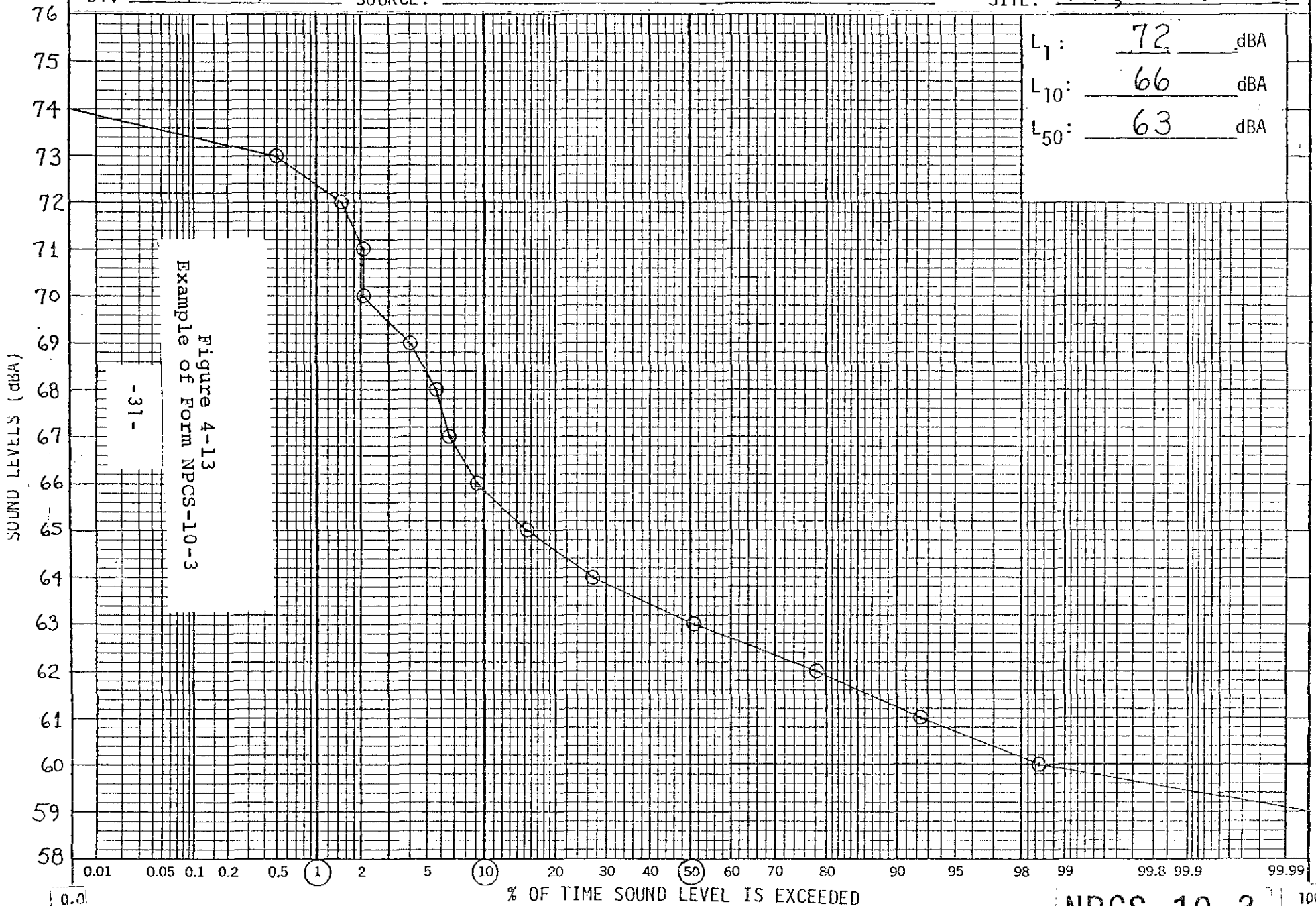
SHEET: 4 / 4

BY: GTW

SOURCE: ACME WOOD PRODUCTS INC.

MEASUREMENT

SITE: #1, JONES NSP



L₁: 72 dBA
 L₁₀: 66 dBA
 L₅₀: 63 dBA

Figure 4-13
 Example of Form NPCS-10-3

-31-

NPCS-10-3

100
6/76

0.0

Note: A normalized distribution will produce a straight line on this graph.

4.8.1 Point Source

Comment: The sound pressure level at a point r feet from a point source can be calculated from a sound pressure level measurement at a point r_0 feet from the point source using the following equation:

$$SPL = SPL_0 - 20 \log (r/r_0)$$

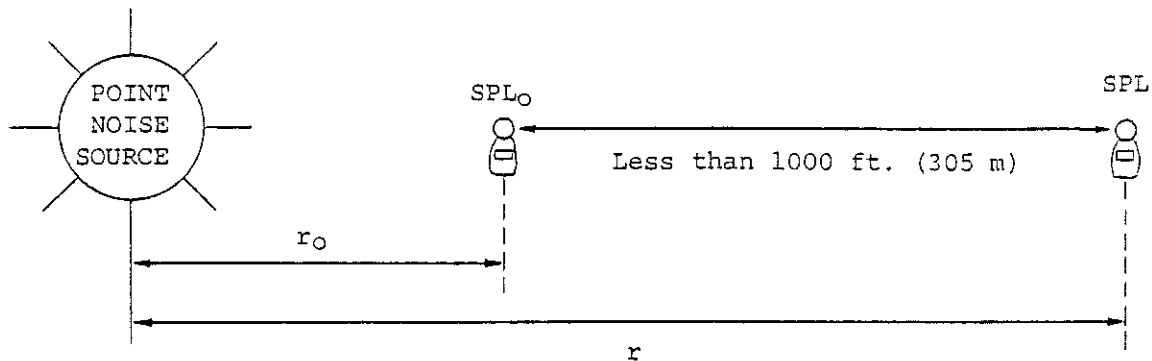
where:

SPL = sound pressure level at r feet from the source.

SPL_0 = sound pressure level at r_0 feet from the source. Note that r_0 is a reference distance and that the distance r is always greater than r_0 . The point r_0 must be in the far field of the source.

Figure 4-15 illustrates a point source, such as an industrial site, and the distance at which the measurement SPL_0 is taken and the distance where the required level, SPL is needed.

This projection technique is applicable only if the distance between r and r_0 is less than 1000 feet. This projection technique should be used only when it is not practical to make a sound pressure level reading at r .



SOUND LEVEL ADJUSTMENT WITH DISTANCE

FIGURE 4-15

4.8.2 Line Source

Comment: The sound pressure level at a point r feet from a line source can be calculated from a sound pressure level measurement at a point r_0 feet from the line source using the following equation:

$$SPL = SPL_0 - 10 \log (r/r_0)$$

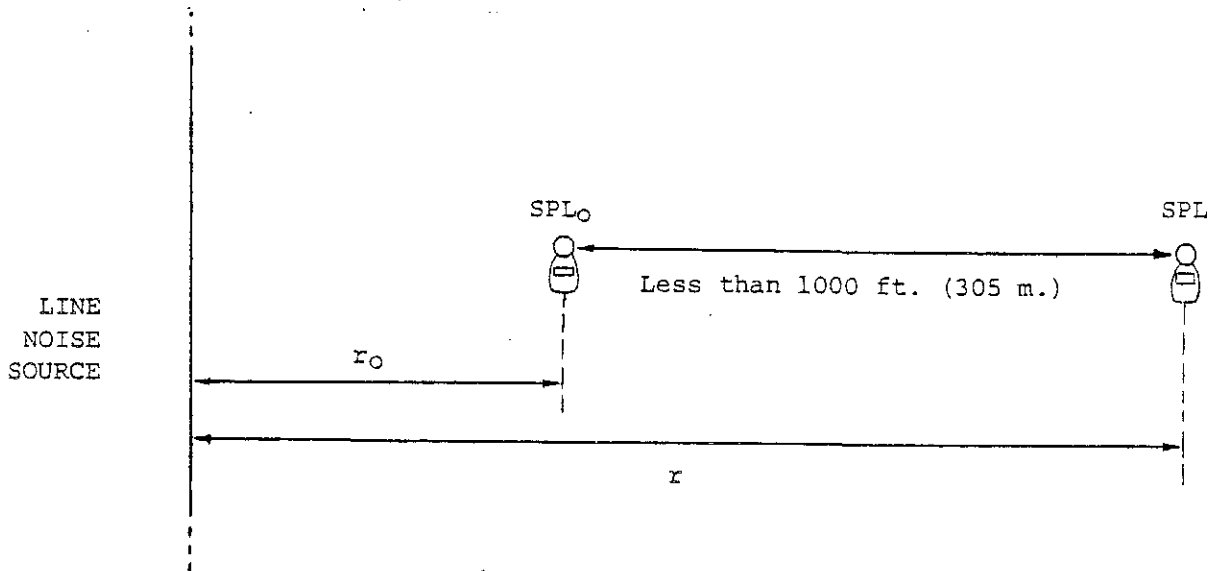
where:

SPL = sound pressure level at r feet from the source.

SPL_0 = sound pressure level at r_0 feet from the source. Note that r_0 is a reference distance and that the distance r is always greater than r_0 . The point r_0 must be in the far field of the source.

Figure 4-16 illustrates a line source, such as a highway with closely spaced moving vehicles, and the distance at which the measurement, SPL_0 is taken and the distance where the required level SPL is needed.

This projection technique is applicable only if the distance between r and r_0 is less than 1000 feet. This projection technique should be used only when it is not practical to make a sound pressure level reading at point r .



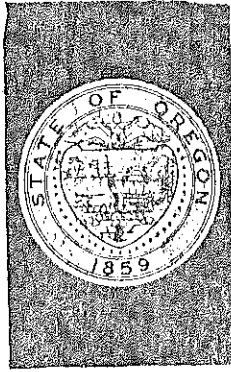
LINE NOISE SOURCE DISTANCE ADJUSTMENT

FIGURE 4-16

Index of Proposed Amendments
Procedure Manual NPCS - 2

Attachment 3
Agenda Item F
December 3, 1982
EQC Meeting

<u>Page No.</u>	<u>Paragraph</u>	<u>Description</u>
1	1.A.	Added clarification to minimum sound meter requirements
2	1.D.	Added requirements for blast impulse measuring instruments



REQUIREMENTS
FOR
SOUND
MEASURING
INSTRUMENTS
AND
PERSONNEL

PROPOSED AMENDMENTS

December 1982

Proposed additions are underlined.

Proposed deletions are [bracketed].

DEPARTMENT OF ENVIRONMENTAL QUALITY
REQUIREMENTS FOR SOUND MEASURING INSTRUMENTS AND PERSONNEL

NPCS-2

I. INSTRUMENTS

PURPOSE: To ensure maximum practical accuracy in any particular instrument, and to minimize the difference in corresponding readings with various makes and models of instruments.

A. SPECIFICATIONS FOR SOUND LEVEL METERS

SCOPE: All sound level meters shall conform to American National Standards Institute Standard Number S1.4-1971 [A Type II specification is the minimum requirement for sound level meters] for either:

- (1) A Type 1 sound level meter.
- (2) A Type 2 sound level meter.
- (3) A Type S sound level meter which has:
 - a) An A-weighting frequency response.
 - b) The appropriate fast or slow dynamic characteristics of its indicator; and.
 - c) A relative response level tolerance consistent with those of either a Type 1 or Type 2 sound level meter as specified in ANSI S1.4-1971.
- (4) A sound level meter conforming with (1), (2) or (3) above of ANSI S1.4-1971 except that the definition for "indicating instrument" shall also include digital indicators that provide decibel readings in increments no greater than one (1) decibel over the range of interest.

The minimum accessory requirements are [a random incidence microphone,] a windscreen, and an acoustically coupled calibrator.

B. SPECIFICATIONS FOR OCTAVE AND THIRD-OCTAVE BAND FILTER SETS

SCOPE: All octave and third-octave band filter sets shall conform to American National Standards Institute Standard Number S1.11-1966. Type O Class II is the minimum requirement for octave and third-octave band filter sets.

C. SPECIFICATIONS FOR TAPE RECORDERS OR GRAPHIC LEVEL RECORDERS

SCOPE: Magnetic tape recorder systems and graphic level recorder systems shall conform to Society of Automotive Engineers Recommended Practice J184, qualifying a sound data acquisition system.

D. SPECIFICATIONS FOR IMPULSE MEASURING EQUIPMENT

SCOPE: Impulse sound measurement instruments shall conform to American National Standards Institute Standard Number S1.4-1971. A Type 1 specification is the minimum requirement for sound level meters with a peak detector circuit[.] used for unweighted (dB) peak impulse measurements. A Type 2 specification is the minimum requirement for sound level meters used for blast impulse noise measurements. Instruments used for blast impulse noise measurements shall be equipped with a "C" weighting network (dBC) and a "slow" detector response circuit.

II. PERSONNEL

PURPOSE: To ensure the quality of measurements.

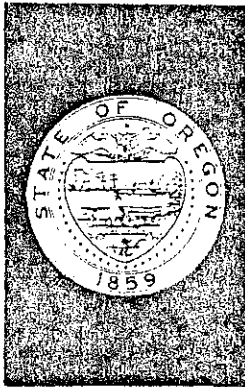
A. PERSONNEL QUALIFICATIONS

SCOPE: Personnel conducting sound measurements shall have been trained and experienced in the current techniques and principles of sound measurement and in the selection and operation of sound measuring instrumentation appropriate to the measurements being taken.

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Procedure Manual NPCS - 21

Attachment 3
Agenda Item F
December 3, 1982
EQC Meeting

<u>Page No.</u>	<u>Paragraph</u>	<u>Description</u>
2	2.1	Clarification added
4	2.3.2	Reduction of restrictions for monitoring during rain
8	3.1	Clarification added
16	3.2.9f	Add criteria to define "level road" grades
17	3.3.5	Reduction of restrictions for monitoring during rain
18	3.5.2	Added procedures for patrol car mounted microphones
21	4.1	Added reference to alternate procedures as approved pursuant to OAR 340-35-025(2) (a)
28	4.5.4.c.6	Added reference to EPA procedure
31	4.5.6(7)	Added reference to EPA procedure
33	4.5.7(4)	Amended deceleration procedure to conform to newly accepted procedures
36	5.3.2	Reduction of restrictions for monitoring during rain
41	6.1	Clarification added
	6.2.1	Grammatical correction
42	6.3.4	Amendments to procedures for monitoring during rain



MOTOR VEHICLE
SOUND
MEASUREMENT
PROCEDURES
MANUAL

PROPOSED AMENDMENTS

December 1982

Proposed additions are underlined.

Proposed deletions are [bracketed].

Index of Proposed Amendments
Procedure Manual NPCS - 21

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REVISION RECORD

INSTRUCTIONS FOR USE: All revisions of this manual will be numbered to assure each manual holder that he has received all revisions. The date and initials of the person inserting revisions to the manual should be entered on this revision record opposite the appropriate revision number. If the sequence is broken, copies of the missing revisions may be requested from the Noise Control Section.

<u>Rev. No</u>	<u>Date Inserted</u>	<u>Initials</u>	
1.	<u>7/8/74</u>	<u>JH</u>	
2.	<u>8/27/76</u>	<u>JH</u>	EQC Amendments
3.	<u>5/27/77</u>	<u>JH</u>	EQC Amendments
4.	<u>9/16/77</u>	<u>DO</u>	pg. 42, corrected typographic error
5.	<u>1/10/78</u>	<u>DO</u>	pg. 12, corrected typographic error.
6.	<u>5/21/80</u>	<u>JH</u>	EQC Motorboat Amendments
7.	<u> </u>	<u> </u>	
8.	<u> </u>	<u> </u>	
9.	<u> </u>	<u> </u>	
10.	<u> </u>	<u> </u>	
11.	<u> </u>	<u> </u>	
12.	<u> </u>	<u> </u>	
13.	<u> </u>	<u> </u>	
14.	<u> </u>	<u> </u>	
15.	<u> </u>	<u> </u>	
16.	<u> </u>	<u> </u>	
17.	<u> </u>	<u> </u>	
18.	<u> </u>	<u> </u>	

FOREWORD

The Motor Vehicle Sound Measurement Procedures Manual has been prepared to specify the equipment to be used, and the procedures established in the manual, when carefully followed, will ensure that the noise readings obtained are accurate, will support enforcement action, and aid in reducing motor vehicle noise.

The scope of this manual includes sound measurements for new motor vehicles, on-highway motor vehicles and stationary testing of off-highway and on-highway motor vehicles.

The objective of the manual is to establish procedures to implement the objectives of the Environmental Quality Commission. Further, if the practices and procedures herein are adhered to, the result will be a uniform enforcement program which will accomplish the intent of the Legislature and fulfill the Commission's responsibility under ORS Chapter 467.

Office of the Administrator
Air Quality Control Division
Department of Environmental Quality

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LEVEL MEASUREMENT

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LIST OF FIGURES

FIGURE

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- 3-3 Measuring Distance Correction Factor
- 3-4 Measurement of Distance to Embankment
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- 3-6 Nomograph for Reflecting Surfaces
- 3-7 Unacceptable Measuring Site
- 3-8 Microphone Height
- 3-9 Moving Motor Vehicle Noise Test Form (NPCS-25)
- 4-1 New Vehicles Test Area Layout
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- 4-4 Test Area Layout for Snowmobiles
- 4-5 Test Area Layout for Trucks
- 4-6 Test Area Layout for Passenger Cars
- 5-1 Auxiliary Equipment Measurement Site
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- 6-1 Microphone Placement for Automobile and Light Trucks
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CHAPTER 1

INTRODUCTION

1.1 Policy

1.1.1 The Department of Environmental Quality, through the Noise Pollution Control Section, shall establish a noise measurement program to implement the laws and regulations applying to motor vehicle noise.

1.1.2 The Noise Pollution Control Section and cooperating enforcement agencies shall be responsible for motor vehicle noise measurement.

1.1.3 This manual contains procedures for the Noise Pollution Control Section, Enforcement Division, and other persons taking motor vehicle sound measurements. Guidance is provided for in the comments.

1.2 Authority

1.2.1 Statutory and administrative law governing authority to the guidance and direction contained in this manual is found in the following sources:

a. Oregon Revised Statutes, Chapter 467, Sections 467.010, 467.020, 467.030, 467.050, 467.990.

b. Oregon Administrative Rules, Chapter 340, Division 35, Department of Environmental Quality.

1.3 Instruments and Training

1.3.1 Specific requirements for instruments and personnel are defined under procedure manual, Noise Pollution Control Section - 2, Requirements for Sound Measuring Instruments and Personnel.

1.3.2 Allied departments, divisions or agencies who select sound measuring instruments for measuring noise emissions should secure the assistance of qualified engineers in the field of sound measurement in preparing specifications and making purchases of such instruments.

1.3.3 Personnel making noise measurements shall be carefully trained in the techniques of noise measurements, use of required instruments, instrument calibration and problems which may be encountered when performing such tasks.

CHAPTER 2

STATIONARY MOTOR VEHICLE

SOUND LEVEL MEASUREMENT

AT 25 FEET FOR TRUCKS AND BUSES

- 2.1 Scope. This Chapter establishes procedures for setting up and calibrating sound measuring equipment and conducting tests to determine the sound level output of a stationary vehicle, as measured 25 feet from the vehicle. The near field test procedure at 20 inches (.5 meter) is presented in Chapter 6.

Motor vehicles in excess of 10,000 pounds GVWR or GCWR engaged in interstate commerce shall conform to measurement procedures and methodologies specified in Compliance with Interstate Motor Carrier Noise Emission Standards of the Federal Highway Administration, Department of Transportation (49 CFR 325).

These procedures, the 25-foot stationary test, are used to conduct emission tests on trucks and buses rated in excess of 8,000 pounds. The standards for these vehicles are found in Table 2 of OAR 340-35-030.

- 2.2 Measurement Sites. Measurement sites shall be free of sound-reflecting objects within fifty feet of the microphone and fifty feet of the vehicle to be tested. (See Figure 2-1)

Comment: A "Sound-reflecting Surface" is any object or landscape surface in the immediate vicinity of a measurement site which reflects sufficient sound to require the application of a correction factor to the sound level meter reading. Surfaces which are not sound-reflecting surfaces are:

- a. Any surface that measures less than eight feet in length in a direction parallel to the portion of the microphone line on which the microphone is positioned, regardless of height (such as a telephone booth or a tree trunk) or less than one foot in height, regardless of length (such as a curb or guard rail).
- b. Any vertical surface, regardless of size (such as a billboard) with the lower edge more than fifteen feet above the roadway.
- c. Any uniformly smooth slanting surface with less than a forty-five degree slope above horizontal.

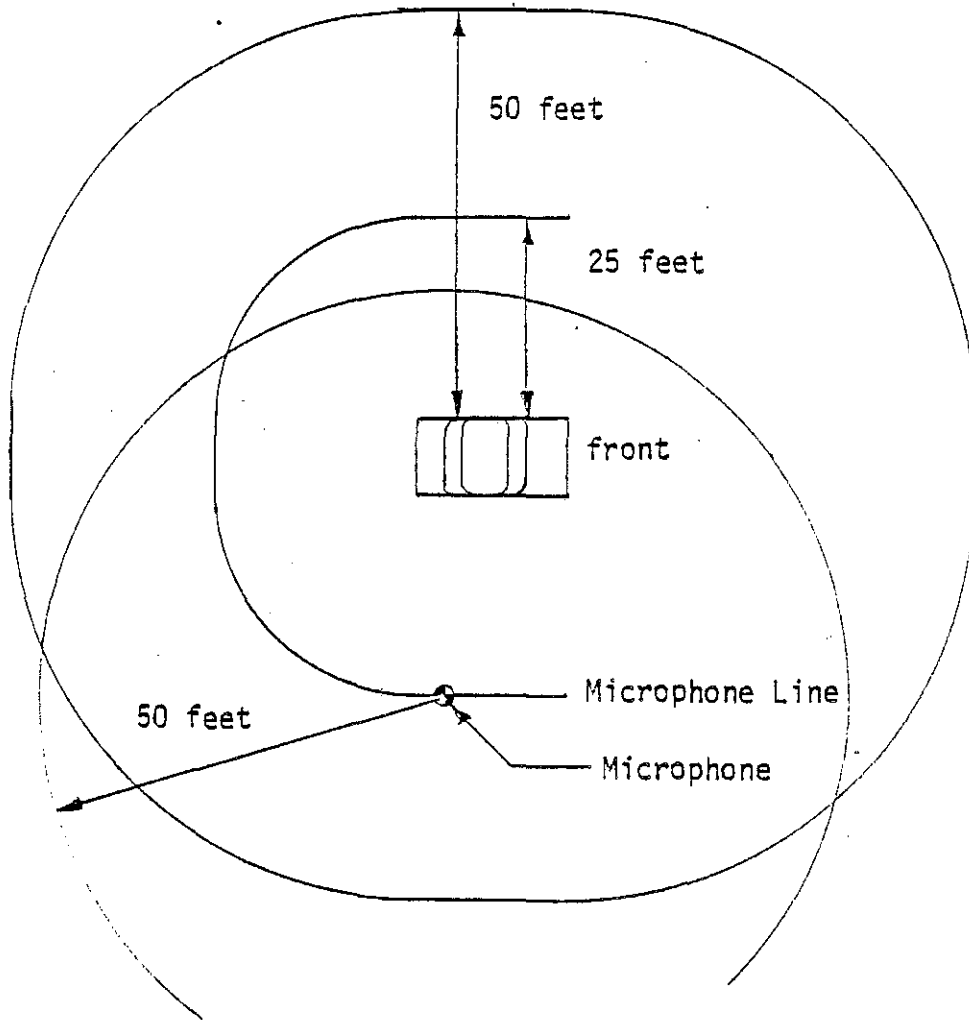


Fig. 2.1 Stationary Measurement Site

- d. Any slanting surface with a forty-five to ninety degree slope above the horizontal where the line at which the slope begins to exceed forty-five degrees is more than fifteen feet above the roadway.
- e. Any trees, bushes, shrubs, hedges, grass, or other vegetation.

All other surfaces are considered sound-reflecting surfaces.

- 2.2.1 Microphone Location. The microphone shall be located twenty-five feet \pm six inches from the rear or from either side of the vehicle to be tested. The locus of points thus defined is the microphone line (See Figure 2-1). The microphone shall be located at the point on the microphone line at which the maximum sound level occurs.
- 2.3 Sound Level Measuring Precaution
 - 2.3.1 Wind. Do not conduct measurements when wind velocity at the test location exceeds ten miles per hour.
 - 2.3.2 Precipitation. Do not conduct measurements when falling precipitation affects results [is falling]. However, measurements may be taken when streets are wet.
 - 2.3.3 Ambient Noise. The ambient sound level shall be at least 10 dBA below the sound level of the vehicle being measured.
 - 2.3.4 Recording. The sound level recorded shall be the highest level obtained during each test, disregarding unrelated peaks due to extraneous ambient noises.
- 2.4 Equipment Setup and Use.
 - 2.4.1 General. All types of sound level meters shall be field calibrated immediately prior to use using the procedures described in the factory instruction manual.
 - 2.4.2 Battery Check. Batteries in both the meter and calibrator shall be checked before calibration.
 - 2.4.3 Instrument Calibration. The instrument shall be set to the correct level range, weighting scale and meter response. The calibrator shall be placed on the microphone of the meter. The output indicated on the meter shall then be adjusted to the correct calibration level.

2.4.4 Microphone Height. The sound level meter may be hand held or placed on a tripod. The microphone shall be positioned four and one-half feet above the ground.

2.4.5 Windscreens. Windscreens made of open cell polyurethane foam furnished by the instrument manufacturer shall be placed over the microphone after calibration.

COMMENT: The windscreen reduces the effect of wind noise and protects the microphone diaphragm from dust or other airborne matter.

2.4.6 Annual Calibration. Within one year prior to use, each set of sound measuring instruments, sound level meter including octave band filter, and calibrator, shall receive a laboratory calibration in accordance to the manufacturer's specifications. This calibration shall be traceable to the National Bureau of Standards.

COMMENT: An inspection label will be attached to each instrument set to determine when the calibration was performed.

2.5 Sound Level Measurement

2.5.1 Preliminary Steps. The following steps shall be followed before taking a measurement.

(a) Turn meter on.

(b) Switch meter to "A" weighting scale.

(c) Switch meter to "FAST" response.

(d) Set the meter to the appropriate range to measure the anticipated sound level.

2.5.2 Mounting. The sound level meter shall be hand held or placed on a tripod according to the manufacturer's instructions.

2.5.3 Orientation. The orientation of the sound level meter microphone shall be according to the manufacturer's instructions to obtain random incidence.

2.5.4 Variations. Allowances are necessary due to unavoidable variations in measurement sites and test equipment. Vehicles are not considered in violation unless they exceed the regulated limit by 2 dBA or more.

- 2.6 Vehicle Test Procedure.
- 2.6.1 Vehicle Sound Level. The sound levels for stationary motor vehicles shall be determined by tests performed according to the following procedures.
- 2.6.2 Location. The microphone shall be located on the microphone line at the position where the maximum sound level is expected to occupy. (See Figure 2-1).
- 2.6.3 Preliminary Tests. Sufficient preliminary tests shall be made to enable the driver to become thoroughly familiar with the test procedure.
- 2.6.4 Vehicle Operation. The vehicle shall be stationary, in a neutral gear, at its normal operating temperature.
- a. Governed Engines. Engines with speed governors shall be run at low idle with the throttle closed. The throttle shall then be fully opened as fast as possible. As soon as the engine reaches and stabilizes at governed speed, the throttle shall be fully closed as quickly as possible.
 - b. Non-Governed Engines. Engines without speed governors shall be operated the same as governed engines except that the throttle shall be closed quickly enough to prevent excessive engine speed and possible damage to the engine. Drivers of vehicles supplied with tachometers should use the tachometer to monitor engine speed.
- 2.6.5 Visual Reading. The highest sound level observed, exclusive of peaks due to unrelated ambient noise, shall be reported for each test.
- 2.6.6 Reported Sound Level. The reported sound level for the vehicle shall be the highest reading which is no more than one dB higher than the next highest reading.
- 2.6.7 Stationary Motor Vehicle Test Form. A form to record all pertinent information and data is presented in Figure 2-2. This form, NPC-24 or any other Department approved form for this use, shall be used for stationary tests.

YEAR	VEHICLE MAKE	VEHICLE TYPE	LICENSE NO.	MODEL				
REGISTERED OWNER		ADDRESS						
DRIVER	D.L. NO.	ADDRESS						
ENGINE TYPE	HP	ENGINE DISPLACEMENT	LOCATION	VEHICLE MILEAGE				
EXHAUST OUTLET <input type="checkbox"/> Single <input type="checkbox"/> L. Side <input type="checkbox"/> Rear <input type="checkbox"/> Dual <input type="checkbox"/> R. Side <input type="checkbox"/> Vertical	CHECK POSITION AND SIZE OF OUTLET <input type="checkbox"/> Straight <input type="checkbox"/> 45° to rear <input type="checkbox"/> 45° to Side <input type="checkbox"/> ___ dia	RESONATORS <input type="checkbox"/> Single <input type="checkbox"/> Dual	MUFFLER TYPE	TIRE SIZE ___ x ___ ___				
RECORDER MODEL AND DEQ NO.		METER MODEL AND DEQ NO.	CALIBRATOR AND DEQ NO.					
TEST DRIVER	TEST ENGINEER	METER CHECK <input type="checkbox"/> BAT. <input type="checkbox"/> WINDSCREEN <input type="checkbox"/> "A" SCALE <input type="checkbox"/> FAST <input type="checkbox"/> CALIB.						
OPERATING CONDITIONS	Time	READINGS		MAX. RPM	TEST CONDITIONS			
		dBa	LOCATION NUMBER					
					WEATHER CONDITION	TEMP.	%R.H.	WIND SPEED
					Sketch in this space the measurement site peculiarities, and using the proper symbols indicate the direction of wind, vehicle orientation and reading locations.			
					Key: WIND DIRECTION - - - - - VEHICLE ← → MICROPHONE LOCATION NO. ◻			

INSTRUMENTATION SET UP AT 25 FT FROM EDGE OF VEHICLE

NPCS-24

Figure 2.2
Stationary Vehicle Noise Test

CHAPTER 3

IN-USE VEHICLE MOVING SOUND LEVEL MEASUREMENTS

- 3.1 Scope. This chapter describes the procedure for selecting sites and setting up equipment for measurement of noise from vehicles on the highway, off-road or on water.

This procedure is used to test and monitor moving vehicles at distances of 35 to 118 feet (typically 50 feet) from the vehicle path. The standards for road vehicles and off-road recreational vehicles are found in Tables 3 and 4 of OAR 340-35-030.

- 3.2 Measurement Sites.

- 3.2.1 Types of Sites. Two types are established for measuring vehicles in use on the highway. They are a standard measuring site requiring a large clear open area and a restricted measuring site in which sound-reflecting objects are permitted. When selecting measuring sites, care shall be taken to measure sites carefully and determine if a correction factor must be applied.

- 3.2.2 Standard Measuring Sites. Standard measuring sites are those where the microphone can be placed 50 feet from the center of the vehicle path and where there are no sound-reflecting objects within 100-foot radius of the microphone point (which is the point on the vehicle path that is closest to the microphone). (See Figure 3-1) When making measurements of vehicle sound levels in standard measuring sites, the instrument readings shall be recorded with no correction factor applied.

- 3.2.3 Restricted Measuring Sites. Restricted measuring sites are those where the distance from the center of the vehicle path to the microphone is other than 50 feet or where there are sound reflecting surfaces closer than 100 feet from the microphone or the microphone point. Vehicle noise measurements may be made in such areas when the proper correction factors described in this chapter are applied to the recorded sound levels. (See Figure 3-2)

- 3.2.4 Measuring Distance. The actual distance from the microphone to the microphone point at the center of the vehicle path may range from 35 to 118 feet when the factor obtained from Figure 3-3 is added to the sound level meter readings to correct the reading to what it would be at the standard measuring distance of 50 feet.

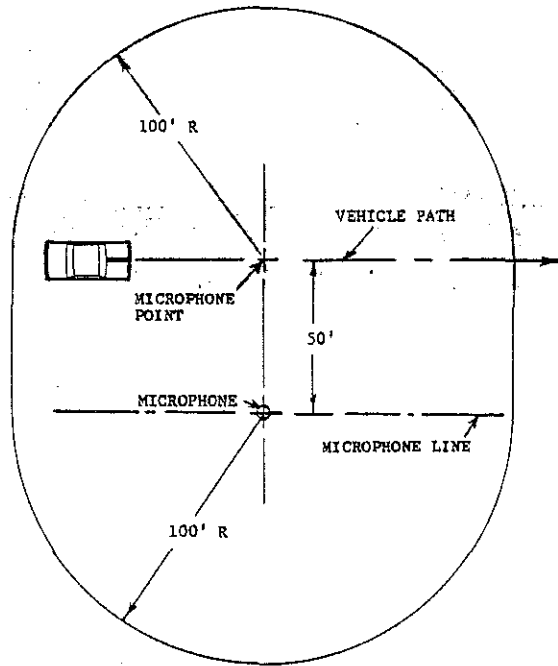


Fig. 3-1. Standard Measuring Site

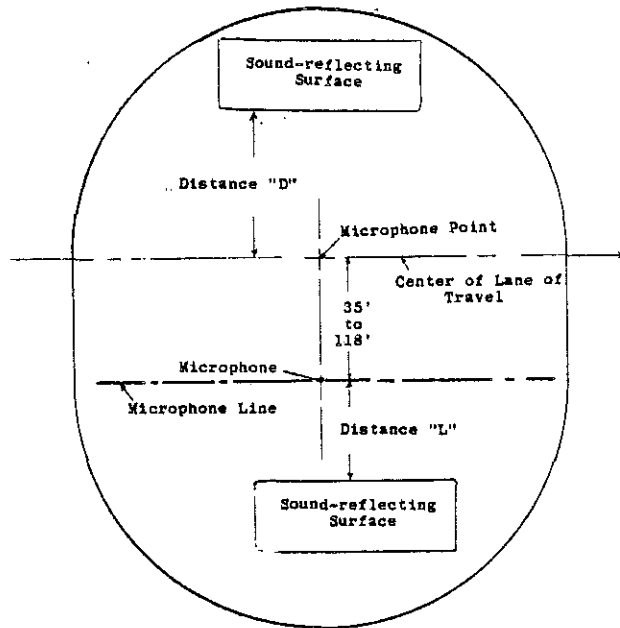


Fig. 3-2. Restricted Measuring Site

Distance from Microphone to Pathway Centerline	dBA Correction Factor
35 - 39 ft	-3
39 - 43 ft	-2
43 - 48 ft	-1
48 - 58 ft	0
58 - 70 ft	+1
70 - 83 ft	+2
83 - 99 ft	+3
99 - 118 ft	+4

Example: If the distance between the microphone and the pathway centerline is 36 feet instead of 50 feet and a vehicle is measured at 90 dBA, the recorded reading will be as follows:

90	dBA	Uncorrected reading
<u>-3</u>	<u>dBA</u>	Correction factor
87	dBA	Corrected reading

Fig 3-3 Measuring Distance Correction Factors

3.2.5 Sound-reflecting Surfaces. A "sound-reflecting surface" is any object or landscape surface in the immediate vicinity of a measurement site which reflects sufficient sound to require the application of a correction factor to the sound level meter reading.

- a. Correction factors determined from paragraph 3.2.7 may be applied only when sound-reflecting surfaces are basically parallel to the lane of travel.
- b. A basically parallel surface may have irregularities or projections of not more than two feet measured perpendicular to the lane of travel, with the distance to the microphone line or vehicle path measured from the closest point of the projection.

3.2.6 Surfaces Not Requiring Correction Factors. Correction factors shall not be applied to the sound level reading when the following surfaces are within the measuring area defined by paragraph 3.2.2:

- a. Any surface that measures less than eight feet in length in a direction parallel to the vehicle path, regardless of height (such as telephone booth or tree trunk) or less than one foot in height, regardless of length (such as a curb or guard rail).
- b. Any vertical surface, regardless of size (such as billboard) with the lower edge more than fifteen feet above the surface.
- c. Any uniformly smooth slanting surface with less than a forty-five degree slope above horizontal.
- d. Any slanting surface with a forty-five to ninety degree slope above horizontal where the line at which the slope begins to exceed forty-five degrees is more than fifteen feet above the surface.
- e. Any trees, brushes, shrubs, hedges, grass or other vegetation.

3.2.7 Correction Factors for Sound-reflecting Surfaces. Correction factors to be applied to sound level meter readings when there are sound-reflecting surfaces within 100 feet of either the microphone or microphone point are determined as follows:

- a. Reflecting Surfaces. Sites where there are sound-reflecting surfaces basically parallel to the vehicle path within the clear area of the standard site may be used by measuring the distances shown in Figure 3.4 and 3.5, and applying the correction factor obtained from the nomogram in Figure 3-6.

- b. Smooth Embankments. The point of measurement from smooth embankments shall be the place on the embankment where the slope begins to exceed forty-five degrees above horizontal (See Figure 3-4). The point of measurement from irregular embankments shall be the place on the embankment where the irregularity begins. A smooth embankment is one with vegetation, concrete, asphalt, dirt or other relatively smooth cover.

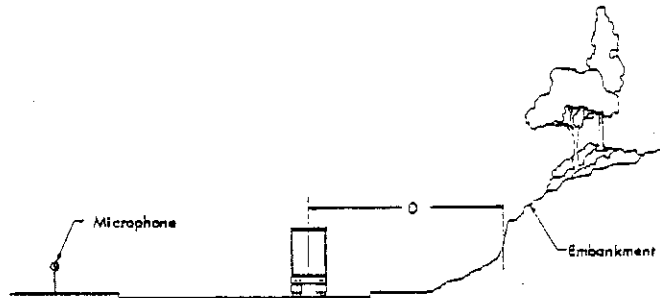


Fig. 3-4. Measurement of Distance to Embankment

- c. Taking Measurements. To determine the correction factor for sound-reflecting surfaces within the measuring site, measure the distances shown in Figure 3-5. Measurement "D" is the shortest distance between the sound-reflecting surface and the centerline of the lane of travel. Measurement "L" is the shortest distance between the sound-reflecting surface and a line parallel to the lane of travel that passes through the microphone (microphone line).

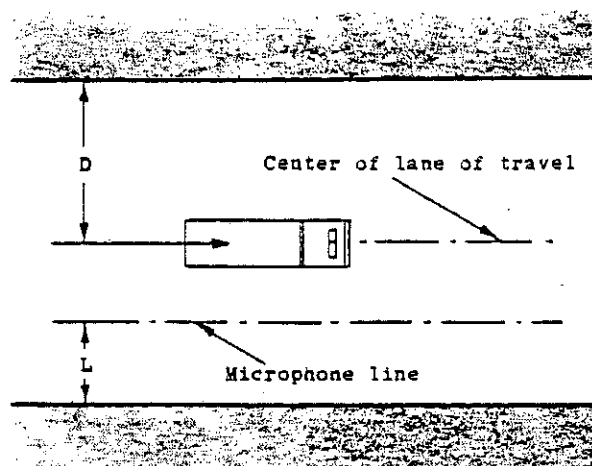
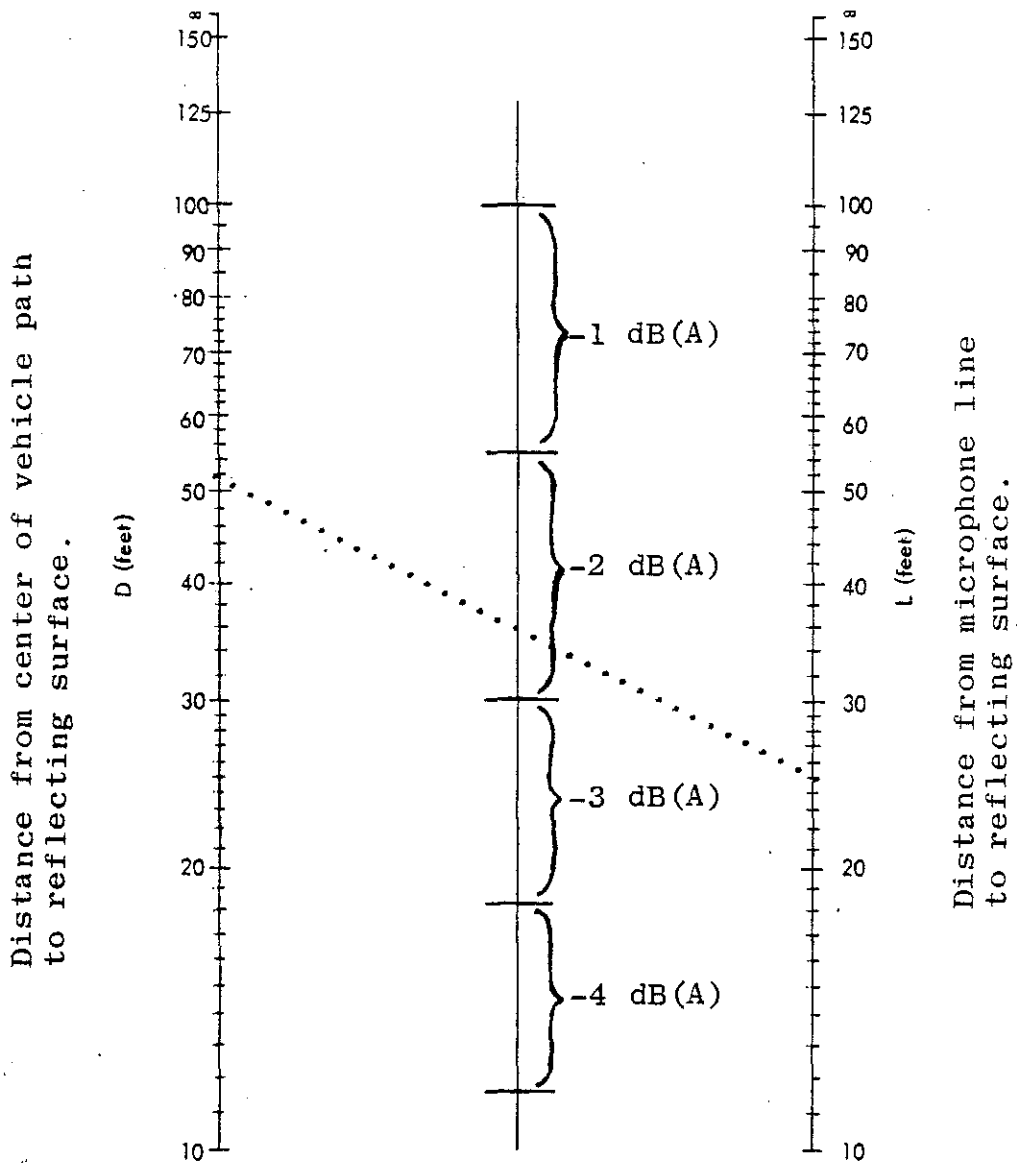


Fig. 3-5 Correction Factor Distances "D" and "L"

- d. Determining Correction Factor. Locate the points on the left and right scales of the nomogram (Figure 3-6) corresponding to the distances "D" and "L." Place a straight edge across the nomogram so that it connects the two points. The point where the straight edge intersects the center axis indicates the correction factor to be applied to the sound level meter reading.
- e. Example. The dotted line in Figure 3-6 illustrates the use of the nomogram for a reflecting surface fifty-two feet from the center of the lane of travel (distance "D") and one twenty-five feet from the microphone line (distance "L"). These measurements plotted on the nomogram result in a correction factor of -2 dBA. With the microphone at the standard measuring distance of fifty feet and a vehicle measured at ninety dBA, the corrected reading would be recorded as follows.

90 dBA	Uncorrected reading
<u>-2 dBA</u>	Correction from Figure 3-6
88 dBA	Corrected reading



On centerline read dB(A) correction to be subtracted from meter reading.

Fig. 3-6 Nomogram for Reflecting Surfaces

3.2.8 Combination of Reflecting Surfaces and Non-standard Measuring Distance. Example. If the distance between the microphone and microphone point is seventy-four feet instead of the standard distance of fifty feet and the sound-reflecting surfaces are the same distances as described in the example given above, two corrections are necessary.

90 dBA	Uncorrected reading
-2 dBA	Correction for sound-reflecting surfaces
<hr/>	
88 dBA	
+2 dBA	Correction for measuring distance
90 dBA	Corrected reading

3.2.9 Selection of Sites. Selection of sites shall be subject to the following restrictions:

- a. Pathways
 - i) Road vehicle sites shall be paved with concrete or asphalt.
 - ii) Snowmobile sites shall be covered with snow or live vegetation no more than four inches in height.
 - iii) Boat sites shall be on water with waves less than \pm twelve inches.
 - iv) All other sites shall be on hard packed earth or live vegetation of less than four inches in height.
- b. Tunnels and Overpasses. Sound measurements shall not be made within 100 feet of a tunnel or overpass through which the roadway passes.
- c. Overhangs. The vehicle path and microphone shall not be within fifty feet of overhangs on buildings which project more than two feet from the wall of the building.
- d. Reflecting Surfaces Close to Microphone. Sound reflecting surfaces, other than the ground or water, shall be no closer than ten feet from the microphone line.
- e. Reflecting Surfaces Close to Lane of Travel. Sound reflecting surfaces shall be no closer than ten feet from the center of the lane of travel for a distance of 100 feet parallel to the vehicle path on either side of the microphone point.
- f. Non-parallel Reflecting Surfaces. Large reflecting surfaces that are not basically parallel to the lane of travel shall be 100 feet or more from the microphone or microphone point. (see Figure 3-7).

g. Grades. The standards for road vehicles on "level roadways" contained in Table 3 of OAR 340-35-030 may be applied to vehicles traveling on any roadway that does not exceed a grade of plus two (2) percent.

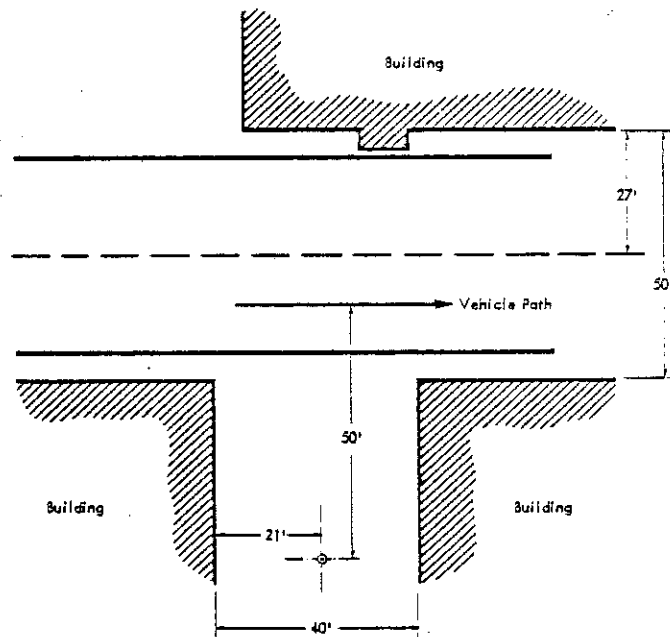


Fig. 3.7. Unacceptable Measuring Site

- 3.3 Sound Level Measuring Precautions
- 3.3.1 Identification. It is most important that the noise recorded is actually from the vehicle being measured. Care must be taken to ensure that noise from another vehicle does not add to that from the one being measured.
- 3.3.2 Intensity. The sound level of the vehicle under scrutiny must rise at least 6 dBA before and fall at least 6 dBA after the maximum sound level occurs.
- 3.3.3 Recording. The sound level recorded shall be the highest level obtained as the vehicle passes by, disregarding unrelated peaks due to extraneous ambient noises.
- 3.3.4 Wind. Always use the wind screen on the microphone when taking measurements. Do not conduct measurements when wind velocity at the test location exceeds ten miles per hour.
- 3.3.5 Precipitation. Do not conduct measurements when falling precipitation affects results [is falling]. Streets shall be dry during road vehicle measurements.
- 3.3.6 Ambient Noise. The ambient sound level shall be at least 10 dBA below the sound level of the vehicle being measured.
- 3.4 Equipment Setup and Use
- 3.4.1 General. All types of sound level meters shall be field calibrated immediately prior to use using the procedures described in the factory instruction manual.
- 3.4.2 Battery Check. Batteries in both the meter and calibrator shall be checked before calibration.
- 3.4.3 Instrument Calibration. The instrument shall be set to the correct level range, weighting scale and meter response. The calibrator shall be placed on the microphone of the meter. The output indicated on the meter shall then be adjusted to the correct calibration level.
- 3.4.4 Microphone Height. The microphone shall be placed on a tripod if an extension cable is used. If the cable is not used, the sound level meter with the microphone attached may be hand held or placed on a tripod. The microphone shall be positioned at height of $4 \pm 1/2$ ft as shown in Figure 3.8.

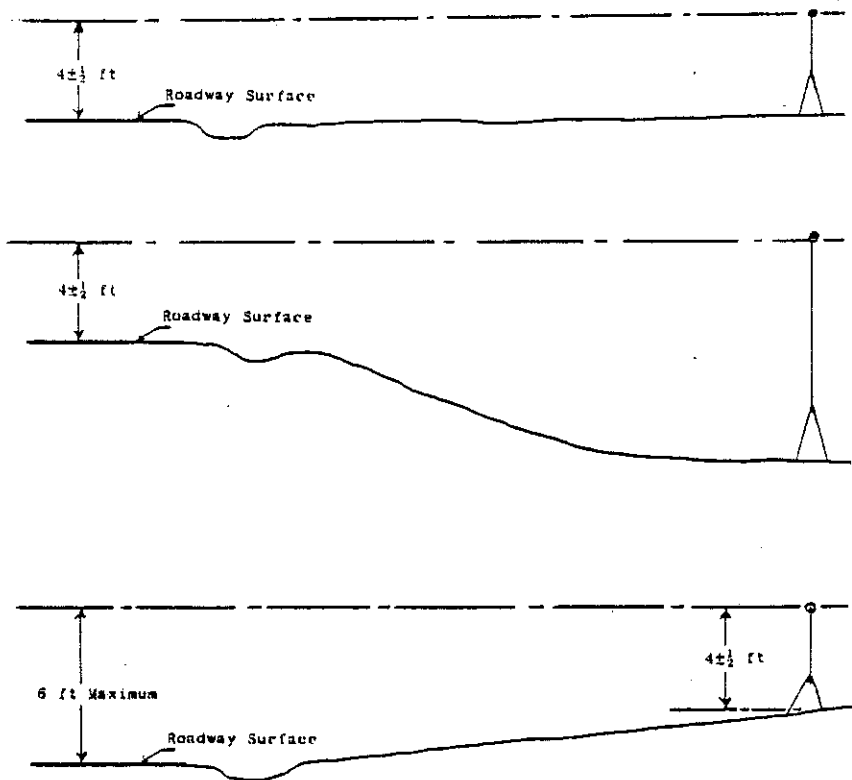


Fig. 3-8. Microphone Height

- 3.4.5 Windscreens. Windscreens made of open cell polyurethane foam furnished by the instrument manufacturer shall be placed over the microphone after calibration.
- 3.4.6 Annual Calibration. Within one year prior to use, each set of sound measuring instruments, sound level meter including octave band filter, and calibrator, shall receive a laboratory calibration in accordance to the manufacturer's specifications. This calibration shall be traceable to the National Bureau of Standards.

COMMENT: An inspection label will be attached to each instrument set to determine when the calibration was performed.

3.5 Sound Level Measurement

- 3.5.1 Preliminary Steps. The following steps shall be followed before taking a measurement.
- a) Turn meter on.
 - b) Switch meter to "A" weighting scale.
 - c) Switch meter to "FAST" response.
 - d) Set the meter to the appropriate range to measure the anticipated sound level.

3.5.2 Mounting. The sound level meter shall be hand held or placed on a tripod according to the manufacturer's instructions.

The meter microphone may also be mounted above a patrol car with an additional correction factor of minus two decibels (-2 dBA) to be added to the measured value. This factor does not preclude the need for the determination of other site correction factors described in section 3.2. The microphone shall be mounted:

- a) Six (6) to eighteen (18) inches above the plane of the car roof, and
- b) Six plus or minus one (6 ± 1) inches outside the vertical side planes of the car, and
- c) Not fore of the roof-windshield line nor aft of the roof-rear window line.

The patrol vehicle may be orientated either parallel or perpendicular to the traffic flow. However, the microphone shall be located on the side of the patrol car closest to the traffic flow when using a parallel orientation.

3.5.3 Orientation. The orientation of the sound level meter microphone shall be according to the manufacturer's instructions to obtain random incidence.

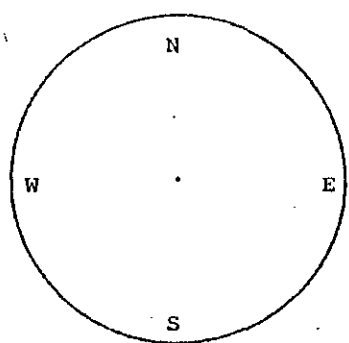
3.5.4 Variations. Allowances are necessary due to unavoidable variations in measurements sites and test equipment. Vehicles are not considered in violation unless they exceed the regulated limit by 2 dBA or more.

3.6 Vehicle Test Procedures

The moving vehicle test can be made after the following steps are accomplished.

- a) The test site is selected and correction factors are determined as defined in Section 3.2.
- b) The necessary measuring precautions are taken as described in Section 3.3.
- c) The test equipment is setup as described in Section 3.4.

A form to record all pertinent information and data is presented in Figure 3-9. This form, NPCCS-25, or any other Department approved form for this use shall be used for the moving vehicle noise tests.

MOVING VEHICLE NOISE TEST					NOISE POLLUTION DIVISION			DATE		
					DEPARTMENT OF ENVIRONMENTAL QUALITY					
YEAR		VEHICLE MAKE		VEHICLE TYPE			LICENSE NO.		MODEL	
REGISTERED OWNER				ADDRESS						
DRIVER			D.L. NO.		ADDRESS					
ENGINE TYPE			HP	ENGINE DISPLACEMENT			LOCATION		VEHICLE MILEAGE	
EXHAUST OUTLET		CHECK POSITION AND SIZE OF OUTLET			RESONATORS		MUFFLER TYPE	TIRE SIZE	GEAR RATIOS	
<input type="checkbox"/> Single <input type="checkbox"/> L. Side <input type="checkbox"/> Rear <input type="checkbox"/> Dual <input type="checkbox"/> R. Side <input type="checkbox"/> Vertical		<input type="checkbox"/> Straight <input type="checkbox"/> 45° to rear <input type="checkbox"/> 45° to side <input type="checkbox"/> ___ dia.			<input type="checkbox"/> Single <input type="checkbox"/> Dual			___ x ___	Diff. ___ : ___ Spkt. ___ : ___ (No. of Teeth)	
RECORDER MODEL AND DEQ NO.				METER MODEL AND DEQ NO.				CALIBRATOR AND DEQ NO.		
TEST DRIVER			TEST ENGINEER			METER CHECK				
						<input type="checkbox"/> BAT. <input type="checkbox"/> WINDSCREEN <input type="checkbox"/> "A" SCALE <input type="checkbox"/> FAST <input type="checkbox"/> CALIB.				
OPERATING CONDITIONS		TIME	dB(A)	CORRECTIONS			EST. MPH	TEST CONDITIONS		
				Distance	Reflect	Correct				
				+	-	dB(A)	WEATHER CONDITION TEMP. %RH WIND VEL.			
							Indicate by proper symbols the direction of the wind, vehicle path, and microphone location.			
							<div style="text-align: center;">  </div> <p>Key: Wind Direction --- → Vehicle Path --- → Microphone Location □</p>			

INSTRUMENTATION SET UP AT 50 FT. FROM CENTERLINE OF TRAVEL.

NPCS-25

Figure 3-9
Moving Motor Vehicle Test

-20-

CHAPTER 4

NEW VEHICLE SOUND LEVEL MEASUREMENT

4.1 Scope. This Chapter establishes procedures for setting up and calibrating sound measuring equipment and conducting tests to determine vehicle sound level output.

OAR 340-35-025 requires all new motor vehicles offered for sale be certified as meeting noise emission limits specified in Table 1. Standards are established for new motorcycles, snowmobiles, automobiles, trucks, buses and motorboats. Emission test procedures for each of these categories are described in this chapter. In lieu of the procedures of this chapter, the following procedures adopted by the Society of Automotive Engineers (SAE) have also been approved:

<u>Motorcycles</u>	<u>SAE J331a*</u>
<u>Snowmobiles</u>	<u>SAE J192a</u>
<u>Autos & Light Trucks</u>	<u>SAE J986NOV 81</u>
<u>Trucks and Buses</u>	<u>SAE J366b**</u>
<u>Motorboats</u>	<u>SAE J34***</u>

* Motorcycles manufactured after December 31, 1982 shall be tested in accordance with procedures set forth in Part 205 Subpart D of Title 40 of the Code of Federal Regulations.

** Medium and heavy trucks having a GVWR in excess of 10,000 pounds and manufactured after January 1, 1978 shall be tested in accordance with procedures set forth in Part 205 Subpart B of Title 40 of the Code of Federal Regulations.

*** If SAE J34a procedure is used, the resulting emission levels shall be increased by 4.3 dBA to account for the increased distance from the motorboat to the microphone.

4.2 Test Area and Personnel.

4.2.1 Test Area. Generally, the test area shall be a flat open space free of large upright sound reflecting surfaces, such as parked vehicles, signboards, building, or hillsides, located within 100 feet radius of the microphone as shown in Figure 4-1. Detailed test area layouts are provided in Section 4.5 for specific vehicle categories.

4.2.2 Surface Condition. The surface of the ground within the measuring site for road vehicles shall be smooth asphalt or concrete free of snow, soil or ashes in at least the triangular area formed by the microphone location and points on the vehicle path 50 feet before and beyond the microphone point. The ground surface in the above area for snowmobiles shall be live

vegetation (grass) no more than four inches in height.
Motorboats shall be tested on a calm water surface.

- 4.2.3 Roadway Surface. The surface of the vehicle path shall be dry, smooth asphalt or concrete pavement free of extraneous material, except that the pathway for snowmobiles shall be covered with live vegetation (grass) no more than four inches in height or a maximum of three inches of loose snow over a base of at least two inches of compacted snow.

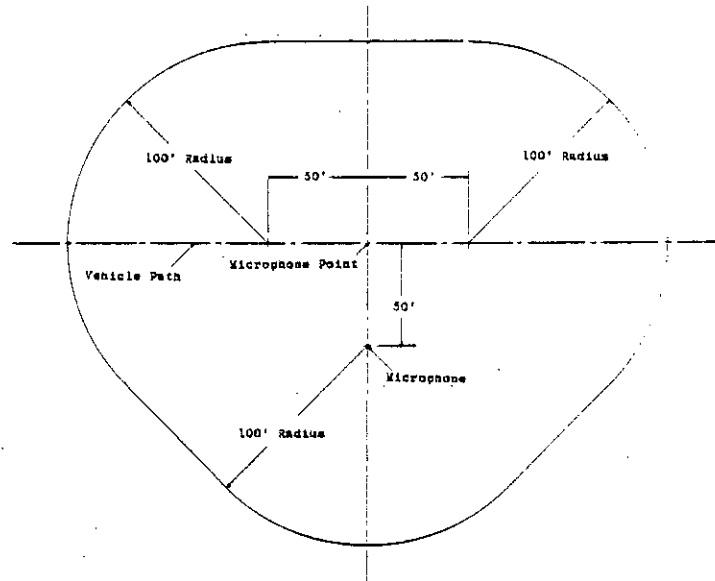


Fig. 4-1. New Vehicle Test Area Layout

- 4.2.4 Wind. Do not conduct sound measurements when wind velocity at the test area exceeds ten miles per hour.
- 4.2.5 Personnel Location. Exercise care to prevent interference with sound level measurements caused by personnel in the measuring area.
- Bystander Location. Bystanders shall remain at least fifty feet from the microphone and the vehicle being measured during sound level measurements.
 - Technician Location. The technician making direct readings from the sound level meter with microphone attached shall stand with the instrument positioned in accordance with the manufacturer's instructions.

- 4.3 Equipment Setup and Use.
- 4.3.1 General. All types of sound level meters shall be field calibrated immediately prior to use using the procedures described in the factory instruction manual.
- 4.3.2 Battery Check. Batteries in both the meter and calibrator shall be checked before calibration.
- 4.3.3 Instrument Calibration. The instrument shall be set to the correct level range, weighting scale, and meter response. The calibrator shall be placed on the microphone of the meter. The output indicated on the meter shall then be adjusted to the correct calibration level.
- 4.3.4 Microphone Location. Attach the microphone or sound level meter to the tripod, extending the tripod legs so that the microphone, when aimed at the microphone point, will be at a height of $4 \pm 1/2$ ft. above the plane of the roadway or water surface. Position the tripod so the microphone is at a distance of 50 ± 1 ft. from the center of the lane of travel.

COMMENT: Connect extension cable between the instruments. Secure the cable to the foot of the tripod leg nearest the recorder location. This will help prevent the tripod from being pulled over by an accidental tug on the cable.

- 4.3.5 Windscreens. Windscreens made of open cell polyurethane foam furnished by the instrument manufacturer shall be placed over the microphone after calibration.

COMMENT: The windscreen reduces the effect of wind noise and protects the microphone diaphragm from dust or other airborne matter.

- 4.3.6 Annual Calibration. Within one year prior to use, each set of sound measuring instruments, sound level meter including octave band filter, and calibrator, shall receive a laboratory calibration in accordance to the manufacturer's specifications. This calibration shall be traceable to the National Bureau of Standards.

COMMENT: An inspection label will be attached to each instrument set to determine when the calibration was performed.

4.4 Sound Level Measurement

- 4.4.1 Preliminary Steps. The following steps shall be followed before taking a measurement.

a) Turn meter on.

- b) Switch meter to "A" weighting scale.
 - c) Switch meter to "FAST" response.
 - d) Set the meter to the appropriate range to measure the anticipated sound level.
- 4.4.2 Mounting. The sound level meter shall be placed on a tripod according to the manufacturer's instructions.
- 4.4.3 Orientation. The orientation of the sound level meter microphone shall be according to the manufacturer's instructions (to obtain random incidence).
- 4.4.4 Variations. Allowances are necessary due to unavoidable variations in measurement sites and test equipment. Vehicles are not considered in violation unless they exceed the regulated limit by 2 dBA or more.
- 4.4.5 Weather Measurement. Record wind velocity and direction with a wind gauge, and temperature and relative humidity with a sling psychrometer or other Department approved instruments.
- 4.4.6 Data Recording. Record all required vehicle data, type of test equipment, and weather information on the New Vehicle Test Form, (NPCS-26), as shown in Figure 4-2 or any other form approved in writing by the Department.
- 4.5 New Vehicle Test Procedure
- 4.5.1 Vehicle Sound Level. The sound levels for new motor vehicles shall be determined by tests performed according to procedures established for each particular class of vehicle.
- 4.5.2 Definitions. For the purpose of these procedures, the following terms have the meanings indicated:
- a. Maximum RPM. "Maximum rpm" means the maximum governed engine speed, or if uncontrolled, the rpm at maximum engine horsepower as determined by the engine manufacturer in accordance with the procedures in Society of Automotive Engineers Standard, Engine Rating Code - Spark Ignition - SAE J245, April 1971, or Engine Rating Code Diesel - SAE J270, September, 1971.
 - b. Microphone Point. "Microphone point" means the unmarked location on the center of the lane of travel that is closest to the microphone.
 - c. Vehicle Reference Point. "Vehicle reference point" means the location of the vehicle used to determine when the vehicle is at any of the points on the vehicle path. The primary vehicle reference point is the front of the vehicle.

NEW VEHICLE NOISE TEST

DEPARTMENT OF ENVIRONMENTAL QUALITY

YEAR	VEHICLE MAKE	VEHICLE TYPE	LICENSE NO.	MODEL
REGISTERED OWNER		ADDRESS		
DRIVER		D.L. NO.	ADDRESS	
ENGINE TYPE		HP	ENGINE DISPLACEMENT	LOCATION
VEHICLE MILEAGE				
EXHAUST OUTLET <input type="checkbox"/> Single <input type="checkbox"/> L. Side <input type="checkbox"/> Rear <input type="checkbox"/> Dual <input type="checkbox"/> R. Side <input type="checkbox"/> Vertical		CHECK POSITION AND SIZE OF OUTLET <input type="checkbox"/> Straight <input type="checkbox"/> 45° to rear <input type="checkbox"/> 45° to side <input type="checkbox"/> ___ dia.		RESONATORS <input type="checkbox"/> Single <input type="checkbox"/> Dual
		MUFFLER TYPE	TIRE SIZE _____ x _____	GEAR RATIOS Diff. _____ : _____ Spkt. _____ : _____ (No. of Teeth)
RECORDER MODEL AND DEQ NO.		METER MODEL AND DEQ NO.	VEHICLE SUPPLIED BY	CALIBRATOR AND DEQ NO.
TEST DRIVER		TEST ENGINEER	METER CHECK <input type="checkbox"/> BAT. <input type="checkbox"/> WINDSCREEN <input type="checkbox"/> "A" SCALE <input type="checkbox"/> FAST <input type="checkbox"/> CALIB.	
OPERATING CONDITIONS	TIME	DBA READINGS L.S. R.S.		MAXIMUM RPM MPH
TEST CONDITIONS				
WEATHER CONDITION		TEMP.	%RH	WIND VEL.
Indicate by proper symbols the direction of the wind, vehicle path, and microphone location.				

INSTRUMENTATION SET UP AT 50 FT. FROM CENTERLINE OF TRAVEL.

NPCS-2/6

Figure 4-2
New Vehicle Test

4.5.3 Operation

- a. Preliminary Runs. Sufficient preliminary runs shall be made to enable the test driver to become familiar with the operation of the vehicle and to stabilize engine operating conditions.
- b. Test Runs. At least four test runs shall be made for each side of the vehicle.
- c. Reported Noise Level. The reported sound level for each side of the vehicle shall be on the average of the two highest readings on that side which are within 2 dBA of each other. The sound level reported for the vehicle shall be the sound level of the loudest side.
- d. Visual Reading and Recording. Visual readings shall be taken from the sound level meter during preliminary test runs and recorded. The readings from the sound level meter shall be compared with those of the recorder and there shall be no more than ± 0.5 dBA variation between the readings. When the variation is greater, the equipment shall be checked and recalibrated. If the variation still exists, the test shall be conducted using only direct readings from the sound level meter.

4.5.4 Motorcycles. Motorcycles shall be tested as follows:

- a. Vehicle Path. The test area shall include a vehicle path of sufficient length for safe acceleration, deceleration, and stopping of the vehicle.
- b. Test Area Layout. The following points and zones shown in Figure 4-3 where only one directional approach is illustrated for purposes of clarity, shall be established on the vehicle path so that measurements can be made on both sides of the vehicle:
 1. Microphone point.
 2. Acceleration point - a location 25 feet before the microphone point.
 3. End point - a location 100 feet beyond the microphone point.
 4. End zone - the last 75-foot distance between the microphone point and the end point.

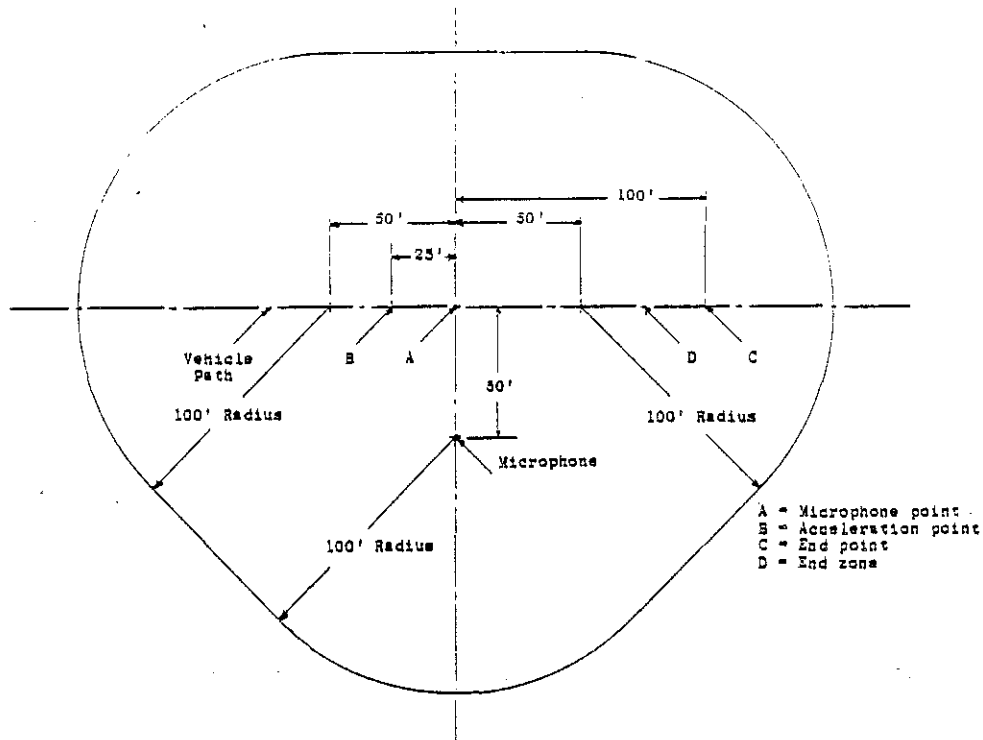


Fig. 4-3. Test Area Layout for Motorcycles

c. Test Procedures. Vehicles shall be tested according to the following procedures:

1. Gear Selection. Motorcycles shall be operated in second gear. Vehicles which reach maximum rpm at less than 30 mph or before a point of 25 feet beyond the microphone point shall be operated in the next higher gear.

If the motorcycle has an automatic transmission or torque converter, then gear selection shall follow the following procedure:

If the gear range is selectable, employ the lowest range. If the vehicle reaches maximum rpm at less than 30 mph or before a point 25 feet beyond the microphone point (see Figure 4-3), use the next higher range. If maximum rpm is reached before a point 25 feet beyond the microphone point when the vehicle is in the highest gear range, then the throttle shall be opened less rapidly, but in such a manner that full throttle and maximum rpm are attained while within the end zone.

If the gear range is not selectable, then the throttle shall be opened less rapidly, but in such a manner that full throttle and maximum rpm are attained while within the end zone.

2. Acceleration. The vehicle shall proceed along the test path at a constant approach speed which corresponds either to an engine speed of 60 percent of maximum rpm or to 30 mph, whichever is lower. When the vehicle reference point reaches the acceleration point, the throttle shall be rapidly and fully opened. The throttle shall be held open until the vehicle reference point reaches the end point or until the maximum rpm is reached within the end zone, at which point the throttle shall be closed. Wheel slip shall be avoided.
3. Deceleration. Tests during deceleration shall be conducted when deceleration noise appears excessive. The vehicle shall proceed along the vehicle path at maximum rpm in the same gear selected for the tests during acceleration. When the reference point on the vehicle reaches the acceleration point, the throttle shall be rapidly closed and the vehicle shall be allowed to decelerate to less than 1/2 of maximum rpm.
4. Engine Temperature. The engine temperature shall be within normal operating range before each test run.
5. Test Weight. The total weight of test driver and test instrumentation shall be 165 lbs. For small drivers, additional weights shall be used to bring the total to 165 lbs.
6. 1983 and Subsequent Models. These models shall be tested in accordance with U.S. EPA procedures. See paragraph 4.1 of this Chapter.

4.5.5 Snowmobiles. Snowmobiles shall be tested as follows:

- a. Vehicle Path. The test area shall include a vehicle path of sufficient length for safe acceleration, deceleration, and stopping of the vehicle.
- b. Test Area Layout. The following points and zones shown in Figure 4-3, where only one directional approach is illustrated for the purposes of clarity, shall be established on the vehicle path so that measurements can be made on both sides of the vehicle.
 1. Microphone point.
 2. End point - a location 50 feet beyond the microphone point.
 3. Acceleration point - a location on the vehicle path established as follows: Position the vehicle headed

away from the microphone point with the vehicle reference point at 25 feet from the microphone point. From a standing start with transmission in low gear, rapidly apply wide-open throttle, accelerating until maximum rpm is attained. The location on the vehicle path where maximum rpm was attained is the acceleration point for test run in the opposite direction.

4. Maximum rpm zone.

- c. Test Procedures. From a standing start, with transmission in low gear and the vehicle reference point positioned at the acceleration point, the throttle shall be rapidly and fully opened and held through the maximum rpm zone until the reference point on the vehicle reaches the end point after which the throttle shall be closed.

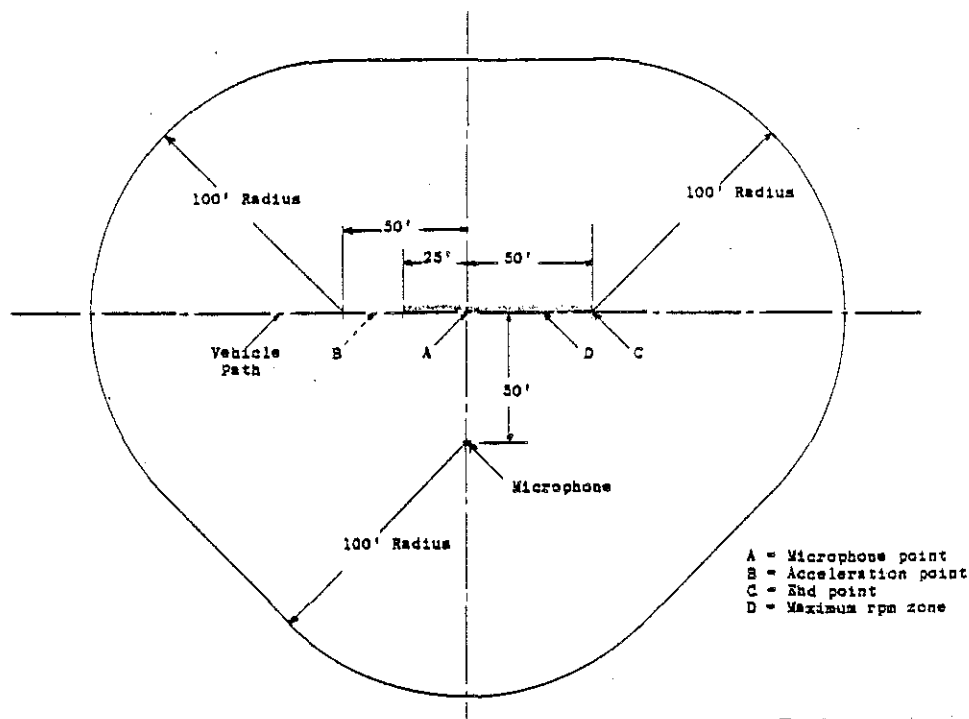


Fig 4-4. Test Area Layout for Snowmobiles

4.5.6 Heavy Trucks, Truck Tractors, and Buses. The test procedure for vehicles with a manufacturer's gross vehicle weight rating of 10,000 lbs or more shall be as follows:

- (1) Test Area Layout. The test area shall include a vehicle path of sufficient length for safe acceleration, deceleration, and stopping of the vehicle. The following points and zones shall be established on the vehicle path

as shown in Figure 4-5, where only one directional approach is illustrated for purposes of clarity.

- (A) Microphone point.
- (B) Acceleration point - a location 50 ft before the microphone point.
- (C) End point - a location 50 ft beyond the microphone point.
- (D) End zone - the last 40-ft distance between the microphone point and the end point.

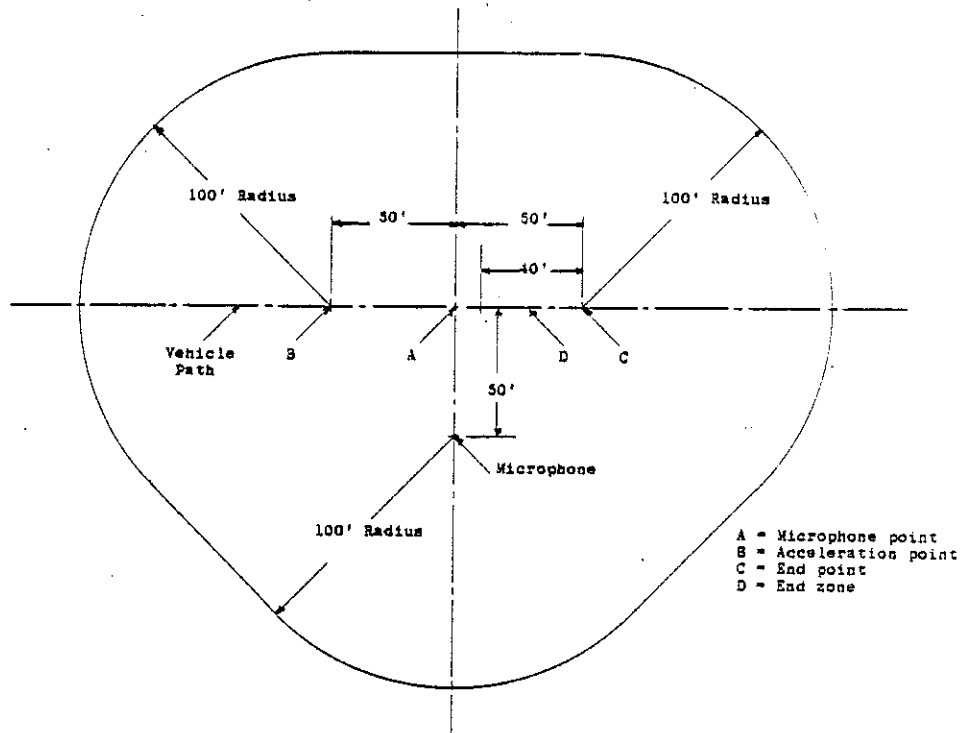


Figure 4-5. Test Area Layout for Trucks.

- (2) Gear Selection. A gear shall be selected (manual or automatic transmission) which will result in the vehicle beginning at an approach rpm of no more than 2/3 maximum rpm at the acceleration point and reaching maximum rpm within the end zone without exceeding 35 mph.
 - (A) When maximum rpm is attained before reaching the end zone, the next higher gear shall be selected, up to the gear where maximum rpm produces over 35 mph.
 - (B) When maximum rpm still occurs before reaching the end zone, the approach rpm shall be decreased in 100 rpm

increments until maximum rpm is attained within the end zone.

- (C) When maximum rpm is not attained until beyond the end zone, the next lower gear shall be selected until maximum rpm is attained within the end zone.
 - (D) When the lowest gear still results in reaching maximum rpm beyond the end zone, the approach rpm shall be increased in 100 rpm increments above 2/3 maximum rpm until the maximum rpm is reached within the end zone.
- (3) Acceleration. The vehicle shall proceed along the vehicle path maintaining the approach engine rpm in the gear selected for at least 50 ft before reaching the acceleration point. When the vehicle reference point reaches the acceleration point, the throttle shall be rapidly and fully opened and held open until maximum rpm is attained within the end zone, at which point the throttle shall be closed.
- (4) Deceleration. Tests during deceleration shall be conducted when deceleration noise appears excessive. The vehicle shall proceed along the vehicle path at maximum rpm in the same gear selected for the tests during acceleration. When the vehicle reference point reaches the microphone point, the throttle shall be rapidly closed and the vehicle allowed to decelerate to less than 1/2 maximum rpm. Vehicles equipped with exhaust brakes shall also be tested with the brake full on immediately following closing of the throttle.
- (5) Engine Temperature. The engine temperature shall be within normal operating range throughout each test run.
- (6) Demand-Activated Fans. If the test vehicle contains a demand-activated fan, the fan may be in the "off" position during the test.
- (7) 1978 and Subsequent Model Trucks. These models shall be tested in accordance with U.S. EPA procedures. See paragraph 4.1 of this Chapter.

4.5.7

Automobiles, Light Trucks, Truck Tractors, Buses, and All Other Vehicles. The test procedure for trucks, truck tractors, and buses with a manufacturer's gross vehicle weight rating of less than 10,000 lbs and all passenger cars shall be as follows:

- (1) Test Area Layout. The test area shall include a vehicle path of sufficient length for safe acceleration, deceleration, and stopping of the vehicle. The following

points and zones shall be established on the vehicle path as shown in Figure 4-6, where only one directional approach is illustrated for purposes of clarity:

- (A) Microphone point.
- (B) Acceleration point - a location 25 ft before the microphone point.
- (C) End point - a location 100 ft beyond the microphone point.
- (D) End zone - the last 75-ft distance between the microphone point and the end point.

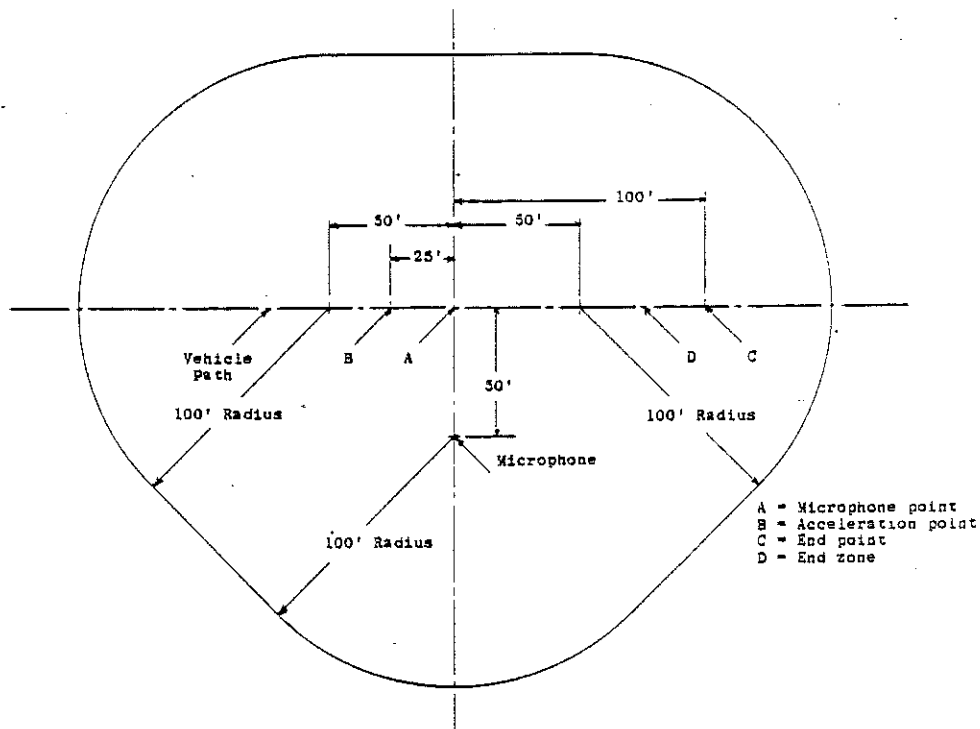


Figure 4-6. Test Area Layout for Passenger Cars

- (2) Gear Selection. Motor vehicles equipped with three-speed manual transmissions and with automatic transmissions shall be operated in first gear. Vehicles equipped with manual transmissions of four or more speeds shall be operated in first gear and in second gear. Vehicles which reach maximum rpm at less than 30 mph or before reaching the end zone shall be operated in the next higher gear. Auxiliary step-up ratios (overdrive) shall not be engaged on vehicles so equipped.

- (3) Acceleration. The vehicle shall proceed along the vehicle path at a constant speed of 30 mph in the selected gear for at least 50 ft before reaching the acceleration point. When the vehicle reference point reaches the acceleration point, the throttle shall be rapidly and fully opened. The throttle shall be held open until the vehicle reference point reaches the end point or until maximum rpm is reached within the end zone. At maximum rpm, the throttle shall be closed sufficiently to keep the engine just under maximum rpm until the end point, at which time the throttle shall be closed.
- (4) Deceleration. Tests during deceleration shall be conducted when deceleration noise appears excessive. The vehicle shall proceed along the vehicle path at [maximum rpm in the same gear selected for tests during acceleration] a stabilized engine speed (rpm) the same as the maximum engine speed attained during the acceleration test and in the same gear. This approach speed is rated engine speed, if attained in the acceleration test made, or the average of the terminal engine speed values at the end of the end zone as determined from the acceleration test. When the front of the vehicle [reference point] reached the [microphone] acceleration point, the throttle shall rapidly be closed and the vehicle allowed to decelerate to [less than 1/2 of maximum rpm] one-half the approach speed or until the front of the vehicle reaches the end of the end zone.
- (5) Engine Temperature. The engine temperature shall be within normal operating range throughout each test run. The engine shall be idled in neutral for at least one minute between runs.

4.5.8 Motorboats. The test procedure for motorized water craft (motorboats) shall be as follows:

- (1) Test Area Layout. A suitable test site is a calm body of water, large enough to allow full-speed pass-bys. The area around the microphone and boat shall be free of large obstructions, such as buildings, boats, hills, large piers, breakwater, etc., for a minimum distance of 100 ft. (30 m). Three markers (buoys or posts) will be placed in line, 50 ft. (15 m) apart, to mark the course the boat is to follow while being tested.
- (2) Test Procedure. The boat shall pass all three markers on a straight course at wide-open throttle with the engine operating at the midpoint of the manufacturer's recommended full-throttle rpm range. The engine speed tolerance shall be ± 100 rpm if this falls in the recommended full-throttle

speed range. If a single top speed rpm is recommended, the tolerance shall be +0, -100 rpm.

- (3) Measurements. The microphone shall be placed 50 ft (15 m) from the line determined by the three markers, normal to the line and opposite the center marker. It will also be placed 3 1/2 - 4 1/2 ft (1.1 - 1.4 m) above the water surface, and no closer than 2 ft (0.6 m) from the surface of the dock or platform on which the microphone stands, as near to the end of the dock as possible or overhanging the end of the dock. Measurements shall be taken while the boat is passing no more than three (3) feet (0.9 m) on the far side of all three markers.

CHAPTER 5

AUXILIARY EQUIPMENT SOUND LEVEL MEASUREMENT

- 5.1 Scope. This Chapter establishes procedures for setting up and calibrating sound measuring equipment and conducting tests to determine the sound level output of auxiliary motor vehicle equipment.
- 5.2 Measurement Sites. Measurement sites shall be free of sound-reflecting objects within one-hundred feet of the microphone and one-hundred feet of the vehicle to be tested.
- 5.2.1 Microphone Location. The microphone shall be located fifty feet \pm six inches from the rear or from either side of the equipment to be tested. The locus of points thus defined is the microphone line. (See Figure 5-1) The microphone should be located at the point on the microphone line at which the maximum sound level occurs.
- 5.2.2 Sound-reflecting Surfaces. A "sound-reflecting surface" is any object or landscape surface in the immediate vicinity of a measurement site which reflects sufficient sound to require the application of a correction factor to the sound level meter reading. Surfaces which are not sound-reflecting surfaces are defined in paragraph 5.2.3, and all other surfaces are considered sound-reflecting surfaces.
- 5.2.3 Surfaces Which are not Sound-reflecting. The following surfaces may be present in the test area:
- a. Any surface that measures less than eight feet in length in a direction parallel to the portion of the microphone line on which the microphone is positioned, regardless of height (such as a telephone booth or a tree trunk) or less than one foot in height, regardless of length (such as a curb or guard rail).
 - b. Any vertical surface, regardless of size (such as a billboard with the lower edge more than fifteen feet above the roadway).
 - c. Any uniformly smooth slanting surface with less than a forty-five degree slope above horizontal.
 - d. Any slanting surface with a forty-five to ninety degree slope above the horizontal where the line at which the slope begins to exceed forty-five degrees is more than fifteen feet above the roadway.

e. Any trees, bushes, shrubs, hedges, grass or other vegetation.

5.3 Sound Level Measuring Precaution

5.3.1 Wind. Do not conduct measurements when wind velocity at the test location exceeds ten miles per hour.

5.3.2 Precipitation. Do not conduct measurements when falling precipitation affects results [is falling.] However, measurements may be taken when streets are wet.

5.3.3 Ambient Noise. The ambient sound level shall be at least 10 dBA below the sound level of the equipment being measured.

5.3.4 Recording. The sound level recorded shall be the highest level obtained during each test, disregarding unrelated peaks due to extraneous ambient noises.

5.4 Equipment Setup and Use

5.4.1 Microphone Height. The sound level meter may be hand held or placed on a tripod. The microphone shall be positioned four and one-half feet above the ground.

5.4.2 Windscreens. Windscreens made of open cell polyurethane foam furnished by the instrument manufacturer may be placed over the microphone after calibration. The windscreen reduces the effect of wind noise and protects the microphone diaphragm from dust or other airborne matter.

5.4.3 Sound Level Meter Setup and Use. Procedures for setup, calibration and use of the sound level meter is contained in this section.

- a) General. All types of sound level meters shall be calibrated using the procedures described in the factory instruction manual. All instruments shall be calibrated prior to use. A general discussion of calibration procedures follows.
- b) Battery Check. The state of the battery shall be checked before the calibration of the instrument. Batteries in both the meter and the calibrator shall be checked.
- c) Instrument Calibration. The instrument shall be set to the correct level range, weighting scale and meter response. The calibrator shall be placed on the microphone of the meter. The output indicated on the meter is then adjusted to the correct calibration level using a screwdriver on the adjustment screw.

- d) Annual Calibration. Annually, or when determined to be necessary, each set of sound measuring instruments, sound level meter and calibrator, shall be returned for calibration to the manufacturer's specifications. An inspection label will be attached to each instrument set to determine when the calibration was performed.
- e) Sound Level Measurement
 - 1. The following steps should be followed before taking a measurement
 - (a) Turn the meter on.
 - (b) Switch on the "A" weighting scale.
 - (c) Switch on the "FAST" meter response.
 - (d) Set the meter to the appropriate number to measure the anticipated sound level.
 - 2. The sound level meter should be hand-held or placed on a tripod according to the manufacturer's instructions.
 - 3. The orientation of the microphone should be according to the manufacturer's instructions.
 - 4. Allowances are necessary due to unavoidable variations in measurement sites and test equipment. Equipment is not considered in violation unless it exceeds the regulated limit by 2 dBA or more.

5.5 Equipment Test Procedure

- 5.5.1 Vehicle Sound Level. The sound levels for auxiliary equipment shall be determined by tests performed according to the following procedures.
- 5.5.2 Location. The microphone shall be located on the microphone line at the position where the maximum sound level is expected to occur (See Figure 5-1).
- 5.5.3 Preliminary Tests. Sufficient preliminary tests shall be made to enable the operator to become thoroughly familiar with the equipment.
- 5.5.4 Equipment Operation. The equipment shall be operated at the combination of load and speed which produces the maximum sound level without violating the manufacturer's operation specifications.

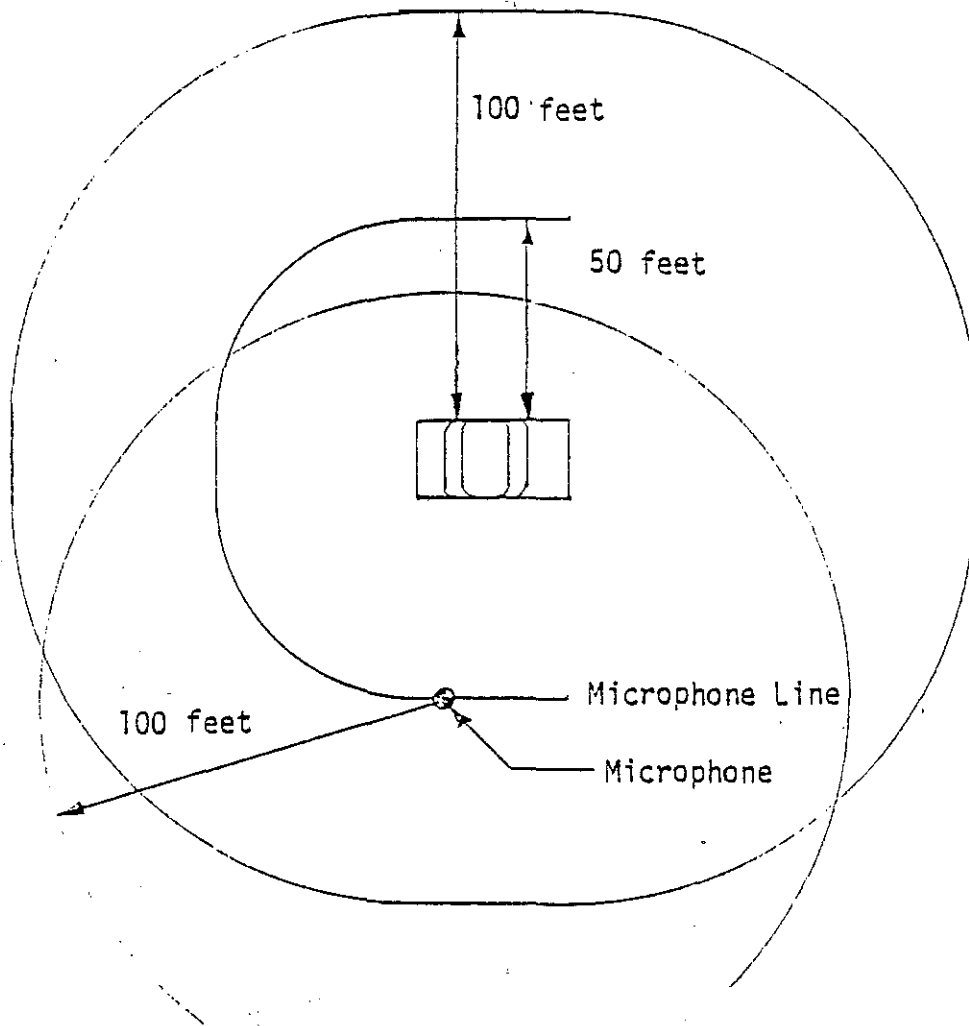


Figure 5-1. Auxiliary Equipment Measurement Site

- 5.5.5 Visual Reading. The highest sound level observed, exclusive of and peaks due to unrelated ambient noise, shall be reported for each test.
- 5.5.6 Reported Sound Level. The reported sound level for the vehicle shall be the highest reading which is no more than one dB higher than the next highest reading.
- 5.5.7 Auxiliary Equipment Test Form. A form to record all pertinent information and data is presented in Figure 5-2. This form, or any other Department approved form for this use, shall be used for auxiliary equipment tests.

AUXILIARY EQUIPMENT NOISE TEST

NOISE POLLUTION DIVISION
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE

YEAR	EQUIPMENT MAKE	EQUIPMENT TYPE	LICENSE NO.	MODEL
------	----------------	----------------	-------------	-------

REGISTERED OWNER	ADDRESS
------------------	---------

DRIVER	D.I. NO.	ADDRESS
--------	----------	---------

ENGINE TYPE	Primary Secondary	HP	ENGINE DISPLACEMENT	LOCATION	EQUIP. MILEAGE/HRS.
-------------	----------------------	----	---------------------	----------	---------------------

EXHAUST OUTLET	CHECK POSITION AND SIZE OF OUTLET	RESONATORS	MUFFLER TYPE
<input type="checkbox"/> Single <input type="checkbox"/> L. Side <input type="checkbox"/> Rear <input type="checkbox"/> Dual <input type="checkbox"/> R. Side <input type="checkbox"/> Vertical	<input type="checkbox"/> Straight <input type="checkbox"/> 45° to rear <input type="checkbox"/> 45° to Side <input type="checkbox"/> ___ dia	<input type="checkbox"/> Single <input type="checkbox"/> Dual	

RECORDER MODEL AND DEQ NO.	METER MODEL AND DEQ NO.	CALIBRATOR AND DEQ NO.
----------------------------	-------------------------	------------------------

TEST DRIVER	TEST ENGINEER	METER CHECK
		<input type="checkbox"/> BAT. <input type="checkbox"/> WINDSCREEN <input type="checkbox"/> "A" SCALE <input type="checkbox"/> FAST <input type="checkbox"/> CALIB.

OPERATING CONDITIONS	Time	READINGS			TEST CONDITIONS			
		dBA	LOCATION NUMBER	MAX. RPM	WEATHER CONDITION	TEMP.	%R.H.	WIND SPEED
					Sketch in this space the measurement site peculiarities, and using the proper symbols indicate the direction of wind, vehicle orientation and reading locations.			

Key: WIND DIRECTION - - - - ->
 VEHICLE <- - - ->
 MICROPHONE LOCATION NO. <->

INSTRUMENTATION SET UP AT 50 FT FROM EDGE OF VEHICLE

NPCS-27

-40-

Figure 5-2
Auxiliary Equipment Noise Test

CHAPTER 6

NEAR FIELD STATIONARY MOTOR VEHICLE

SOUND LEVEL MEASUREMENTS

20 Inches (1/2 Meter)

- 6.1 Scope. This chapter establishes procedures for setting up and calibrating sound measuring equipment and conducting tests to determine the sound level output of a stationary vehicle as measured 20 inches (.5 meter) from the exhaust exit. This procedure allows testing indoors and at sites limited in open space.

These procedures are used to conduct emission tests on automobiles, light trucks under 8,000 pounds GVWR, motorcycles and motorboats containing atmosphere terminating exhaust systems. Standards for these vehicles are found in Tables 2 and 4 of OAR 340-35-030.

- 6.2 Initial Inspection.

- 6.2.1 Subjective Evaluation. Before a vehicle is tested according to the near field procedures, a subjective evaluation of the vehicle noise shall be made by experienced personnel to determine if an objective test is necessary. The subjective test, using the human ear as a sensing device, shall be conducted at engine idle and during rapid partial throttle opening in neutral gear. The inspector shall stand on the exhaust exit side and near the rear of the vehicle during this evaluation. The exhaust noise shall not be discernably louder than the engine noise and they shall blend together to be acceptable.

- 6.2.2 Visual Inspection. If a vehicle is found to be subjectively loud, a visual inspection of the exhaust system shall be conducted. This inspection should include the entire system from the engine to the outlet pipe.

COMMENT: Under Oregon Administrative Rules Chapter 340 Section 35-030 the following defects are a violation:

- a) No muffler
- b) Leaks in the exhaust system
- c) A pinched outlet pipe

- 6.2.3 Near Field Test. If the subjective evaluation warrants further inspection and the visual check does not disclose a violation, then the vehicle shall be subjected to the near field noise test as described in Section 6.5. This test uses a sound level meter to measure the noise level of the vehicle under controlled test conditions.
- 6.3 Measurement Sites.
- 6.3.1 Vehicle Location. The vehicle must rest on the open water, ground or pavement, the shop floor, or on a dynamometer. It should not be on a hoist, rack, or over a pit. Shop doors should be open to avoid excessively high readings and reflective surfaces should be as far as possible from the sound level meter.
- 6.3.2 Bystanders. Bystanders should not stand within 10 feet (3 meters) of the microphone or vehicle during noise tests, except for operating personnel.
- 6.3.3 Wind. Do not conduct noise measurements when wind velocity at the test location exceeds 20 miles per hour (32 km/hr).
- 6.3.4 Precipitation. Do not conduct noise measurements if precipitation is falling, unless the microphone and instruments are protected from moisture and results are not affected.
- Warning: Do not let any moisture on microphone. This will cause damage. Do not attempt to clean microphone.
- 6.3.5 Ambient Noise. The ambient noise levels shall be at least 10 dBA below the sound level of the vehicle being tested.
- 6.4 Equipment Setup and Use.
- 6.4.1 Meter Specifications. The specifications for sound level meters are defined in Noise Pollution Control Section manual NPC-2 Requirements for Sound Measuring Instruments and Personnel. The minimum meter required is a Type II as defined by American National Standards Institute number S1.4-1971.
- 6.4.2 Battery. A battery check shall be conducted on the Meter and Calibrator before each calibration.
- 6.4.3 Calibration. The sound level meter shall be field calibrated immediately prior to use following procedures described by the manufacturer's instruction manual. Meters should be calibrated at least at the beginning and end of each business day and at intervals not exceeding 2 hours when the instrument is used for more than a 2-hour period.

COMMENT: If the instrument is damaged or in need of service, contact the Noise Pollution Control office or Motor Vehicles office.

- 6.4.4 Annual Calibration. Within one year prior to use, each set of sound level meters shall receive a laboratory calibration in accordance with the manufacturer's specifications. This calibration shall be traceable to the National Bureau of Standards.
- 6.4.5 Windscreens. Windscreens of open cell polyurethane foam furnished by the manufacturer shall be placed over the microphone after calibration. This will protect it from dust or other airborne matter.

Warning: Do not let exhaust gases impinge on microphone.

- 6.4.6 Meter Setting. The meter shall be set on the "A" scale and used in the slow response mode.
- 6.4.7 Tachometer. A calibrated engine tachometer shall be used to determine when the test RPM is attained. Tachometers shall have the following characteristic:

Steady state accuracy of $\pm 2\%$ of full scale.

The tachometer shall be calibrated at least once a year in accordance with manufacturer's calibration procedures.

6.5 Sound Level Measurements.

6.5.1 Preliminary Steps:

- a) Field calibration.
- b) Windscreen on.
- c) Set meter to the appropriate range to measure the anticipated sound level.
- d) Switch to "A" weighting scale and slow response mode.
- e) Turn meter on.

6.5.2 Mounting. The sound level meter shall be hand-held or placed on a tripod according to the manufacturer's instructions.

6.5.3 Orientation. The orientation of the sound level meter microphone shall be according to the manufacturer's instructions.

COMMENT: Generally, the operating personnel will be to one side. The "General Radio" 1565B Sound Level Meter shall be oriented such that the microphone points aft and the sound path will "graze" the surface of the microphone (See Figure 6.1 and 6.2).

6.5.4 Microphone Position. The microphone for the sound level meter shall be at the same height as the center of the exhaust outlet but no closer to the surface than 8 in. (203 mm). The microphone shall be positioned with its longitudinal axis parallel to the ground, 20 in. (508 mm) from the edge of the exhaust outlet, and 45 ± 10 deg. from the axis of the outlet (Figure 6.1 & 6.2). For exhaust outlets located inboard from the vehicle body, the microphone shall be located at the specified angle and at least 8 in. (203 mm) from the nearest part of the vehicle.

For motorcycles with more than one outlet per side, the measurement shall be made at the rearmost outlet.

Note: If a measuring device is attached to the exhaust outlet and the meter to maintain proper distance, ensure no vibrations from the vehicle are transmitted to the instrument.

6.5.5 Vehicle Operation. Vehicles tested to determine exhaust system sound levels shall be operated as follows:

a) Automobiles and Light Trucks and other Automotive Powered Vehicles. The engine shall be operated at normal operating temperatures with transmission in park or neutral. Sound level measurements shall be made at $3/4$ (75%) of the RPM for rated horsepower ± 100 RPM of meter reading.

COMMENT: Tables of the 75% RPM (test RPM) versus the engines are given in the Near Field Motor Vehicle Test RPM Tables, NPC-31.

b) Motorcycles. The rider shall sit astride the motorcycle in a normal riding position with both feet on the ground. The engine shall be operated at normal operating temperatures with the transmission in neutral. If no neutral is provided, the motorcycle shall be operated either with the rear wheel 5-10 cm (2-4 in) clear of the ground, or with the drive chain or belt removed. The sound level measurement shall be made with the engine speed stabilized at one of the following values:

(A) If the motorcycle engine data is available, test the motorcycle at $1/2$ (50%) of the RPM for maximum rated horsepower ± 100 RPM.

(B) If the engine data is not available and if the motorcycle has a tachometer indicating the manufacturer's recommended maximum engine speed ("Red Line"), test the motorcycle at 45% of the "Red Line" RPM ± 100 RPM.

Note: Motorcycle tachometers generally show a red area at the upper part of the scale. The "Red Line RPM" is the lowest value within the red area.

(C) If the engine data and red line RPM are not available, test the motorcycle at:

- (i) 3500 RPM \pm 100 RPM for motorcycles with total cylinder displacement between 0-950 cc (0-58 in³)
- (ii) 2800 RPM \pm 100 RPM for motorcycles with total cylinder displacement greater than 950 cc (58 in³)

c) Trucks and Buses. To be determined.

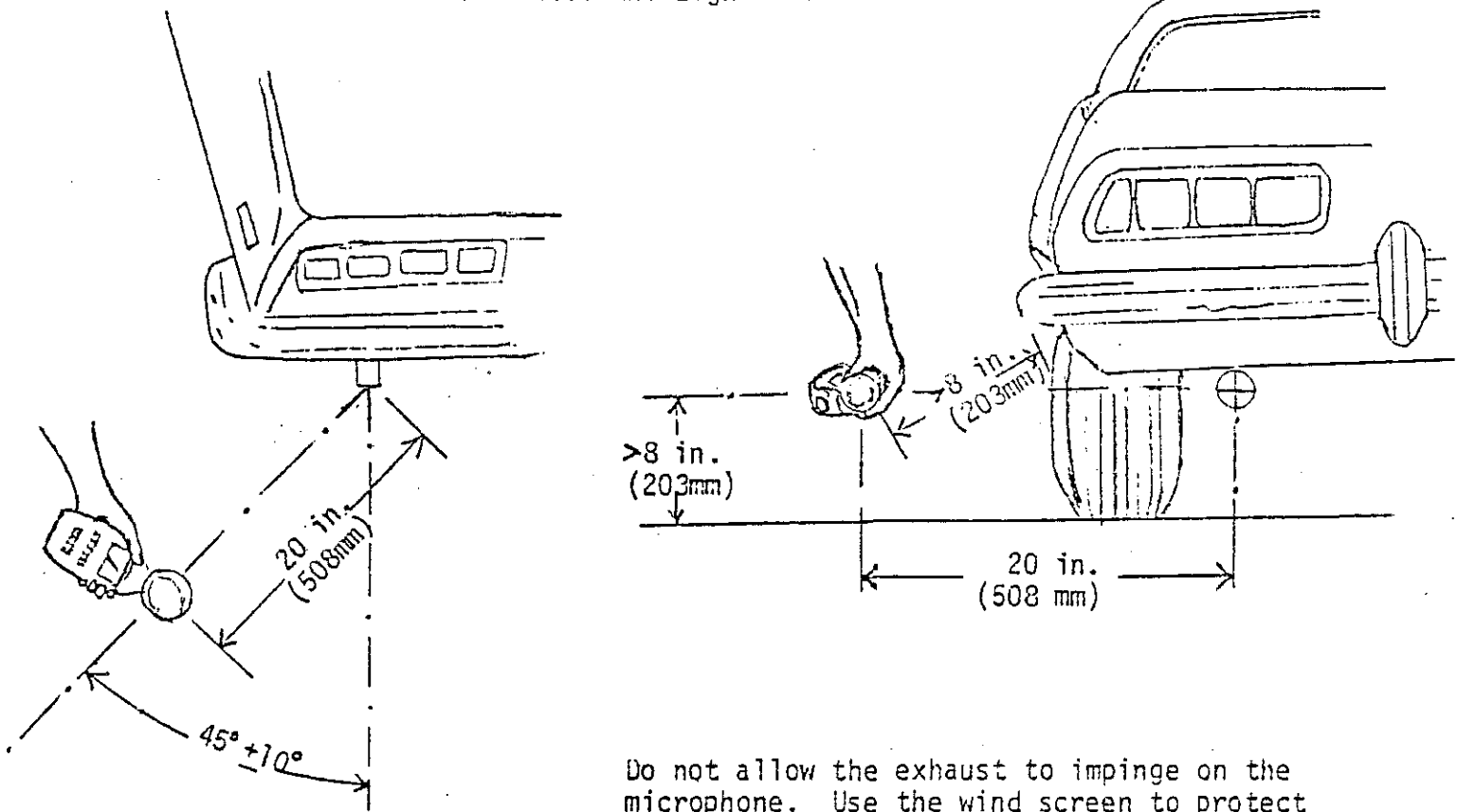
6.5.6 Reported Sound Levels. The reported exhaust system sound level reading shall be the highest reading obtained during the test, exclusive of peaks due to unrelated ambient noise or extraneous impulsive type noise obtained during the acceleration or deceleration portion of the test. When there is more than one exhaust outlet, the reported sound level shall be for the loudest outlet.

COMMENT: The purpose of this test is to measure exhaust noise, so there should not be any other noises within 10 dBA below the exhaust noise (See Ambient Noise).

6.5.7 Variations. Allowances are necessary due to unavoidable variations in measurement sites and test equipment. Vehicles are not considered in violation unless they exceed the regulated limit by the value shown in the following table or more.

Sound Level Meter Type	Allowable Exceedance
ANSI Type 1	1 dBA
ANSI Type 2	2 dBA

Figure 6.1
Microphone Placement for
Automobiles and Light Trucks



Do not allow the exhaust to impinge on the microphone. Use the wind screen to protect the microphone.

For dual exhausts, measure both and record the higher of the two readings.

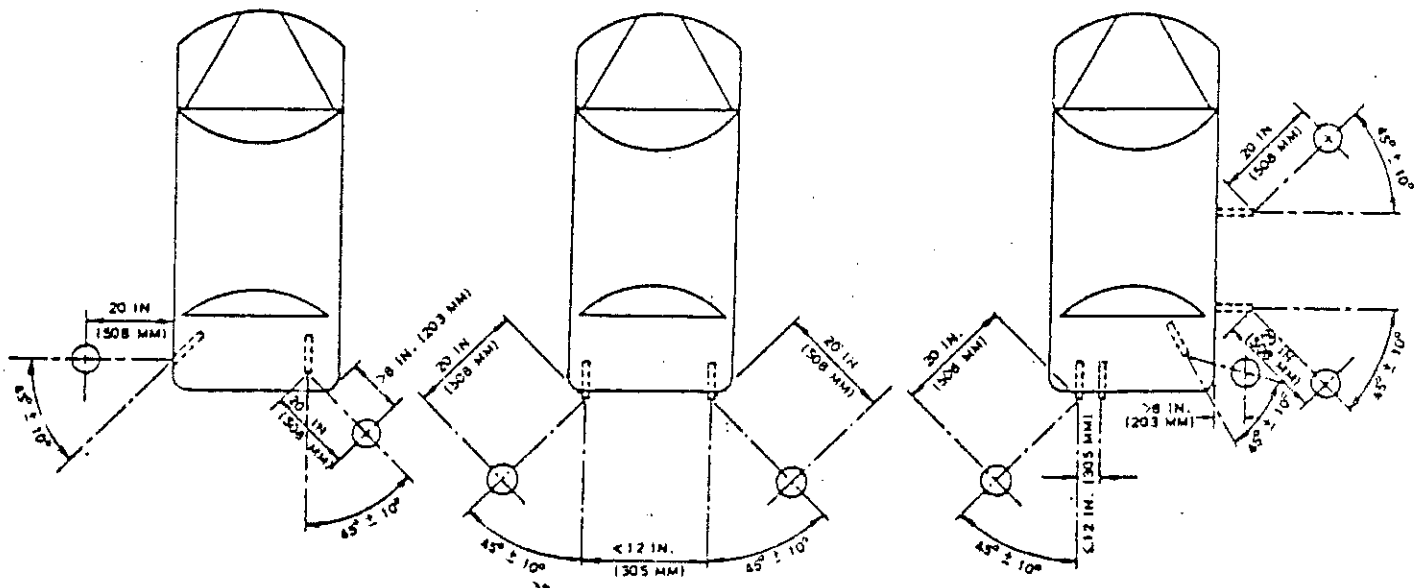
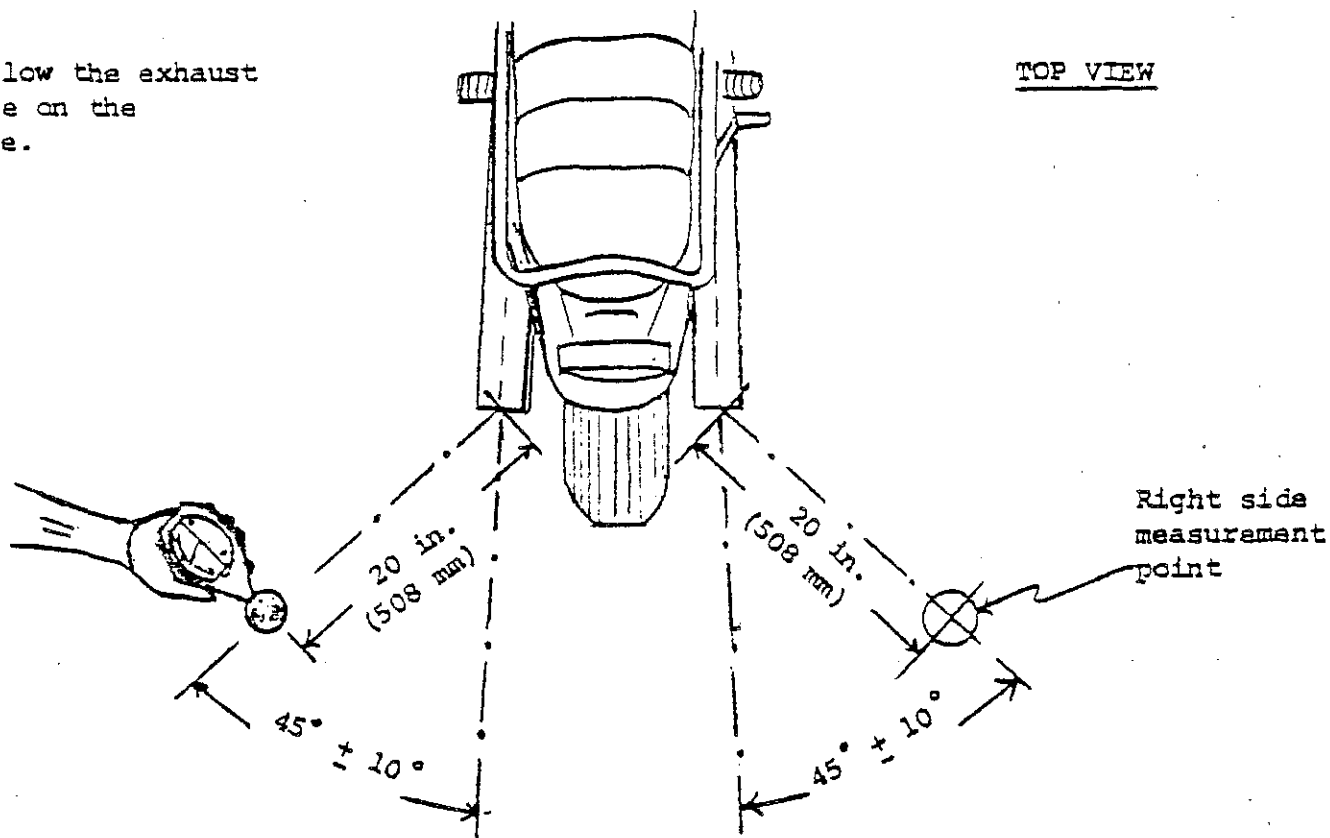
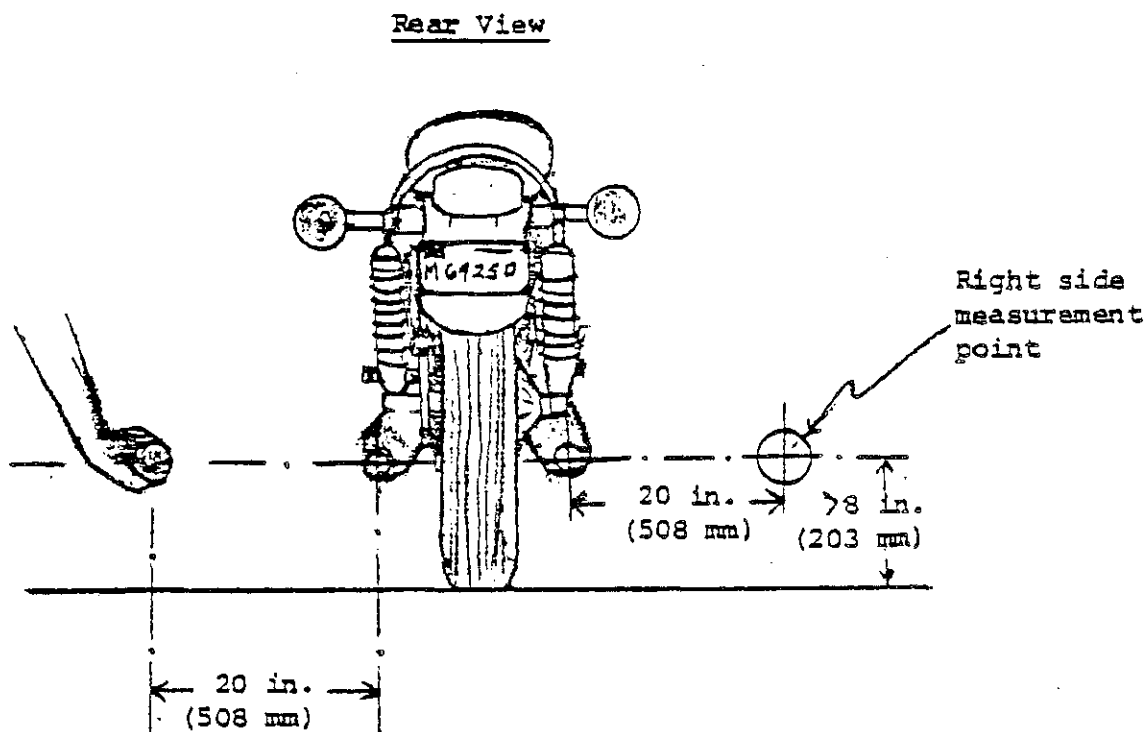


Figure 6.2
Microphone Placement for
Motorcycles

Do not allow the exhaust
to impinge on the
microphone.



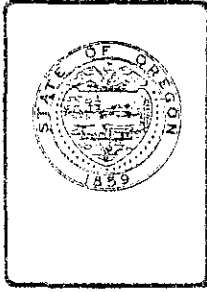
For exhaust outlets on both sides, measure both and report the highest of the two readings.



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Attachment 3
Agenda Item F
December 3, 1982
EQC Meeting

<u>Page No.</u>	<u>Paragraph</u>	<u>Description</u>
2	1.4(3)	Added sound monitoring procedures for drag race vehicles
4-5	3.4.2	Deleted muffler length requirements
5	3.4.3	Deleted muffler length requirements
13	5.1	Deleted exception from drag vehicles
23	Fig.5-4	Deleted muffler length and added reference to drag emission limits
24	Fig.5-4	Deleted muffler length and added reference to drag emission limits



MOTOR RACE
VEHICLE AND FACILITY
SOUND MEASUREMENT
AND
PROCEDURE MANUAL

ADOPTED NOV. 1980

PROPOSED AMENDMENTS

December 1982

Proposed additions are underlined.

Proposed deletions are [bracketed].

Index of Proposed Amendments
Procedure Manual NPCS - 35

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CHAPTER 1

INTRODUCTION

- 1.1 Policy.
- 1.1.1 The Environmental Quality Commission (EQC), through the Department of Environmental Quality (DEQ) shall establish a noise measurement program to implement the laws and regulations applying to Motor Sports Vehicles and Facilities.
- 1.1.2 The person owning or controlling the motor sports facility shall be responsible for compliance with the Oregon Noise Control Regulations for Motor Sports Vehicles and Facilities (OAR 340-35-040).
- 1.1.3 This manual contains procedures to be followed in complying with the Motor Sports Vehicles and Facilities Noise Control Regulations. Guidance is provided in the "Notes" and "Comments".
- 1.2 Authority. The statutory and administrative law governing authority which provide guidance and direction for this manual are contained in:
- a) Oregon Revised Statutes, Chapter 467
 - b) Oregon Administrative Rules for Noise Control
 - i) OAR 340-35-005 Policy
 - ii) OAR 340-35-010 Exceptions
 - iii) OAR 340-35-015 Definitions
 - iv) OAR 340-35-040 Noise Control Regulations for Motor Sports Vehicles and Facilities
 - v) OAR 340-35-100 Variances
- 1.3 Noise Regulations for Motor Sports Vehicles and Facilities. The DEQ Noise Control Regulations for Motor Sports Vehicles and Facilities contain two basic requirements for racing vehicles:
- 1) Vehicles shall be equipped with a "properly installed and well maintained muffling" system; and
 - 2) Vehicles shall not exceed the maximum allowable noise emission limits for that vehicle.
- Facilities located over two miles from the nearest "noise sensitive property" (residences) and/or any Top Fuel Burning Drag race vehicles are exempt from the above requirements due to lack of available control technology.
- 1.4 Penalties. The motor sports facility and racing vehicle owner is subject to penalties set forth by the Environmental Quality Commission in OAR 340-12-052, Noise Control Schedule of Civil Penalties, for violation of the Noise Control Regulations for Motor Sports Vehicles and Facilities. Penalties may be as great as \$500 for each violation.

General Vehicle Inspection Procedure. As stated in the policy section, the facility owner is required to inspect the race vehicles for compliance with the noise regulations. The following general procedures shall be followed when inspecting race vehicles:

1. Prior to a racing event (normally during the technical inspection of the vehicle), the facility owner shall inspect the muffler system to determine if the vehicle has a "properly installed and well maintained muffling" system (see Chapter 3).
2. If the vehicle has failed to meet the muffler requirements during the above inspection, then the race vehicle does not comply with the regulations and must therefore install a "properly installed and well maintained muffling" system.
3. If the vehicle meets the muffler requirements, then the vehicle (except for a drag race vehicle) shall be sound measured to determine if it meets the maximum allowable noise emission limits.

Drag race vehicles shall be sound measured when the facility owner believes the vehicle may exceed the emission limits. Thus it is not necessary to measure every drag race vehicle; however, the facility owner is still responsible to ensure that all vehicles comply.

Vehicles other than motorcycles shall be noise tested while moving around the course (preferably during practice sessions). Open course motorcycles shall be tested while stationary (normally during technical inspection after the muffler inspection). Closed course motorcycles shall be tested while either stationary or moving at the option of the facility owner. (See Chapter 4 and 5)

4. If the vehicle has failed to meet the maximum allowable noise emission limits, then the vehicle does not comply with the regulations and the muffling system must be improved to comply with the emission standards.
5. All vehicles who fail to meet either the muffler requirements or the maximum allowable noise emission limits shall be recorded on Form NPC-35-1.

CHAPTER 2

TRAINING

- 2.1 Sound Measurement Equipment. Prior to a race event, the person(s) designated to inspect racing vehicles for compliance with the noise control regulations shall become familiar with the sound measurement equipment (this person will be referred to in this procedure manual as the Noise Control Steward or NCS). The Noise Control Steward shall have read the manufacturer's instruction manual for the sound equipment. The NCS also shall have sufficient hands-on experience to feel comfortable operating the equipment.
- 2.2 Noise Control Racing Rules and Procedure Manual. The Noise Control Steward shall have a good working knowledge of the Department of Environmental Quality Noise Control Standards for Motor Sports Vehicles and Facilities (OAR 340-35-040) and its companion document the Sound Measurement Procedure Manual (NPCS-35).
- 2.3 Race Vehicle and Facility. The Noise Control Steward shall have a good working knowledge of the racing vehicles and facility being monitored. This includes:
- a) Knowing the driving characteristics of the race vehicles,
 - b) Knowing the layout of the track, and
 - c) Knowing the requirements for approved racing muffler systems.

This information will be useful in locating the proper measurement sites and for inspecting vehicles.

CHAPTER 3

MUFFLER SYSTEMS

- 3.1 General. The DEQ regulation requires all types of race vehicles (except Top Fuel Burning Drag vehicles) to be equipped with a "properly installed and well maintained muffling" system. During the vehicle inspection prior to the racing event, the vehicle's muffling system shall be visually inspected by the Noise Control Steward. If the muffling system fails to meet the DEQ muffler requirements, then the vehicle shall not operate at the race facility until the muffling system complies. This chapter describes the procedures for visual inspection of the vehicle's muffling system.
- .2 Top Fuel Burning Drag Vehicles. Drag vehicles operating on more than 50% alcohol fuel or on nitromethane are defined as Top Fuel Burning Drag vehicles and are commonly known as Funny cars and Top Fuel cars. Due to the lack of muffler technology needed to quiet this vehicle class, they are not required to have a muffler system under this rules.
- 3.3 "Properly Installed" Mufflers. A properly installed muffling system is:
- a) Correctly installed per manufacturer's instructions,
 - b) Fully functional,
 - c) Has no leaks or holes in the walls of the exhaust tubing and muffler body, and
 - d) Has no defect or modifications to reduce its sound reduction capabilities.
- 3.4 "Well Maintained Muffler" Systems. The DEQ noise regulations specifically state what constitutes a "well maintained muffler" system. If "properly installed" and "well maintained," the following systems meet the requirements of the rule. Note that each and every exhaust outlet must have a muffler located upstream from the outlet.
- 3.4.1 Reverse Flow (Baffle) Mufflers. See Figure 3-1 for examples of reverse flow mufflers. The reverse flow devices incorporate a multitube and baffled design. The exhaust gases do not flow straight through these devices, but take a multipath, back and forth route through the device.
- 3.4.2 Perforated Straight Core with Sound Absorbing Medium. See Figure 3-2 for examples of the perforated straight core with sound absorbing medium mufflers. In order for a straight core device to comply with the requirements, it must meet all the following criteria:
- a) The central core tube shall be perforated,
 - b) The core shall be fully surrounded from beginning to end with an absorbing medium (e.g. fiberglass, steel wool, etc.).
 - c) The muffler shall not be installed on a rotary engine, and
 - [d) The muffler shall meet the following length requirements:]

- [(i) For any engine exceeding 1600 cc (96.7 cu. in.) displacement, the muffler shall be at least 20 inches (50.8 cm) in inner core length; or]
- [(ii) For any non-motorcycle engine equal to or less than 1600 cc (96.7 cu. in.), the muffler shall be at least 12 inches (30.5 cm) in inner core length; or]
- [(iii) For any four-cycle motorcycle engine, the muffler shall be at least six inches (15.24 cm) in inner core length; or]
- [(iv) For any two-cycle motorcycle engine, the muffler shall be at least eight inches (20.32 cm) in inner core length.]

[Note: The "inner core length" means the length of the main body of the muffler, not including the exhaust tubing leading to and from the main body of the muffler (see Figure 3-2).]

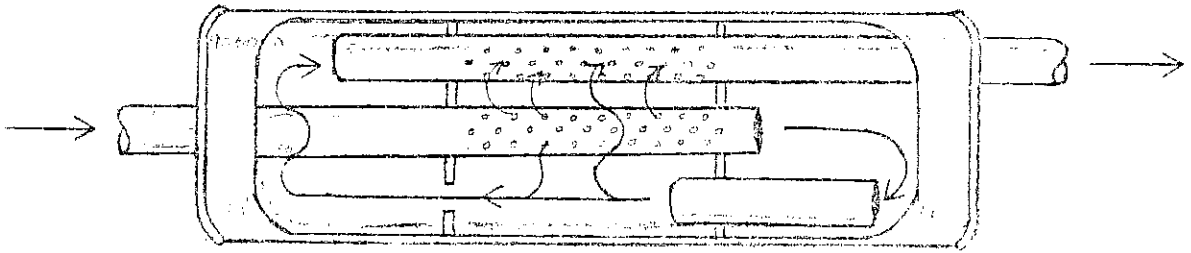
- 3.4.3 Annular Swirl Flow (Auger-Type) Mufflers. See Figure 3.3 for an auger type muffler. The exhaust gases in the annular swirl flow muffler follows a circular path down the length of the muffler. The inner design is like an auger. [In order for these devices to comply with the noise requirements, they shall meet the following length requirements:]
- [a] For any engine exceeding 1600 cc (96.7 cu. in.), the muffler swirl chamber shall be at least 16 inches (40.64 cm) in length; or]
 - [b] For any engine equal to or less than 1600 cc (96.7 cu. in.), the muffler swirl chamber shall be at least 10 inches (25.4 cm) in length.]
- 3.4.4 Stacked 360° Diffuser Discs Mufflers. See Figure 3-4 for an example of a Diffuser Disc muffler. This type of muffler works by causing the exhaust gases to bend 90° and then flow through the stacked 360° diffuser discs.
- 3.4.5 Turbocharger. A turbocharger is an exhaust gas driven supercharger. Turbochargers meet the requirements for a "well maintained muffler" system. However, superchargers mechanically driven by the engine are not defined as a "well maintained muffler" system and thus do not meet DEQ muffler requirements.
- 3.4.6 Go-Kart Mufflers. Go-karts must be equipped with a muffler as specified by the International Karting Federation. See Figure 3-5 for the specifications on go-kart mufflers.
- 3.4.7 Original Manufacturers Muffler on a Motorcycle. The original muffling equipment installed on a motorcycle and designated for use on the motorcycle by the manufacturer, meets the DEQ muffler requirements. The original motorcycle mufflers are generally of reverse flow, baffle and perforated straight core designs.
- 3.4.8 Underwater Exhausted Outboard Boat Motors. Watercraft with [outboard boat] motors whose exhaust exits beneath the water

surface during operation are defined as a "well maintained" muffler and meet the DEQ muffler requirements.

- 3.4.9 Other Approved Muffling Devices. Any other muffling device demonstrated effective and approved by the Motor Sports Advisory Committee and the Department of Environmental Quality will then be designated a "well maintained muffler" system.
- 3.5 Other Not Approved Devices. Other devices not meeting the criteria outlined in Section 3.1 to 3.4.9 for a "properly installed and well maintained muffling" system are illegal and shall not be used on vehicles operating at any Motor Sports Facility; except where specific exemption, exception and/or variances apply.
- 3.6 Form NPC-35-1. Form NPC-35-1 contains a condensed version of the information outlined in this chapter. Also, the form contains space for a description of the muffling system and whether it passed or failed the "properly installed" and "well maintained muffling" system requirements.

Fig. 3 - 1 Reverse Flow, Baffled Mufflers

Typical Baffled Muffler



Other Baffled Muffler Designs

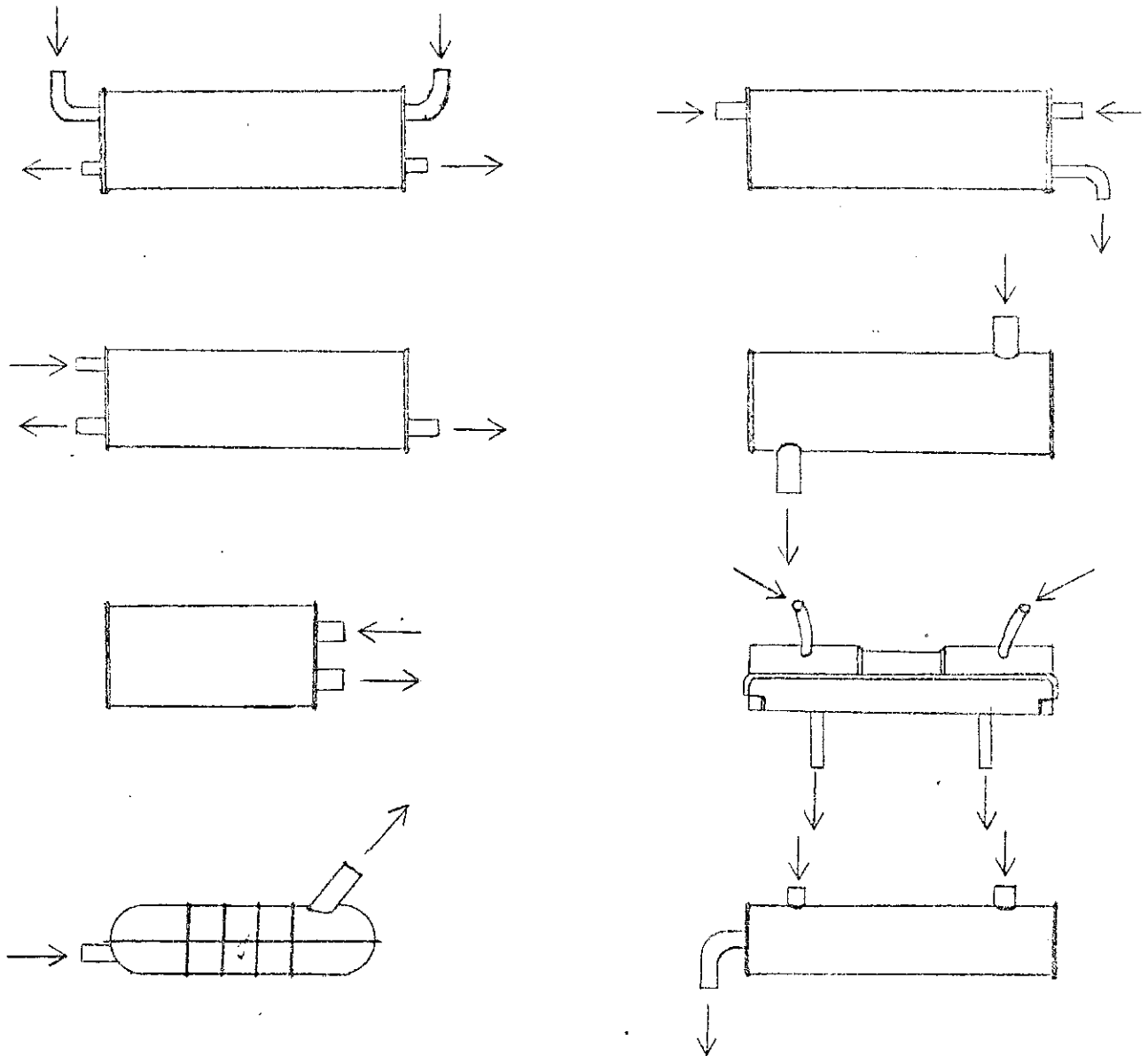
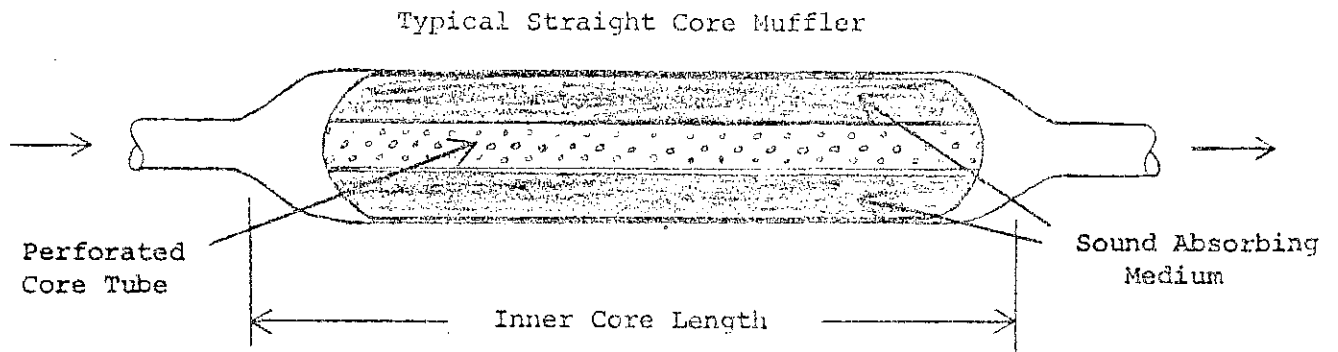


Fig. 3 - 2 Perforated Straight Core Muffler



Another Type of Straight Core Muffler

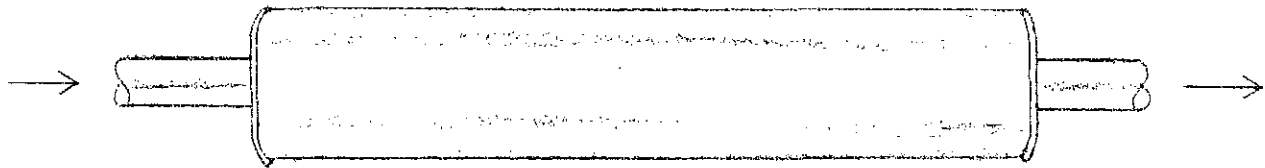


Fig. 3 - 3 Annular Swirl Flow (Auger-Type) Muffler

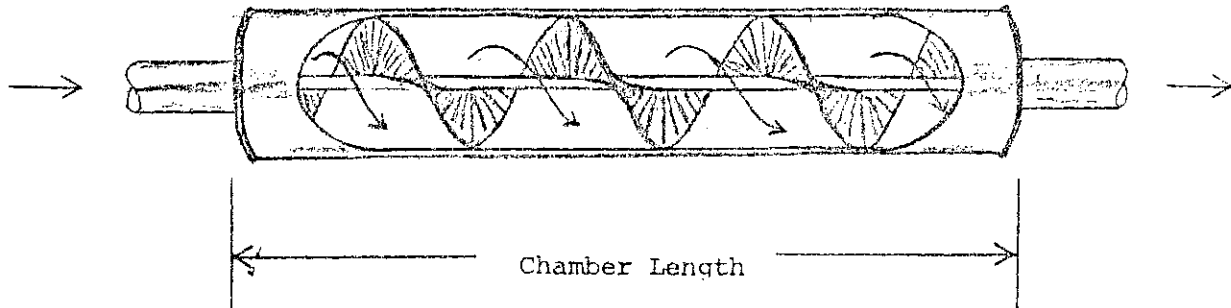


Fig. 3 - 4 Stacked 360° Diffuser Disc Muffler

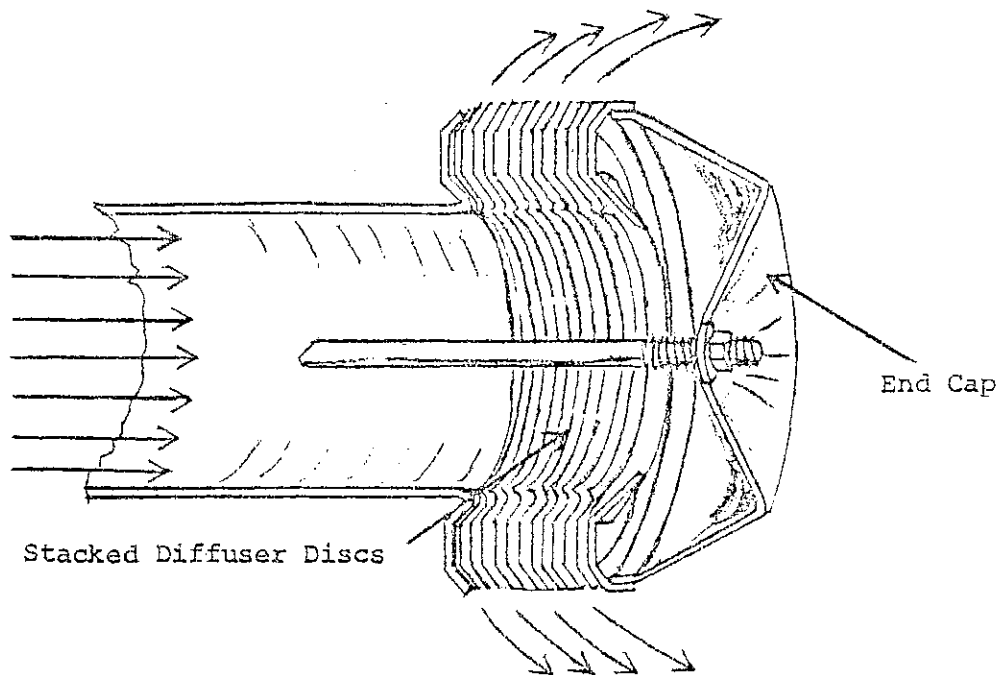
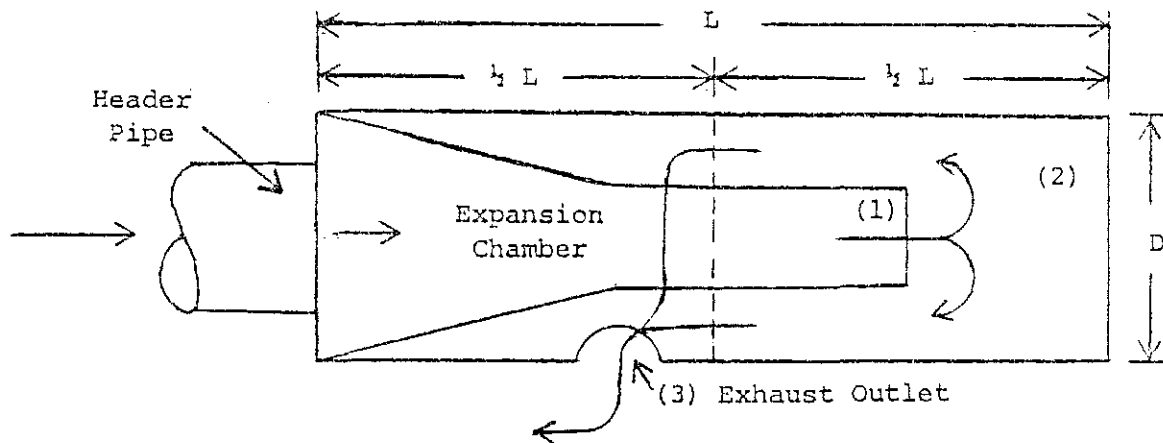


Fig. 3 - 5 Go-Kart Muffler Requirements



All go-kart exhaust systems shall be equipped with a muffler meeting the following specifications:

- No minimum or maximum muffler length (L) or diameter (D) is required.
- The expansion chamber must outlet (1) into the rear half of the muffler (2), that portion farthest from the header pipe.
- The exhaust gas outlet hole to atmosphere (3) may be of any shape, but shall not exceed .7854 sq. inches or the equivalent of a 1-inch diameter circle. Two 1-inch diameter, or smaller, exhaust outlet holes may be used on a single cylinder, 270 cc open class go-kart engine. This applies only to large displacement single cylinder engines in the 270 cc open class. If more than one outlet hole is used on a 270 cc single cylinder engine, no more than two holes may be used, both must be round, and neither hole may exceed 1-inch diameter.
- Multiple exhaust gas outlet holes to atmosphere are preferred.
- There may be no physical connection between the expansion chamber outlet (1) and the exhaust gas hole to atmosphere (3).
- Adjustable pipes are not legal in sprint racing of go-karts.

CHAPTER 4

INSTRUMENTATION

- 4.1 General. This chapter describes the requirements for the sound measurement equipment and its use.
- 4.2 Sound Level Meter. All sound level meters used in monitoring compliance with the noise regulations at motor racing facilities shall be equipped with:
- a) An "A" weighting electronic network,
 - b) A meter response similar to ANSI "Fast" and ANSI "Slow".
(Depending on the type of measurement procedure.)
 - c) A battery voltage indicator, and
 - d) Adequate measuring range to test race vehicles.
- Such sound level meters shall also:
- a) Conform to minimum specifications set forth in American National Standard Institute (ANSI) Standards Number S1.4-1971 for type 2 sound level meters, or
 - b) Shall be an Oregon Department of Environmental Quality approved sound level meter for use in measuring racing vehicles for the purpose of this rule.
- 4.3 Sound Level Meter Calibration.
- 4.3.1 Field Calibration. To assure sound measurement accuracy in the field, DEQ recommends that the measurement equipment include an acoustical calibrator which couples to the microphone. Sound meters should be field calibrated before and after, and every two hours during vehicle monitoring. Consult the sound meter's manufacturer's instruction manual for proper calibration procedures.
- 4.3.2 Annual Calibration. Every year the sound meter and calibrator should receive a laboratory calibration in accordance with manufacturer's specifications. This calibration should be traceable to the National Bureau of Standards.
- 4.4 Accessories. The following accessories are valuable in gathering sound measurements:
- a) A microphone wind screen (see Section 4.5)
 - b) Motor Racing Record Forms (NPCS-35-1)
 - c) Clipboard
 - d) Tripod to hold the sound level meter
 - e) Spare batteries
 - f) Screwdriver for sound meter calibration
 - g) A tape measure
 - h) Ear protectors
 - i) A tachometer for stationary noise testing

- 4.5 Sound Measurement Precautions.
- 4.5.1 Wind. Wind blowing on the microphone can create additional noise in the sound meter. To minimize wind noise, a windscreen on the microphone is recommended whenever measurements are taken. The windscreen should be furnished with the meter by the manufacturer and made of open cell polyurethane foam. This type of windscreen will protect the microphone from wind, dust, accidental shocks, and moisture, while not affecting the sound measurements. Consult the sound meter instruction manual for more details.
- 4.5.2 Precipitation. Water can damage microphone diaphragms. Hence, the microphone should be protected from moisture at all times. The wind screen will protect the microphone during all but the heaviest rain showers.
- 4.5.3 Background Sound Levels. Sounds from other vehicles or activities can affect sound level measurements made during race vehicle monitoring. To avoid this, it is recommended that the sound level of the race vehicle being measured rise at least 6 dBA before and fall at least 6 dBA after the maximum sound level occurs.
- 4.6 Equipment Set Up and Use.
- 4.6.1 Calibration. The meter should be periodically field calibrated as outlined in section 4.3.1 and following the manufacturer's instruction manual.
- 4.6.2 Battery Check. The batteries in the sound meter and calibrator are to be checked whenever performing field calibrations.
- 4.6.3 "A"-Weighting. The "A"-weighting electronic network on the meter is to be engaged and used during vehicle testing (i.e., not the "B", "C", "D", or flat networks).
- 4.6.4 "Fast" and "Slow". For the moving vehicle test, the fast meter response network is to be engaged and used during testing. For the stationary vehicle test, the slow meter response is to be engaged and used during testing.
- 4.6.5 Microphone Height. The microphone shall be placed on a tripod if an extension cable is used. If a cable is not used, the sound meter with the microphone attached may be hand held or placed on a tripod. Ideally, the microphone should be positioned $4 \pm 1/2$ feet ($1.2 \pm .15$ meters) above the ground or water for the moving test and at the same height as the exhaust outlet for the stationary test. See Chapter 5 for more details.
- 4.6.6 Microphone Orientation. Care should be taken to correctly orient the microphone to the race vehicle. Some microphones are designed to be pointed directly at the noise source, while others are designed to be pointed perpendicular to the sound so that

the sound grazes the microphone diaphragm. Consult the sound meter instruction manual for the proper microphone orientation.

- 4.6.7 Personnel Location. Care should be exercised to prevent interference with sound measurements caused by personnel in the measuring area. No person should stand between the race vehicle and the sound meter. The person taking sound measurements should stand back from the microphone as much as possible and to one side of the sound path. This will minimize sound reflections off the body. Consult the manufacturer's instruction manual for more details. Bystanders should stand behind the test personnel to minimize body reflections.
- 4.6.8 Range Setting. Set the meter to the appropriate range to measure the anticipated sound level.

CHAPTER 5

SOUND MEASUREMENT SITES AND PROCEDURES

- 5.1 General. The DEQ noise regulations for motor sports facilities require all race vehicles [, except for drag vehicles,] to meet specific maximum allowable sound emission limits. Also the noise regulations specify the type of noise test procedures to be followed. The non-motorcycle race vehicle categories are only noise tested while moving about the race course. Open course motorcycles are tested only while stationary. Closed course motorcycles are tested either while moving or while stationary at the option of the Noise Control Steward.

For the moving vehicles noise test, the vehicle is first inspected to determine if it complies with the muffler requirements (See Chapter 3). If the muffler complies, then the vehicle can be allowed to operate on the facility for practice runs prior to the race event. During these practice runs, the Noise Control Steward shall take sound measurements to determine if the vehicle complies with the noise emission limits. If it fails the emission limits, then the vehicle shall not be allowed to operate further on the facility until the emissions are lowered. Section 5.2 describes the moving vehicle sound measurement procedures.

For the stationary vehicle test, the muffler system is first inspected for compliance with the muffler requirements. If it complies, then the vehicle is stationary noise tested, per the test procedures in Section 5.3. If the vehicle fails the muffler requirements and/or the noise emission limits, it shall not be allowed to operate on the race facility until it complies.

5.2 Moving Vehicle Sound Measurement Procedure.

- 5.2.1 Microphone Height. Ideally, the sound measurement area for the moving vehicle test should be flat and the microphone positioned $4 \pm 1/2$ feet ($1.2 \pm .15$ meters) above the plane of the ground or water surface. In practice, this is sometimes difficult to achieve. Figure 5-1 shows some acceptable microphone heights. In general, the NCS should maintain at least 3-1/2 feet of line-of-site clearance between the microphone and the vehicle above the surrounding ground terrain.
- 5.2.2 Blockage of the Sound Path. The ideal moving vehicle measurement site is shown in Figure 5-2. The ideal site is flat and is clear of objects within the area between the vehicle path and the microphone position for a distance of 100 feet (30.5 meters) in each direction along the track. Objects located within the measurement area between the vehicle and the microphone can potentially influence the sound level measurements. Any site where an object "significantly" blocks the sound path is not a legitimate test site and shall not be used for monitoring compliance with the noise standards for racing facilities.

At most moving vehicle test sites, there will be something located within the measurement area that may block sound (i.e., Armco safety barriers, hay bales, fences, bleachers, other race vehicles, trees, piles of dirt, etc.). Fortunately, not everything will "significantly" block the sound path. If the following conditions are met, then a moving vehicle test site is not "significantly" blocked and is therefore an acceptable test site:

- 1) In general, there must be good line-of-sight clearance between the microphone and the vehicle exhaust outlets (excluding shielding by the vehicle body) for most of the vehicle's pass by. More precisely, the line-of-sight view of exhaust outlets must be at least 80% open area during the pass by, and
- 2) The area immediately in front of the microphone must be clear of obstruction.

If the Noise Control Steward has any doubts about the site, then choose an alternate measurement site.

- 5.2.3 Reflective Surfaces. Objects with large flat surfaces (excluding the ground or water surface) which are basically parallel to the track and located behind the microphone or on the other side of the track, can increase the measured sound level. The ideal moving vehicle measurement site has no reflective surfaces located in an area less than 100 feet (30.5 meters) from the microphone and the microphone point (see Figure 5.2). Since an ideal site with no reflective surfaces is not always available, then the next best thing is to not measure at sites where reflective surfaces are less than the following distances away from the microphone or the race vehicle:
- a) 10 feet (3.0 meters) for the 50 ft. (15.24 m) measurement sites, or
 - b) 20 feet (6.0 meters) for the 100 ft. (30.5 m) measurement sites.

- 5.2.4 50 Ft. Trackside Measurement Point. The DEQ noise regulations for racing facilities specifies a moving vehicle sound measurement position (microphone location) at "trackside." "Trackside" is defined as 50 feet (15.24 meters) from the edge race vehicle. For the purpose of this rule, this means the sound measurements shall be made 50 feet (15.24 meters) from the edge of the Driving Groove. The Driving Groove is the path that most race vehicles follow around the race course. In order to determine the driving groove, the Noise Control Steward must draw upon his knowledge of the race vehicles and the race course.

After the driving groove has been located, the NCS shall measure 50 feet (15.24 meters) from the edge and perpendicular to the driving groove. This is the position where sound measurements will be taken.

Note: It is recommended that a mark be placed at the edge of the driving groove, perpendicular to the microphone. This can be used to determine the location of each vehicle with respect to the 50 foot monitoring distance. (See

Section 5.4.2 for more details)

- 5.2.5 Alternate 100 ft. Trackside Measurement Point. If it is determined that a measurement at 50 ft. (15.24 meters) is unsafe or not feasible, then measurements may be taken at 100 ft. (30.5 meters) for the driving groove. If the 100 foot distance is used a 6 dBA correction shall be added to the observed sound reading or 6 dBA may be subtracted from the required maximum sound emission limits specified in the noise regulations. (The sound emission limits list in form NPC-35-1 were adjusted.)
- 5.2.6 Choosing Loudest Moving Vehicle Measurement Location. Given the general test site constraints outlined in Section 5.2.1 to 5.2.5, many possible measurement locations are typically available at racing facilities. The moving vehicle standards require race vehicles not exceed a specified noise emission level under all operating conditions (acceleration, deceleration, cruising, full out, etc.). The Noise Control Steward shall therefore monitor for compliance with the moving vehicle limits at those measurement sites where the vehicle is producing its maximum noise levels.

Comment: The Noise Control Steward must measure at the noisiest site. A non-complying vehicle may pass or fail depending on the ability of the steward to choose the noisiest site. The owner of a vehicle that passes or fails due to improper measurement procedures will lose confidence in the validity and the need for the rules. In such a case, the Steward will have compromised the track, sanctioning organization, and the vehicle owner.

Generally, race vehicles produce their maximum noise levels when they are accelerating near the highest engine RPM. Determining the point of maximum sound emissions takes a knowledge of the vehicle and the race course. Even then, vehicles may need to be tested at several sites before a final test site is selected. Long, straight sections of the track tend to be noisier than the corners. Also, vehicles may be noisier on one side than the other, depending on the location of the exhaust outlet. Measurements shall be made on the noisiest side of the vehicle.

5.3 Stationary Vehicle Sound Measurement Procedure.

- 5.3.1 Test site. The test site should be relatively flat and free of loose or powdered snow, plowed soil, grass of height greater than 6 inches (.15 meters), brush, trees, or other extraneous material. Also the site should be free of large sound reflective surfaces (other than the ground) such as parked vehicles, sign boards, buildings, or hillsides; located within 15 ft. (4.6 meters) radius of the vehicle being tested.

- 5.3.2 Microphone Location. The microphone shall be located with respect to the rear most exhaust outlet on either side of the vehicle as follows:
- a) 20 inches \pm 1/2 in. (0.5 meters \pm .01 m) from the exhaust outlet,
 - b) At a 45-degree angle (\pm 10 degree), from the axis of the outlet,
 - c) At the same height as the exhaust outlet, and
 - d) With its longitudinal axis parallel to the ground.

Figure 5-3 shows the microphone location.

Note: For microphones designed for grazing noise measurement (see Section 4.6.6), point the microphone rearward away from the engine. Further no wire or other means of distance measurement shall be attached to the microphone. This may lead to erroneous readings.

- 5.3.3 Vehicle Operations. The rider shall sit astride of the motorcycle in a normal riding position with both feet on the ground. The engine shall be operated at the normal operating temperatures with gear box in neutral. If no neutral is provided the motorcycle shall be operated either with the rear wheel clear of the ground, or with the drive chain or belt removed. The sound level measurement shall be made with the engine speed stabilized at one of the following values. (The preferred test procedure is listed first; the least preferred test procedure is last):

- a) The engine speed shall be stabilized at 50% (1/2) of the manufacturer's recommend maximum engine speed ("Red Line RPM"), or
- b) If no "Red Line RPM" is published for the vehicle, then stabilize the engine speed at 60% of the engine speed at which maximum horsepower is developed, or
- c) If neither "Red Line RPM" nor maximum horsepower RPM information is available, then calculate the test RPM from the following formulae:

$$\text{RPM} = \frac{306,000}{\text{stroke in mm}} \quad \text{or} \quad \text{RPM} = \frac{12,000}{\text{stroke in inches}}$$

- d) If engine test speed cannot be determined from steps a, b, and c above or if a tachometer is not available, then test the motorcycle at 1/2 of full open throttle.

Comment: During stationary noise testing, the Noise Control Steward should make certain the tachometer is accurately measuring the engine speed. Also do not allow the exhaust to impinge on the microphone.

5.4 Sound Measurements

5.4.1 Preliminary Steps. The following steps should be followed before taking sound measurements.

- a) Check battery
- b) Calibrate sound meter
- c) Switch meter to "A" weighting scale.
- d) Set meter to correct a range setting
- e) Windscreen - on
- f) No significant blockage of the sound path
- g) No reflective surfaces
- h) Test personnel located correctly behind meter
- i) No significant background noises.
- j) For moving vehicle sound testing:
 - * Select the loudest measurement site
 - * Determine the Driving Groove
 - * Place the meter at 50 (or 100 ft.) from Driving Groove
 - * Set meter on "Fast" response
 - * Set meter at $4 \pm 1/2$ ft. above terrain
 - * Point microphone correctly
 - * Monitor the loudest side of vehicle
- k) For stationary vehicle sound testing:
 - * Vehicle at normal temperature and in neutral.
 - * Vehicle operator in normal riding position.
 - * Attach and check tachometer.
 - * Determine the engine test speed.
 - * Monitor the rear most exhaust outlet for each side.
 - * Set the meter to "slow" response
 - * Place microphone 20 inches from exhaust outlet.
 - * Place microphone 45° from the axis of the outlet.
 - * Place microphone at the same height as the outlet.
 - * Place longitudinal axis of the microphone parallel to the ground.
 - * Point the microphone correctly.
 - * Monitor both sides of the vehicle.
 - * Stabilize the engine at the engine test speed.

5.4.2 Moving Vehicle Measurements. The measured noise emission level for a moving race vehicle shall be the maximum sound level reading displayed on a meter position 50 or 100 feet (15.2 or 30.5 meters) from the vehicle's driving groove, taken during the vehicle's pass by. To avoid background noise from affecting the sound measurements, the sound level should ideally rise and fall at least 6 dBA from the maximum noise level. Also, the sound meter's "Fast" response should be used.

Ideally, all moving vehicles will follow the driving groove and the sound measurements will be made at the proper measurement distance. However, this may not always be the case. The following comments may be of value to minimize the time it takes for testing vehicles:

Comment: If the moving vehicle is measured on its noisiest side and under its noisiest operating conditions, then the following statements can be considered valid:

- a) If the vehicle passes less than 50 (or 100) feet from the microphone and does not exceed the noise emission limits, then it does not violate the noise limits at 50 (or 100) feet.
- b) If the vehicle passes greater than 50 (or 100) feet and exceeds the emission limits, then it does violate the noise limits at 50 (or 100) feet.
- c) If the vehicle passes less than 50 (or 100) feet and exceeds the emission limits, then the situation is uncertain and the vehicle shall be remeasured.
- d) If the vehicle passes greater than 50 (or 100) feet and does not exceed the emission limits, then the situation is again uncertain and the vehicle shall be remeasured.

5.4.3 Stationary Vehicle Measurements. The reported noise emission level for the stationary vehicle shall be the highest sound level reading displayed on the meter during steady state operation at the proper engine speed. Sound level readings obtained during acceleration or deceleration of the engine are not included. If there are exhaust outlets on both sides of the vehicle, then readings shall be obtained on both sides and the highest reading reported as the vehicle's emission level. The sound meters "Slow" response should be used for stationary testing. Although the "Fast" response is acceptable. Further, to avoid background noise from affecting the sound measurements, the sound level should ideally rise and fall at least 6 dBA from the maximum noise level.

5.4.4 Recording Sound Level Measurements. Noise data for all race vehicles which exceed the maximum allowable noise emissions shall be recorded on form NPCS-35-1. The race facility owner shall keep such recorded noise data for a period of at least one calendar year and, upon request, shall make such data available to the Department. The owner may also submit the data to the Department for storage.

5.5 Form NPCS-35-1. Form NPCS-35-1 is used to record muffler and sound level data on all race vehicles exceeding the DEQ noise standards. Figure 5-4 shows an example of Form NPCS-35-1. Enclosed in this procedure manual is a master form of NPCS-35-1 to be photocopied and used to record race data. The following describes form NPCS-35-1 and the information to be recorded on it:

- a) The name and location of the racing facility.
- b) The name of the sponsoring organization, if any.
- c) Name of the individual who inspected the vehicles for compliance with the noise standards.
- d) Mark the type of racing event and the appropriate maximum allowable noise emission limits for the event.
- e) Description of the sound level meter (make and model).

- f) Location of the measurement site and distance from race vehicle.
- g) A check list for use in taking sound level measurements is included on the form.
- h) The description of the racing vehicle (type of vehicle, vehicle number, driver's name, etc.).
- i) The maximum measured sound level expressed in dBA (decibels measured on an "A" weighted sound meter). This is at 20 inch, 50 ft., or 100 ft. depending on what type of test was performed as indicated in item d and f above. Also include with the sound level, the test RPM for the 20 inch stationary test.
- j) A list of muffling systems which meet the requirements for a "Well Maintained Muffling System" is included on the form.
- k) Indicate on the form whether the vehicle passed or failed the visual inspection of the muffling system (whether or not the vehicle meets the "properly installed and well maintained muffler" requirements).
- l) Describe the muffler system and given the reason(s) for vehicle passing or failing the visual inspection of the muffling system. (See list of "Well Maintained Muffling Systems" included on the form.)
- m) Indicate any results or actions taken on the vehicle (i.e. not allowed to race, muffler was fixed and retested, etc.).

Note: Form NPCS-35-1 is designed to provide the user with most of the important information contained in the DEQ race noise standards and procedure manual. However, this form could not contain all the information. Consult the standards and the manual if questions arise.

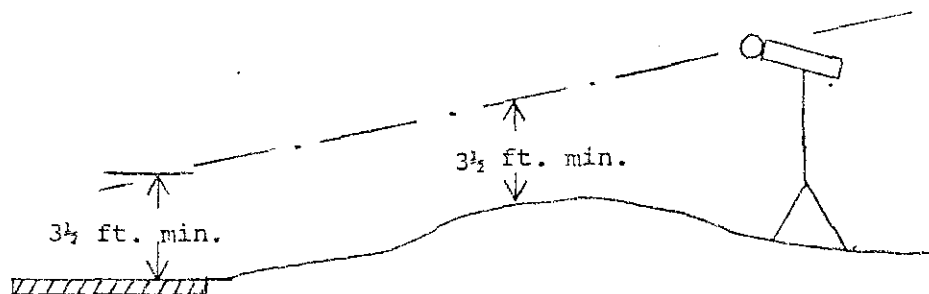
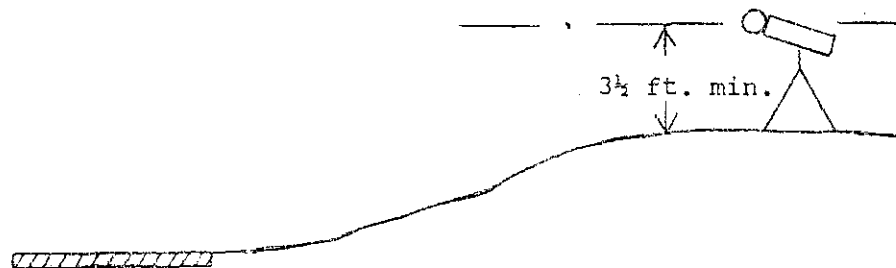
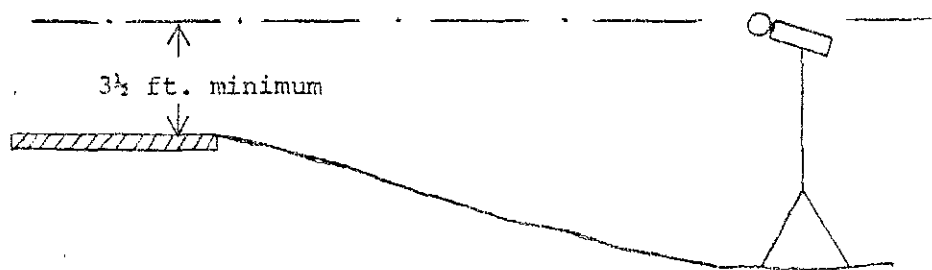
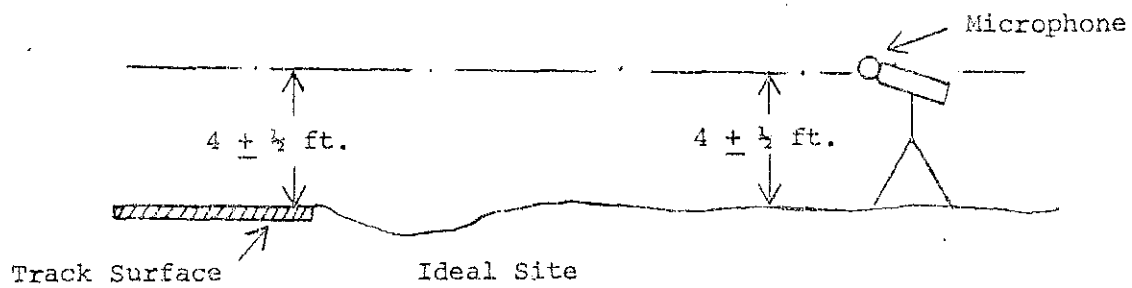


Fig. 5 - 1 Acceptable Microphone Heights

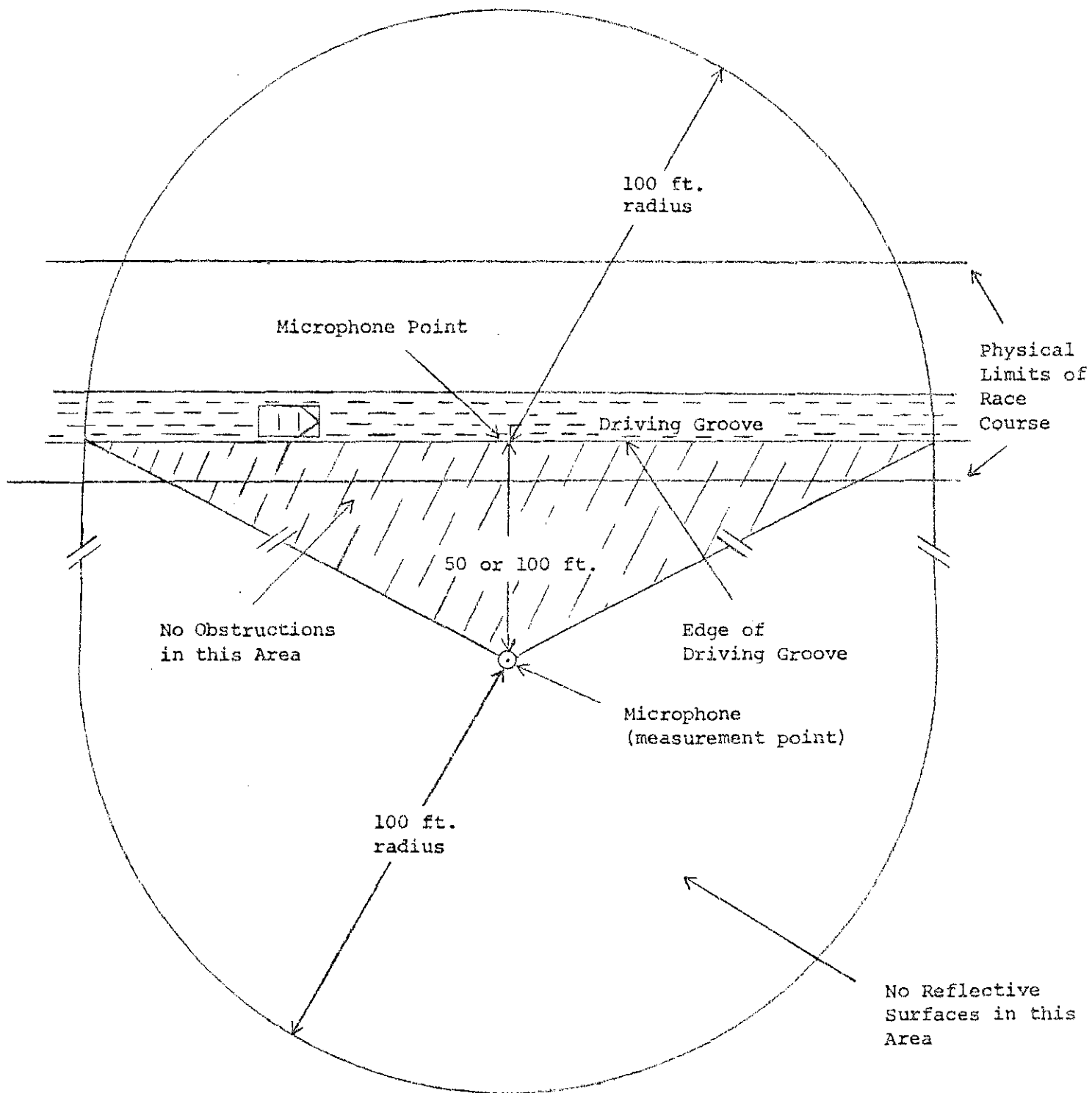
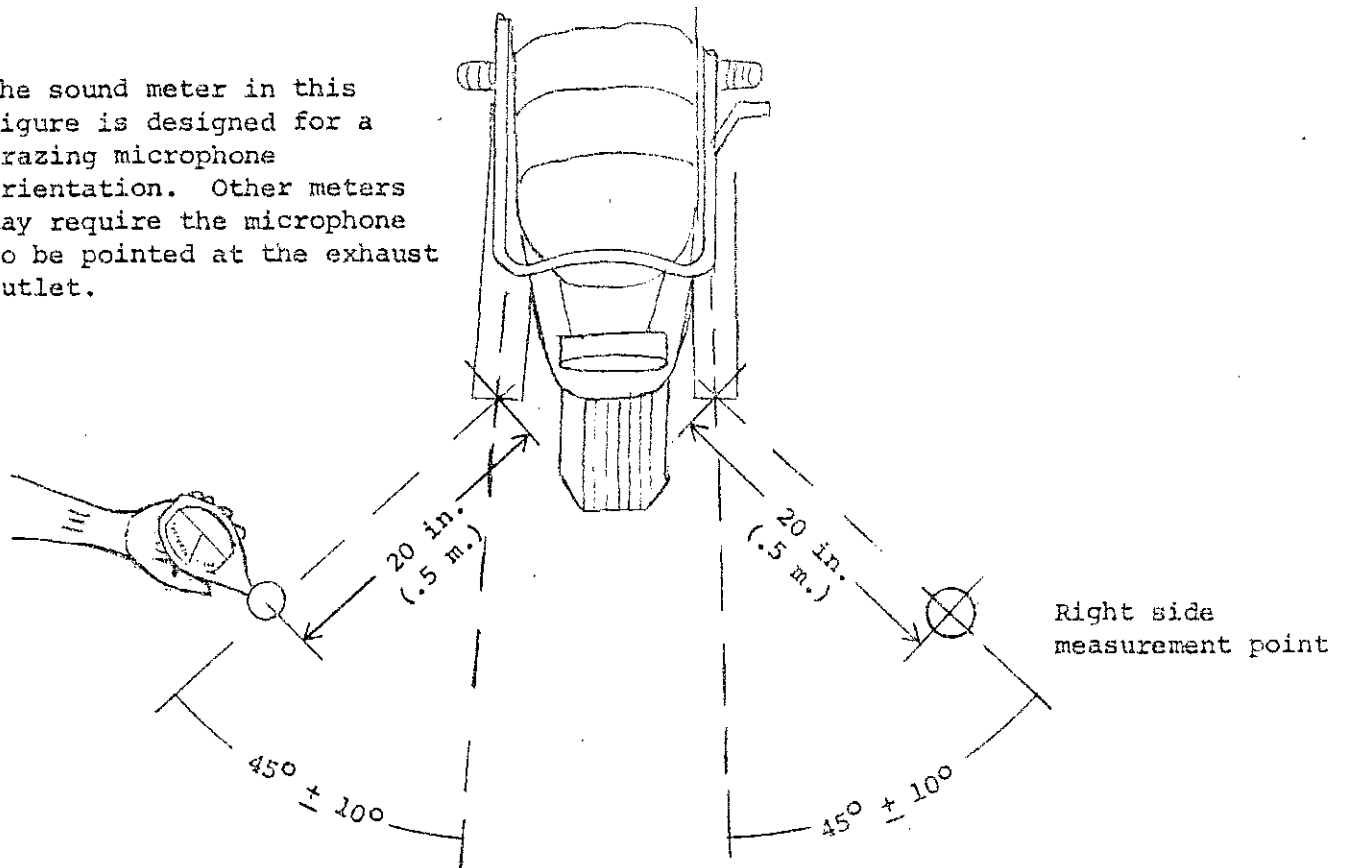


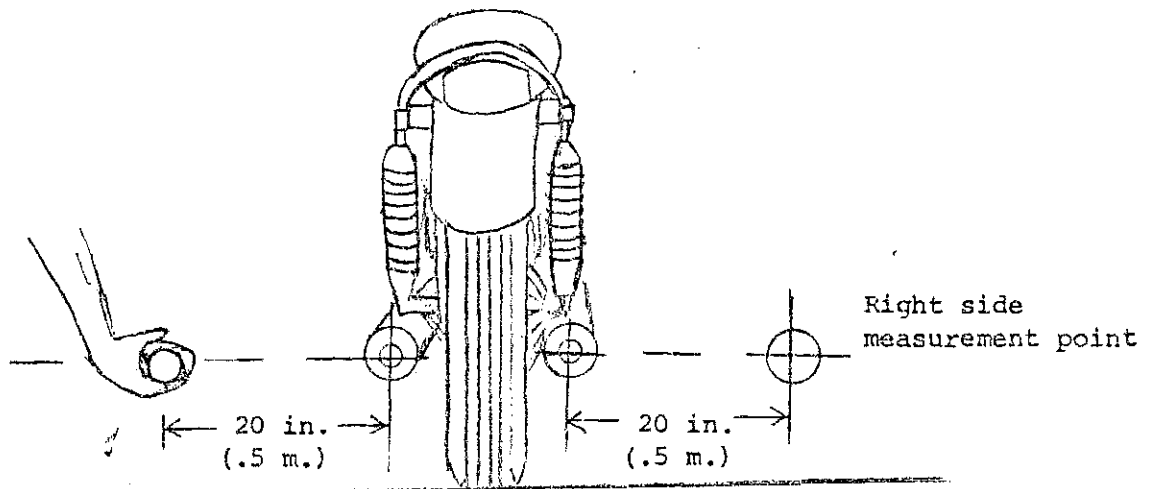
Fig. 5-2 General Layout of Ideal Moving Vehicle Sound Measurement Site (Flat Terrain, No Obstructions to Block the Sound Path, No Reflective Surfaces)

Fig. 5-3 Stationary Test Microphone Location

The sound meter in this figure is designed for a grazing microphone orientation. Other meters may require the microphone to be pointed at the exhaust outlet.



- * Measure from rear most exhaust outlet on each side.
- * For exhaust outlets on both sides, measure both.
- * Report the highest reading at the test RPM.
- * Do not allow exhaust to impinge on the microphone.



DEPARTMENT OF ENVIRONMENTAL QUALITY
MOTOR SPORTS RACING RECORD FORM¹

Date: Nov. 4 1980 Inspected By: John Doe

All non-Top Fuel Burning Drag² vehicles must have a "Properly Installed and Well Maintained Muffling" system. If properly installed, the following systems meet this requirement. Also, all exhaust outlets must be muffled:

Racing Facility Name and Location:
Acme Race Track - Smallville

Sound Meter Make and Model:
Gen Rad 1983

Sponsoring Organization:
23rd St. Sports Car Club

Sound Measurement Position: 20 in.
 50 ft.
 100 ft.
North Straight-away

Track Type of Race and Max. Allowed Noise Emissions:

Sound Measurement Check Lists:
 Battery and Meter Calibration - OK
 "A" Weighting and Windscreen
 "Fast" - for Moving, "Slow" - for Stationary
 No Reflections or Blockage of Path
 Low Background Noise
- MOVING TEST -
 Find Loudest Site and Driving Groove
 50 or 100 ft. from Driving Groove
 Microphone Height and Orientation - OK
 Test Loud Side of Vehicle
- STATIONARY TEST -
 Microphone at 20 in. and 45° from Outlet
 Tachometer Working - OK
 Test at 50% of Red Line or... (see Manual)
 Test Both Sides at Steady State RPM

1. Reverse Flow, Baffle Muffler
2. Stacked Diffuser Disc Muffler
3. Exhaust Turbocharged System³
4. Muffler Approved for Go-Karts
5. Original Factory Muffler Installed on a Motorcycle
6. Underwater Exhausted Outboard Boat Motor
7. Auger Type Muffler
[a. Minimum 16" muffler for greater than 1600 cc engines, or]
[b. Minimum 10" muffler for 1600 cc or less engines.]
8. Perforated Straight Core, Absorbent Lined Muffler; Not Installed on a Rotary Engine
[a. Minimum 20" muffler on any engine exceeding 1600 cc,]
[b. Minimum 17" muffler on a non-motorcycle engine 1600 cc or less,]
[c. Minimum 6" muffler on any 4-cycle motorcycle engine, or]
[d. Minimum 8" muffler on any 2-cycle motorcycle engine.]
9. Any other DEQ approved muffling system.

(1600 cc = 96.7 cu. in)

	-dBA-		
	20 in.	50 ft.	100 ft.
<input type="checkbox"/> Drag	-	105	99
<input type="checkbox"/> Oval	-	105	99
<input checked="" type="checkbox"/> Sports Car	-	105	99
<input type="checkbox"/> Closed Course Motorcycle	105	105	99
<input type="checkbox"/> Open Course Motorcycle	105	-	-
<input type="checkbox"/> Wheel Drive	-	105	99
<input type="checkbox"/> Water Craft	-	105	99
<input type="checkbox"/> Autocross	-	90	84
<input type="checkbox"/> Go-Kart	-	105	99
<input type="checkbox"/> Other	-	-	-

VEHICLE DESCRIPTION	MEASURED NOISE LEVEL (dBA & RPM)	VISUAL INSPECTION OF THE MUFFLING SYSTEM		RESULTS AND ACTIONS
		Muffler System	Describe Muffler System and Give Reason(s) for Pass/Fail (see list above)	
<u>W Smith #19</u>	<u>109</u>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<u>Diffuser Disc Muffler</u>	<u>Took some discs out of Muffler; Passed at 102 dBA</u>
<u>Jones #3</u>	<u>-</u>	<input type="checkbox"/> Pass <input checked="" type="checkbox"/> Fail	<u>No Muffler; Straight Pipes</u>	<u>Not allowed on track</u>
<u>Brown #12 (Rotary Engine)</u>	<u>-</u>	<input type="checkbox"/> Pass <input checked="" type="checkbox"/> Fail	<u>Straight Core muffler on a Rotary Engine Car</u>	<u>Said he would fix it.</u>
<u>Wilson #5 (1400 cc Engine)</u>	<u>111</u>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<u>Dual exhaust, 1 1/2 inch glass pipes on each side</u>	<u>Not allowed to race</u>
<u>Roberts #10 (1200 cc motorcycle Engine)</u>	<u>115</u>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<u>Stock Motorcycle Mufflers</u>	<u>Not allowed to race</u>
<u>Brown #12 (see above)</u>	<u>97</u>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<u>Stock baffled mufflers</u>	<u>Allowed to race</u>
<u>Mc Kay #112</u>	<u>101</u>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<u>Turbo Charged Engine</u>	<u>Just interested in what it produced.</u>

(1) Only those race vehicles failing to comply with the "properly installed and well maintained muffler" requirements and/or the maximum allowable noise emission requirements, are required to be recorded on this form.

(2) Top Fuel Burning Drag vehicles are powered by greater than 50% alcohol or by nitromethane and are commonly known as top fuel or funny cars. These vehicles are not required to have a muffler.

(3) An Exhaust Turbocharged system is considered a "well maintained muffling" system.

Fig. 5 - 4
Example of Form
NPCS-35-1

DEPARTMENT OF ENVIRONMENTAL QUALITY
MOTOR SPORTS RACING RECORD FORM¹

Date: _____ Inspected By: _____

Racing Facility Name and Location: _____

Sound Meter Make and Model: _____

Sponsoring Organization: _____

Sound Measurement Position: 20 in.
 50 ft.
 100 ft.

Model Type of Race and Max. Allowed Noise Emissions:

Sound Measurement Check List:

	-dBA-		
	20 in.	50 ft.	100 ft.
<input type="checkbox"/> Drag	105	99	
<input type="checkbox"/> Oval	105	99	
<input type="checkbox"/> Sports Car	105	99	
<input type="checkbox"/> Closed Course Motorcycle	105	99	
<input type="checkbox"/> Open Course Motorcycle	105		
<input type="checkbox"/> 4-Wheel Drive	105	99	
<input type="checkbox"/> Water Craft	105	99	
<input type="checkbox"/> Autocross	90	84	
<input type="checkbox"/> Co-Kart	105	99	
<input type="checkbox"/> Other			

- Battery and Meter Calibration - OK
- "A" Weighting and Windscreen
- "Fast" - for Moving, "Slow" - for Stationary
- No Reflections or Blockage of Path
- Low Background Noise
- MOVING TEST -
- Find Loudest Site and Driving Groove
- 50 or 100 Ft. Free Driving Groove
- Microphone Height and Orientation - OK
- Test Loud Side of Vehicle
- STATIONARY TEST -
- Microphone at 20 in. and 45° from Outlet
- Tachometer Working - OK
- Test at 50% of Red Line or... (see Manual)
- Test Both Sides at Steady State RPM

All non-Top Fuel Burning Drag² vehicles must have a "Properly Installed and Well Maintained Muffling" system. If properly installed, the following systems meet this requirement. Also, all exhaust outlets must be muffled:

1. Reverse Flow, Baffle Muffler
2. Stacked Diffuser Disc Muffler
3. Exhaust Turbocharged System³
4. Muffler Approved for Co-Karts
5. Original Factory Muffler Installed on a Motorcycle
6. Underwater Exhausted Outboard Boat Motor
7. Auger Type Muffler
 - [a. Minimum 16" muffler for greater than 1600 cc engines, or]
 - [b. Minimum 10" muffler for 1600 cc or less engines.]
8. Perforated Straight Core, Absorbent Lined Muffler; Not Installed on a Rotary Engine
 - [a. Minimum 20" muffler on any engine exceeding 1600 cc.]
 - [b. Minimum 12" muffler on a non-motorcycle engine 1600 cc or less.]
 - [c. Minimum 6" muffler on any 4-cycle motorcycle engine, or]
 - [d. Minimum 8" muffler on any 2-cycle motorcycle engine.]
9. Any other DEQ approved muffling system.

(1600 cc = 96.7 cu. in)

VEHICLE DESCRIPTION	MEASURED NOISE LEVEL (dBA & RPM)	VISUAL INSPECTION OF THE MUFFLING SYSTEM		RESULTS AND ACTIONS
		Muffler System	Describe Muffler System and Give Reason(s) for Pass/Fail (see list above)	
24		<input type="checkbox"/> Pass <input type="checkbox"/> Fail		
		<input type="checkbox"/> Pass <input type="checkbox"/> Fail		
		<input type="checkbox"/> Pass <input type="checkbox"/> Fail		
		<input type="checkbox"/> Pass <input type="checkbox"/> Fail		
		<input type="checkbox"/> Pass <input type="checkbox"/> Fail		
		<input type="checkbox"/> Pass <input type="checkbox"/> Fail		
		<input type="checkbox"/> Pass <input type="checkbox"/> Fail		
		<input type="checkbox"/> Pass <input type="checkbox"/> Fail		

(1) Only those race vehicles failing to comply with the "properly installed and well maintained muffler" requirements and/or the maximum allowable noise emission requirements, are required to be recorded on this form.

(2) Top Fuel Burning Drag vehicles are powered by greater than 50% alcohol or by nitromethane and are commonly known as top fuel or funny cars. These vehicles are not required to have a muffler.

(3) An Exhaust Turbocharged system is considered a "well maintained muffling" system.

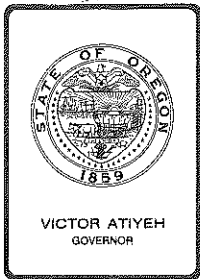
CHAPTER 6

NOISE IMPACT BOUNDARIES

- 6.1 General. Prior to the construction or operation of any permanent new motor sports facility, the owner shall submit for Department approval the projected daily Noise Impact Boundaries for the facility representing an estimate of maximum projected use. The data and analysis used for determining the boundary shall also be submitted for Department evaluation. The Noise Impact Boundary is a map of the area around the facility with the maximum daily operation Ldn - 55 dBA noise contour drawn on it. The information needed by the Department to evaluate the project are such things as:
- a) Maps giving the physical layout of the facility; the terrain of the land around the facility; the location and type of noise sensitive property nearby; and the local land use zoning.
 - b) Data about the type of events and vehicles using the facility including the days and hours of operation.
 - c) Information about practice sessions.
 - d) Information about recreation use at the facility.
 - e) Information on how the impact contours were predicted.
 - f) Information on the facility's public address system.

The facility owner should coordinate the development of the Noise Impact Boundaries for new facilities with the DEQ Noise Control Section.

NPCS35



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. G, December 3, 1982, EQC Meeting

Request for Authorization to Hold a Public Hearing
Concerning Proposed Changes in the New Source Review, Hot
Mix Asphalt Plant, and Volatile Organic Compound Rules in
the State Implementation Plan

Background

The Department is proposing several changes in the New Source Review, Hot Mix Asphalt Plant, and Volatile Organic Compound rules. These changes are required to correct wording problems, to update the rules where changes have been required by EPA, to make Oregon's stack height rule more consistent with EPA's stack height rule, and to streamline Department procedures. The Department feels that these changes will have no significant impact on air quality or on sources.

The proposed changes are discussed below and involve revising the following rules:

1. Definition of Non-attainment Area [OAR 340-20-225(16)].
2. Language corrections [OAR 340-20-245(2)(a)(C) and 260(2)].
3. Growth margins for volatile organic compounds [OAR 340-20-240(7)].
4. Stack Height Regulations [OAR 340-20-275].
5. Portable Hot Mix Asphalt Plants [OAR 340-25-120].
6. Commission approval for use of non-guideline models [OAR 340-20-245(4)].
7. Repeal of redundant "Bubble" rule in the Volatile Organic Compound rules [OAR 340-22-108].

Statement of Need

The Statement of Need prepared pursuant to ORS 183.335(2) is presented in Attachment 1.

Discussion

1. Definition of Non-attainment Area

The term 'nonattainment area' is defined in the New Source Review Rules as follows (OAR 340-20-225(16)) : "'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".

EPA has pointed out that section 107 of the Clean Air Act requires that all designations of areas as attainment, nonattainment, or unclassifiable must be approved by EPA. It is, therefore, proposed that the phrase "and approved by the Environmental Protection Agency" be added at the end of the definition of nonattainment area.

2. Language Corrections

Two minor language changes are required to clarify the meaning of wording in the New Source Review rule. In OAR 340-20-240(6), Special Exemption for the Salem Ozone Nonattainment Area, new sources and modifications of sources which would emit volatile organic compounds (VOC) are exempted from the offset requirement. A clarification needs to be added to OAR 340-20-245(2)(a)(C) to indicate that new sources or modifications of sources of VOC near Salem but outside of the nonattainment area are also exempted as follows:

(2) Air Quality Analysis:

(a) 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, (including secondary emissions), would not cause or contribute to air quality levels in excess of:

(A)..... (No Change)

(B)..... (No Change)

(C) An impact on a designated nonattainment area greater than the significant air quality impact levels (OAR 340-20-225 definition 23)). New sources or modifications of sources which would emit volatile organic compounds which may impact the Salem ozone nonattainment area are exempt from this requirement.

In OAR 340-20-260(2), Requirements for Net Air Quality Benefit, the words "in or" should be deleted from the fourth sentence as follows: "Proposed major source 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 unless the applicant demonstrates that the proposed emissions will not impact the non-attainment area." This sentence does not make sense with "in or" included, because the preceding sentences already require sources

within the nonattainment area to provide reductions equivalent to or greater than the proposed increases.

3. Growth Margins for Volatile Organic Compounds

As part of the ozone State Implementation Plans for Medford-Ashland and Portland, growth margins were developed for new major sources of volatile organic compounds. The growth margin for Medford-Ashland presently included in the New Source Review rules at OAR 340-20-240(7) needs to be revised. The growth margin for Portland is not presently included in the rules. It is proposed that OAR 340-20-240(7) be revised to read as follows:

(7) Growth Margins

The ozone control strategies for the Medford-Ashland and Portland ozone nonattainment areas establish growth margins for new major sources or major modifications which will emit volatile organic compounds. The growth margin shall be allocated on a first-come-first served basis depending on the date of submittal of a complete permit application. No single source shall receive an allocation of more than 50% of any remaining growth margin. The allocation of emission increases from the growth margins shall be calculated based on the ozone season (April 1 to October 31 of each year). The amount of each growth margin that is available is defined in the State Implementation Plan for each area and is on file with the Department.

4. Stack Height Regulations

EPA promulgated new requirements for stack heights on February 8, 1982. It is proposed that the Oregon rules be modified to conform to the new EPA requirements by:

- a. Removing the stack height rule from the New Source Review rules and establishing a new section on Stack Heights and Dispersion Techniques to make it clear that the stack height provision applies to all sources, not just major new sources or major modifications.
- b. Modifying the definitions of "dispersion technique" and "good engineering stack height" to conform to EPA definitions and adding definitions of three other terms used in the new EPA regulations.

The stack height rule limits neither the minimum or maximum stack height that may actually be constructed at a source. The rule does limit the maximum height that can be used for air quality modeling to good engineering practice (GEP) stack height. The rule does not allow any relaxation of control equipment requirements such as Best Available Control Technology (BACT).

In some cases, the rules may require sources to increase stack heights to avoid excessive concentrations created by downwash. The minimum definition of GEP for stacks not affected by structures or terrain features has been increased from 30 meters to 65 meters as allowed by the EPA regulations. This change will allow the Department greater flexibility in avoiding downwash problems.

In rare cases, the rules will require emission controls greater than BACT where standards or increments would be exceeded. In such cases the stack height could not be increased above good engineering practice stack height to avoid the more stringent control requirements.

It is therefore proposed that OAR 340-20-275, Stack Heights, and OAR 340-20-225(7) and (11), Definitions, be revoked and replaced by new provisions which would be renumbered OAR 340-20-340 and 345 Stack Heights and Dispersion Techniques. This provision is Attachment 2.

5. Portable Hot Mix Asphalt Plants

The rules for Hot Mix Asphalt Plants [OAR 340-25-120] need to be updated to eliminate a section that is now outdated and to change the permit issuance period from the present one year period to the same period as other permits (normally 5 years). The outdated provision was originally adopted to provide an exemption for portable hot mix plants locating in dry areas where water for scrubbers may not be available. In practice, this provision is not used and any temporary exemption for such facilities can be provided through normal variance procedures. These changes can be made by deleting the sections shown in brackets below:

Portable Hot Mix Asphalt Plants

340-25-120[(1) Portable hot mix asphalt plants temporarily located outside of special control areas and complying with the emission limitation of section 340-25-110(1) need not comply with rules 340-21-015 and 340-21-030, provided, however, that the particulate matter emitted does not create or tend to create a hazard to human, animal, or plant life, or unreasonably interfere with agriculture operations, recreation areas, or the enjoyment of life and property.]

[(2)] Portable hot mix asphalt plants may apply for air contaminant discharge permits within the area of Department jurisdiction without indicating specific site locations. [Said permits will be issued for periods not to exceed one (1) calendar year.] As a condition of said permit, the permittee will be required to obtain approval from the Department for the air pollution controls to be installed at each site location or set-up at least ten (10) days prior to operating at each site location or set-up.

6. Commission Approval for Use of Non-guideline Models

The New Source Review rule, under OAR 340-20-245(4), requires the approval of the Commission before air quality models which are not listed in EPA's Guideline on Air Quality Models can be used for reviewing new sources. It is proposed that the Department be given the authority to approve the use of non-guideline models. The approval of EPA would still be required. OAR 340-20-245(4) would be modified to read as follows:

- (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] Department 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.

7. Repeal of Redundant "Bubble" Rule

On August 28, 1981, the Commission adopted OAR 340-20-315, Alternative Emission Controls (Bubble) as part of the Plant Site Emission Limit rules. A limited bubble rule (OAR 340-22-108) was included in the Volatile Organic Compound (VOC) Rules when they were adopted in 1980. This VOC bubble rule is now redundant and should be revoked in favor of OAR 340-20-315.

Summation

The following housekeeping revisions are proposed by the Department to up-date the New Source Review, Hot Mix Asphalt Plant, and Volatile Organic Compound Rules. The proposed changes for each rule are shown on Attachment 3.

1. The definition of Nonattainment Area needs to be revised to indicate that the approval of EPA is required for nonattainment area designations. [OAR 340-20-2245(2)(a)(C) and 260(2)]
2. Two language corrections need to be made in the New Source Review rules to clarify the intent of the rules. [OAR 340-20-240(6) and 260(2)]
3. Growth margins for volatile organic compound emissions in Medford and Portland need to be updated in the rules. [OAR 340-20-240(7)]

4. The Stack Height rules are proposed to be revised to be more consistent with the new EPA rules. [OAR 340-20-275]
5. The Portable Hot Mix Asphalt Plant rules need to be revised to delete an outdated provision and to allow the Department to issue permits for longer than one year at a time. [OAR 340-25-120]
6. The Department should be granted authority to approve the use of non-guideline air quality models, rather than requiring Commission approval each time. [OAR 340-20-245(4)]
7. The limited bubble rule contained in the Volatile Organic Compound Rules is now redundant and should be revoked. [OAR 340-22-108]
8. The Department concludes that the above changes will have little or no significant impact on air quality or on sources.

Director's Recommendation

Based on the above summation, it is recommended that a public hearing be authorized concerning these proposed changes in the New Source Review, Hot Mix Asphalt Plant, and Volatile Organic Compound rules as shown in Attachment 3.

Bill

William H. Young

- Attachments:
1. Statement of Need for Proposed Rulemaking
 2. Stack Heights and Dispersion Techniques - Proposed Rule
 3. Rules Being Revised (for reference purposes)

L. Kostow:a
229-6459
November 9, 1982
AA2718

RULEMAKING STATEMENTS

for
Proposed Revisions to the New Source Review, Hot Mix Asphalt Plant,
and Volatile Organic Compound Rules

Pursuant to ORS 183.335, these statements provide information on the
intended action to amend a rule.

STATEMENT OF NEED:

Legal Authority

This proposal amends OAR 340-20-220 through 275, OAR 340-22-108 and OAR 340-25-120. It is proposed under authority of ORS 468.020 and 468.295.

Need for the Rule

These revisions to the New Source Review Rule, Hot Mix Asphalt Plant rule, and Volatile Organic Compound rule are required to correct wording problems, to update the rules where changes have been required by EPA and to streamline Department procedures.

Principal Documents Relied Upon

1. Approval and Promulgation of Implementation Plans: Oregon, EPA, Federal Register, August 13, 1982.
2. Stack Height Regulations, EPA, Federal Register, February 8, 1982.
3. Oregon State Implementation Plans for Ozone, Medford-Ashland and Portland Ozone Nonattainment Areas.

FISCAL AND ECONOMIC IMPACT STATEMENT:

The fiscal impact of these revisions on sources of air pollution is expected to be nil. The DEQ will be able to save personnel resources because of simplified administrative procedures.

LAND USE CONSISTENCY STATEMENT:

The proposed rule does not affect land use as defined in the Department's coordination program approved by the Land Conservation and Development Commission.

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON . . .

WHO IS AFFECTED:

New Sources and Modifications of Sources and Hot Mix Asphalt Plants

WHAT IS PROPOSED:

The Department of Environmental Quality is proposing to amend the New Source Review Rules, the Hot Mix Asphalt Plant rules, and the Volatile Organic Compound rules to correct wording problems, update the rules where changes have been required by EPA, and streamline Department procedures.

WHAT ARE THE HIGHLIGHTS:

1. The definition of Nonattainment Area needs to be revised to indicate that the approval of EPA is required for nonattainment area designations.
2. Two language corrections need to be made in the New Source Review rules to clarify the intent of the rules.
3. Growth margins for volatile organic compound emissions in Medford and Portland need to be updated in the rules.
4. The Stack Height rules need to be revised to meet the new EPA requirements.
5. The Portable Hot Mix Asphalt Plant rules need to be revised to delete an outdated provision and to allow the Department to issue permits for longer than one year at a time.
6. The Department should be granted authority to approve the use of non-guideline air quality models, rather than requiring Commission approval each time.
7. The limited bubble rule contained in the Volatile Organic Compound Rules is now redundant and should be revoked.



P.O. Box 1760
Portland, OR 97207

8/10/82

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-7813, and ask for the Department of Environmental Quality.

PUBN. AH (9/82)
AG1741

HOW TO COMMENT:

Copies of the complete proposed rule package may be obtained from the Air Quality Division in Portland or the regional office nearest you.

A public hearing will be held before a hearings officer at:

(To be Arranged)

Oral and written comments will be accepted at the public hearing. Written comments may be sent to the Department of Environmental Quality, Air Quality Division, but must be received by no later than (to be arranged).

WHAT IS THE NEXT STEP:

After public hearing the Environmental Quality Commission may adopt rule amendments identical to the proposed amendments, adopt modified rule amendments on the same subject matter, or decline to act. The adopted rules will be submitted to the U. S. Environmental Protection Agency as part of the State Clean Air Act Implementation Plan. The Commission's deliberation should come in February as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

PUBN. AH (9/82)
AG1741

Stack Heights and Dispersion Techniques

340-20-340 Definitions

(1) "Dispersion Technique" means any technique which attempts to affect the concentration of a pollutant in the ambient air by using that portion of a stack which exceeds good engineering practice stack height, varying the rate of emission of a pollutant according to ambient concentrations of that pollutant, or by addition of a fan or a reheater to obtain a less stringent emission limitation. The preceding sentence does not include: (a) the reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream; (b) the use of smoke management in agricultural or silvicultural programs; or (c) combining the exhaust gases from several stacks into one stack.

(2) "Excessive Concentrations" for the purpose of determining good engineering practice stack height in a modeling evaluation or field study means a maximum concentration due to downwash, wakes, or eddy effects produced by structures or terrain features which is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects.

(3) "Good Engineering Practice (GEP) Stack Height" means the greater of:

(a) 65 meters.

(b) $H_g = H + 1.5 L$, where

H_g = good engineering practice stack height, measured
from the ground level elevation at the base of the
stack.

H = height of nearby structure or structures measured from
ground level elevation at the base of the stack.

L = lesser dimension (height or width) of the nearby
structure or structures.

(c) The height demonstrated by a modeling evaluation or a field
study which is approved by the Department and ensures that
the emissions from a stack do not result in excessive
concentrations of any air pollutant as a result of downwash,
wakes, or eddy effects created by the source itself, nearby
structures, or terrain obstacles.

(4) "Nearby Structures" means those structures within a distance of
five times the lesser of the height or the width dimension of a
structure but not greater than one-half mile. The height of the
structure is measured from the ground level elevation at the base of
the stack.

340-20-345 Limitations

(1) The degree of emission limitation required for any source shall not be affected in any manner by so much of the stack height as exceeds good engineering practice (GEP) or by any other dispersion technique. This provision applies to new sources and, modifications of sources, and to existing sources proposing to increase stack heights.

(2) An emission limitation established pursuant to the proposed construction of a stack under the criteria established in 340-20-340(3)(c) shall be subject to notice and opportunity for public comment concerning the modeling evaluation or field study that was used to demonstrate the need for the increased stack height.

OREGON ADMINISTRATIVE RULES
CHAPTER 340, DIVISION 20 -- DEPARTMENT OF ENVIRONMENTAL QUALITY

New Source Review

Applicability

340-20-220 (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 340-20-280 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 are subject to other Department rules including Highest and Best Practicable Treatment and Control Required (OAR 340-20-001), Notice of Construction and Approval of Plans (OAR 340-20-020 to 340-20-032), Air Contaminant Discharge Permits (OAR 340-20-140 to 340-20-185), Emission Standards for Hazardous Air Contaminants (OAR 340-25-450 to 340-25-480), and Standards of Performance for New Stationary Sources (OAR 340-25-505 to 340-20-545).

Stat. Auth.: ORS Ch. 468

Hist: DEQ 25-1981, f. & ef. 9-8-81

Definitions

340-20-225 (1) "Actual emissions" means the mass rate of emissions of a pollutant from an emissions source:

(a) In general, actual emissions as of the baseline period shall equal the average rate at which the source actually emitted the pollutant during the baseline period and which is 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 had not yet begun normal operation in the baseline period, actual emissions shall equal the 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) "Baseline Period" means either calendar years 1977 or 1978. The Department shall allow the use of a prior time period upon a determination that it is more representative of normal source operation.

(4) "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.

(5) "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.

(6) "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.

(7) "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.

(8) "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.

(9) "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.

(10) "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.

(11) "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) $H_C = H + 1.5 L$, for plumes influenced by structures; where:

(A) H_C = good engineering practice stack height;

(B) H = height of structure or nearby structure;

(C) 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.

(12) "Growth Increment" means an allocation of some part of an airshed's capacity to accommodate future new major sources and major modifications of sources.

(13) "Lowest Achievable Emission Rate (LAER)" means that rate of emissions which reflects: 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 the most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent. In no

OREGON ADMINISTRATIVE RULES
CHAPTER 340, DIVISION 20 — DEPARTMENT OF ENVIRONMENTAL QUALITY

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.

(14) "Major Modification" means any physical change or change of operation of a 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 for that pollutant, whichever time is more recent. If accumulation of emission increases results in a net significant emission rate increase, the modification causing such increases become subject to the New Source Review requirements including the retrofit of required controls.

(15) "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)).

(16) "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, *and approved by EPA.*

(17) "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.

(18) "Plant Site Emission Limit" means the total mass emissions per unit time of an individual air pollutant specified in a permit for a source.

(19) "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.

(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 be specific, well defined, quantifiable, and 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:

(a) Emission rates equal to or greater than the following for air pollutants regulated under the Clean Air Act:

(B) Nitrogen Oxides.....	40 tons/year
(C) Particulate Matter*.....	25 tons/year
(D) Sulfur Dioxide.....	40 tons/year
(E) Volatile Organic Compounds*.....	40 tons/year
(F) Lead.....	0.6 ton/year
(G) Mercury.....	0.1 ton/year
(H) Beryllium.....	0.0004 ton/year
(I) Asbestos.....	0.007 ton/year
(J) Vinyl Chloride.....	1 ton/year
(K) Fluorides.....	3 tons/year
(L) Sulfuric Acid Mist.....	7 tons/year
(M) Hydrogen Sulfide.....	10 tons/year
(N) Total reduced sulfur (including hydrogen sulfide).....	10 tons/year
(O) Reduced sulfur compounds (including hydrogen sulfide).....	10 tons/year

*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.

(b) For pollutants not listed above, the Department shall determine the rate that constitutes a significant emission rate.

(c) 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/m³ (24 hour average) shall be deemed to be emitting at a significant emission rate (see Table 2).

(23) "Significant Air Quality Impact" means an ambient air quality impact which is equal to or greater than those set out in Table 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 and is capable of impacting the 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.

Stat. Auth.: ORS Ch. 468
Hist: DEQ 25-1981, f. & ef. 9-8-81

Procedural Requirements

340-20-230 (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;

<u>Pollutant</u>	<u>Significant Emission Rate</u>
(A) Carbon Monoxide	100 tons/year

(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:

(a) 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.

(b) 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.

(c) 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 Chapter 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 working 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.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 25-1981, f. & ef. 9-8-81

Review of New Sources and Modifications for Compliance With Regulations

340-20-235 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.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 25-1981, f. & ef. 9-8-81

Requirements for Sources in Nonattainment Areas

340-20-240 New major sources and major modifications which are located in designated nonattainment areas shall meet the requirements listed below:

(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) for each nonattainment pollutant. In the case of a major modification, the requirement for LAER shall apply only to each new or modified emission unit which increases emissions. 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 reduction may be used to demonstrate compliance with this section. Those emission increases for which offsets can be found through the best efforts of the applicant 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:

(a) 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.

(b) 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 this rule but are exempt from all other sections of this rule.

(7) Growth Increments: Medford-Ashland Ozone Nonattainment Area:

(a) 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 by year:

(A) 1980 to 1982	185 tons of VOC
(B) 1983	388 tons of VOC
(C) 1984	591 tons of VOC
(D) 1985	794 tons of VOC
(E) 1986	997 tons of VOC
(F) 1987	1200 tons of VOC

(b) 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.

Stat. Auth.: ORS Ch. 468
Hist: DEQ 25-1981, f. & ef. 9-8-81

↑ Replaced

Requirements for Sources in Attainment or Unclassified Areas (Prevention of Significant Deterioration)

340-20-245 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 (22)). 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:

(a) 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, (including secondary emissions), 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)). ← Sentence added

(b) 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.

(c) 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 consider the requirements of section (2) of this rule to have been met.

(3) Exemption for Sources Not Significantly Impacting Designated Nonattainment Areas:

(a) A proposed major source is exempt from OAR 340-20-220 to 340-20-275 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 following categories or less than 250 tons/year for sources not in the following source categories:

- (i) Fossil fuel-fired steam electric plants of more than 250 million BTU/hour heat input,
- (ii) Coal cleaning plants (with thermal dryers),
- (iii) Kraft pulp mills,
- (iv) Portland cement plants,
- (v) Primary Zinc Smelters,
- (vi) Iron and Steel Mill Plants,
- (vii) Primary aluminum ore reduction plants,
- (viii) Primary copper smelters,
- (ix) Municipal Incinerators capable of charging more than 250 tons of refuse per day,
- (x) Hydrofluoric acid plants,
- (xi) Sulfuric acid plants,
- (xii) Nitric acid plants,
- (xiii) Petroleum Refineries,
- (xiv) Lime plants,
- (xv) Phosphate rock processing plants,
- (xvi) Coke oven batteries,
- (xvii) Sulfur recovery plants,
- (xviii) Carbon black plants (furnace process),
- (xix) Primary lead smelters,
- (xx) Fuel conversion plants,
- (xxi) Sintering plants,
- (xxii) Secondary metal production plants,
- (xxiii) Chemical process plants,
- (xxiv) Fossil fuel fired boilers (or combinations thereof) totaling more than 250 million BTU per hour heat input,
- (xxv) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels,
- (xxvi) Taconite ore processing plants,
- (xxvii) Glass fiber processing plants,
- (xxviii) Charcoal production plants.

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(b) Major modifications are not exempted under this section unless the source including the modifications meets the requirements of paragraphs (a)(A) and (B) above. Owners or operators of proposed sources which are exempted by this provision should refer to OAR 340-20-020 to 340-20-032 and OAR 340-20-140 to 340-20-185 for possible applicable requirements.

(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 requirement specified in the "Guidelines 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)(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 or any applicable increment.

(B) 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.

(C) 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:

- (i) Carbon monoxide — 575 $\mu\text{g}/\text{m}^3$, 8 hour average,
- (ii) Nitrogen dioxide — 14 $\mu\text{g}/\text{m}^3$, annual average,
- (iii) Total suspended particulate — 10 $\mu\text{g}/\text{m}^3$, 24 hour average,
- (iv) Sulfur dioxide — 13 $\mu\text{g}/\text{m}^3$, 24 hour average,
- (v) Ozone — Any net increase of 100 tons/year or more of volatile organic compounds from a source of modification subject to PSD is required to perform an ambient impact analysis, including the gathering of ambient air quality data,
- (vi) Lead — 0.1 $\mu\text{g}/\text{m}^3$, 24 hour average,
- (vii) Mercury — 0.25 $\mu\text{g}/\text{m}^3$, 24 hour average,
- (viii) Beryllium — 0.0005 $\mu\text{g}/\text{m}^3$, 24 hour average,
- (ix) Fluorides — 0.25 $\mu\text{g}/\text{m}^3$, 24 hour average,
- (x) Vinyl chloride — 15 $\mu\text{g}/\text{m}^3$, 24 hour average,

- (xi) Total reduced sulfur — 10 $\mu\text{g}/\text{m}^3$, 1 hour average,
- (xii) Hydrogen sulfide — 0.04 $\mu\text{g}/\text{m}^3$, 1 hour average,
- (xiii) Reduced sulfur compounds — 10 $\mu\text{g}/\text{m}^3$, 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 or 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(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. If the Department concurs with such demonstration the permit shall not be issued.

(Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.)

Stat. Auth.: ORS Ch. 468

Hist: DEQ 25-1981, f. & ef. 9-8-81

Exemptions

340-20-250 (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.

NOTE: 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, which would be in operation at a site for less than two years, such as pilot plants and portable facilities, and emissions resulting from the construction phase of a new source or modification must comply with OAR 340-20-240(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 in 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 and would not involve a physical change in the source 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. This exemption shall not be allowed for new sources or modifications that received permits to construct after January 1, 1978.

(4) Also refer to OAR 340-20-245(3) for exemptions pertaining to sources smaller than the Federal Size-Cutoff Criteria.

Stat. Auth.: ORS Ch. 468
Hist: DEQ 25-1981, f. & ef. 9-8-81

Baseline for Determining Credit for Offsets

340-20-255 The baseline for determining credit for emission offsets shall be the Plant Site Emission Limit established pursuant to OAR 340-20-300 to 340-20-320 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 permitted 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.

Stat. Auth.: ORS Ch. 468
Hist: DEQ 25-1981, f. & ef. 9-8-81

Requirements for Net Air Quality Benefit

340-20-260 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. This demonstration may require that air quality modeling be conducted according to the procedures specified in the "Guideline on Air Quality Models". 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 modification 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 unless the applicant demonstrates that the proposed emissions will not impact the nonattainment area.

(3) The emission reductions must be of the same type of pollutant as the emissions from the new source or modifica-

tion. Sources of respirable particulate (less than three microns) must be offset with particulate in the same 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.

Stat. Auth.: ORS Ch. 468
Hist: DEQ 25-1981, f. & ef. 9-8-81

Emission Reduction Credit Banking

340-20-265 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 340-20-320.

(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 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. The one year limitation for contemporaneous offsets shall not be applicable to those shutdowns or curtailments which are to be used as internal offsets within a plant as part of a specific plan. Such a plan for use of internal offsets shall be submitted to the Department and receive written approval within one year of the permanent shutdown or curtailment. A permanent source shutdown or curtailment shall be considered to have occurred when a permit is modified, revoked or expires without renewal pursuant to the criteria established in OAR 340-14-005 through 340-14-050.

(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) Emission reductions must be in the amount of ten tons per year or more to be creditable for banking except as follows:

(a) In the Medford-Ashland AQMA emission reductions must be at least in the amount specified in Table 2 of OAR 340-20-225(22),

(b) In Lane County, the Lane Regional Air Pollution Authority may adopt lower levels.

(7) 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.

(8) 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.

(9) 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.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 25-1981, f. & ef. 9-8-81

Fugitive and Secondary Emissions

340-20-270 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 and 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 and become subject to these rules.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 25-1981, f. & ef. 9-8-81

Stack Heights

340-20-275 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 rule shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before that date.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 25-1981, f. & ef. 9-8-81

Plant Site Emission Limits

Policy

340-20-300 The Commission recognizes the need to establish a more definitive method for regulating increases and decreases in air emissions of air quality permit holders as contained in OAR 340-20-301 through 340-20-320. However, by the adoption of these rules, the Commission does not intend to: limit the use of existing production capacity of any air quality permittee; cause any undue hardship or expense to any permittee due to the utilization of existing unused productive capacity; or create inequity within any class of permittees subject to specific industrial standards which are based on emissions related to production. PSELs can be established at levels higher than baseline provided a demonstrated need exists to emit at a higher level and PSD increments and air quality standards would not be violated and reasonable further progress in implementing control strategies would not be impeded.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 25-1981, f. & ef. 9-8-81

Requirement for Plant Site Emission Limits

340-20-301 (1) 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.

(2) The emissions limits established by PSELs shall provide the basis for:

(a) Assuring reasonable further progress toward attaining compliance with ambient air standards.

(b) Assuring that compliance with ambient air standards and Prevention of Significant Deterioration increments are being maintained.

(c) Administering offset, banking and bubble programs.

(d) Establishing the baseline for tracking consumption of Prevention of Significant Deterioration Increments.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 25-1981, f. & ef. 9-8-81

Definitions

340-20-305 (1) "Actual Emissions" means the mass rate of emissions of a pollutant from an emissions source:

(a) In general, actual emissions 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. 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 emissions source which had 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 either calendar years 1977 or 1978. The Department shall allow the use of a prior time period

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upon a determination that it is more representative of normal source operation.

(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 mass emissions per unit time of an individual air pollutant specified in a permit for a source.

Stat. Auth.: ORS Ch. 468
Hist: DEQ 25-1981, f. & ef. 9-8-81

Criteria for Establishing Plant Site Emission Limits

340-20-310 (1) For existing sources, PSELs shall be based on the baseline emission rate for a particular pollutant at a source and shall be adjusted upward or downward pursuant to Department Rules:

(a) If an applicant requests that the Plant Site Emission Limit be established at a rate higher than the baseline emission rate, the applicant shall:

(A) Demonstrate that the requested increase is less than the significant emission rate increase defined in OAR 340-20-225(22); or

(B) Provide an assessment of the air quality impact pursuant to procedures specified in OAR 340-20-240 to 340-20-245. A demonstration that no air quality standard or PSD increment will be violated in an attainment area or that a growth increment or offset is available in a nonattainment area shall be sufficient to allow an increase in the Plant Site Emission Limit to an amount not greater than the plant's demonstrated need to emit as long as no physical modification of an emissions unit is involved.

(b) Increases above baseline emission rates shall be subject to public notice and opportunity for public hearing pursuant to the Department's permit requirements.

(2) PSELs 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) Mass emission limits 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, PSELs shall be based on application of applicable control equipment requirements and projected operating conditions.

(6) PSELs 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 OAR 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 Air Contaminant Discharge Permit requirements and 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.

Stat. Auth.: ORS Ch. 468
Hist: DEQ 25-1981, f. & ef. 9-8-81

Alternative Emission Controls (Bubble)

340-20-315 Alternative emission controls may be approved for use within a plant site such that specific mass emission limit rules are exceeded provided that:

(1) Such alternatives are not specifically prohibited by a permit condition.

(2) Net emissions for each pollutant are not increased above the Plant Site Emission Limit.

(3) The net air quality impact is not increased as demonstrated by procedures required by OAR 340-20-260 (Requirements for Net Air Quality Benefit).

(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 a previously issued permit and New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) where required, are not relaxed.

(6) Specific mass emission limits are established for each emission unit involved such that compliance with the PSEL can be readily determined.

(7) Application is made for a permit modification and such modification is approved by the Department.

Stat. Auth.: ORS Ch. 468
Hist: DEQ 25-1981, f. & ef. 9-8-81

Temporary PSD Increment Allocation

340-20-320 (1) 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 nuisance condition is created.

(d) The applicant's proposed and approved objective continues to be realized.

(2) When such demonstration is being made for changes to the PSEL, it shall be presumed that ambient air quality monitoring shall not be required of the applicant for changes in hours of operation, changes in production levels, voluntary fuel switching or for cogeneration projects unless, in the opinion of the Department, extraordinary circumstances exist.

(3) 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.

(4) Such temporary allocations must be specifically time limited and may be recalled under specified notice conditions.

Stat. Auth.: ORS Ch. 468
Hist: DEQ 25-1981, f. & ef. 9-8-81

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(6) "Particulate matter" means any matter except combined water, which exists as a liquid or solid at standard conditions.

(7) "Special control areas" means for the purpose of this rule any location within:

(a) Multnomah, Clackamas, Columbia, Washington, Yamhill, Polk, Benton, Marion, Linn, and Lane Counties.

(b) The Umpqua Basin as defined in section 340-21-010(2).

(c) The Rogue Basin as defined in section 340-21-010(3).

(d) Any incorporated city or within six (6) miles of the city limits of said incorporated city.

(e) Any area of the state within one (1) mile of any structure or building used for a residence.

(f) Any area of the state within two (2) miles straight line distance or air miles of any paved public road, highway, or freeway having a total of two (2) or more traffic lanes.

Stat. Auth.: ORS Ch.

Hist: DEQ 49, f. 2-9-73, ef. 3-1-73

Control Facilities Required

340-25-110 (1) No person shall operate any hot mix asphalt plant, either portable or stationary, located within any area of the state outside special control areas unless all dusts and gaseous effluents generated by the plant are subjected to air cleaning device or devices having a particulate collection efficiency of at least 80% by weight.

(2) No person shall operate any hot mix asphalt plant, either portable or stationary located within any special control area of the state without installing and operating systems or processes for the control of particulate emissions so as to comply with the emission limits established by the process weight table, Table 1, attached herewith and by reference made a part of this rule and the emission limitations in sections 340-21-015(2) and (3), and rule 340-21-030.

Stat. Auth.: ORS Ch.

Hist: DEQ 49, f. 2-9-73, ef. 3-1-73

Other Established Air Quality Limitations

340-25-115 The emission limits established under these rules are in addition to visible emission and other ambient air standards, established or to be established by the Environmental Quality Commission unless otherwise provided by rule or regulation.

Stat. Auth.: ORS Ch.

Hist: DEQ 49, f. 2-9-73, ef. 3-1-73

Portable Hot Mix Asphalt Plants

340-25-120 (1) Portable hot mix asphalt plants temporarily located outside of special control areas and complying with the emission limitation of section 340-25-110(1) need not comply with rules 340-21-015 and 340-21-030, provided, however, that the particulate matter emitted does not create or tend to create a hazard to human, animal, or plant life, or unreasonably interfere with agriculture operations, recreation areas, or the enjoyment of life and property.

(2) Portable hot mix asphalt plants may apply for air contaminant discharge permits within the area of Department jurisdiction without indicating specific site locations. [Said permits will be issued for periods not to exceed one (1) calendar year.] As a condition of said permit, the permittee will be required to obtain approval from the Department for the air pollution controls to be installed at each site location or set-up at least ten (10) days prior to operating at each site location or set-up.

Stat. Auth.: ORS Ch.

Hist: DEQ 49, f. 2-9-73, ef. 3-1-73

Ancillary Sources of Emission — Housekeeping of Plant Facilities

340-25-125 (1) Ancillary air contamination sources from the plant and its facilities which emit air contaminants into the atmosphere such as, but not limited to, the drier openings, screening and classifying system, hot rock elevator, bins, hoppers, and pug mill mixer, shall be controlled at all times so as to maintain the highest possible level of air quality and the lowest possible discharge of air contaminants.

(2) The handling of aggregate and traffic shall be conducted at all times so as to minimize emissions into the atmosphere.

Stat. Auth.: ORS Ch.

Hist: DEQ 49, f. 2-9-73, ef. 3-1-73

Kraft Pulp Mills

(ED. NOTE: Administrative Order DEQ 50 repealed previous rules 340-25-155 through 340-25-195 (consisting of SA 38, filed 4-4-69).]

Definitions

340-25-150 As used in these regulations, unless otherwise required by context:

(1) "Continual Monitoring" means sampling and analysis, in a continuous or timed sequence, using techniques which will adequately reflect actual emission levels or concentrations on a continuous basis.

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

(3) "Emission" means a release into the atmosphere of air contaminants.

(4) "Kg S/metric ton" means kilograms of Total Reduced Sulfur per metric ton of production. The corresponding English unit is "lb S/ton".

(5) "Kraft Mill" or "Mill" means any industrial operation which uses for a cooking liquor an alkaline sulfide solution containing sodium hydroxide and sodium sulfide in its pulping process.

(6) "Lime Kiln" means any production device in which calcium carbonate is thermally converted to calcium oxide.

(7) "Non-Condensibles" means gases and vapors, contaminated with TRS gases, from the digestion and multiple-effect evaporation processes of a mill that are not condensed with the equipment used in said processes.

(8) "Other Sources" means sources of TRS emissions in a kraft mill other than recovery furnaces and lime kilns, including but not limited to:

(a) Vents from knotters, brown stock washing systems, evaporators, blow tanks, smelt tanks, blow heat accumulators, black liquor storage tanks, black liquor oxidation system, pre-steaming vessels, tall oil recovery operations;

(b) Any operation connected with the treatment of condensate liquids within the mill; and

(c) Any vent which is shown to be a significant contributor of odorous gases.

(9) "Particulate Matter" means all solid material in an emission stream which may be removed on a glass fiber filter maintained during sampling at stack temperature or above the water vapor dew point of the stack gas, whichever is greater, but not more than 202° C. (400° F.). The glass fiber filter to be used shall be MSA 1106BH or equivalent.

(10) "Parts Per Million (ppm)" means parts of a contaminant per million parts of gas by volume on a dry-gas basis (1 ppm equals 0.0001% by volume).

(11) "Production" means the daily average amount of air-dried unbleached kraft pulp, or equivalent, produced as determined by dividing the monthly total production by the number of days specific production equipment operates, and expressed in air-dried metric tons (admt) per day. The corresponding English unit is air-dried tons (adt) per day.

OREGON ADMINISTRATIVE RULES
CHAPTER 340, DIVISION 22 — DEPARTMENT OF ENVIRONMENTAL QUALITY

mentation plan including increments of progress shall be submitted to the Department for review no later than May 1, 1979. For each emission source required to comply with VOC rules adopted by the Commission on December 15, 1978. For sources required to comply with the VOC rules amended by the Commission on June 8, 1979, compliance schedules shall be submitted no later than October 1, 1979. See Table 1 for later compliance dates. Compliance shall be demonstrated no later than the date specified in the individual sections of these rules and as shown in Table 1. The Department shall within 45 days of receipt of a complete proposed program and implementation plan, complete an evaluation and advise the applicant of its approval or other findings.

(3) The compliance schedule increments of progress set out in Table 1 shall be completed.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; Renumbered from 340-22-106(3) & (4); DEQ 23-1980, f. & ef. 9-26-80

Applicability of Alternative Control Systems

340-22-108 (1) A source may install and operate alternative control systems or changes in process on a plant site basis and be exempt from these rules provided:

(a) An application for an alternative control system is submitted in writing; and

(b) An application and supporting documentation demonstrates that the volatile organic compound reduction in emissions is equal to or greater than that required by the General Emission Standards for Volatile Organic Compounds; and

(c) Approval is granted in writing by the Department;

(d) The alternative control system is approved by the Environmental Protection Agency.

(2) Alternative Control Systems shall be approved for a specified period of time, however, such approval shall not exempt the source from complying with subsequent rule modifications or air quality control strategies required, provided further the source may provide new alternative control systems to meet the new promulgation or requirements.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 23-1980, f. & ef. 9-26-80

Small Gasoline Storage Tanks

340-22-110 (1) No person may transfer or cause or allow the transfer of gasoline from any delivery vessel which was filled at a Bulk Gasoline Terminal or nonexempted Bulk Gasoline Plant into any stationary storage tank of less than 40,000 gallon capacity unless:

(a) The tank is filled by Submerged Fill; and

(b) A vapor recovery system is used which consists of a Certified Underground Storage Tank Device capable of collecting the vapor from volatile organic liquids and gases so as to prevent their emission to the outdoor atmosphere. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place. Or

(c) The vapors are processed by a system demonstrated to the satisfaction of the Department to be of equal effectiveness.

(2) Exemptions. This section will not apply to:

(a) Transfers made to storage tanks of gasoline dispensing facilities equipped with floating roofs or their equivalent;

(b) Stationary gasoline storage containers of less than 2,085 liters (550 gallons) capacity used exclusively for the fueling of implements of farming, provided the containers use submerged fill;

(c) Stationary gasoline storage tanks located at a gasoline dispensing facility that are filled by a delivery vessel which was filled at an exempted bulk gasoline plant; provided that the storage tanks use submerged fill. However, in the Portland-

Vancouver AQMA, no person shall deliver gasoline to a gasoline dispensing facility at a rate exceeding 10,000 gallons per month from a bulk gasoline plant, unless the gasoline vapor is handled as required by subsection (1)(b) or (c) of this rule.

(3) The owner, operator, or builder of any stationary storage container subject to this rule shall comply by April 1, 1981, except where added equipment is required by rule changes adopted in 1980, compliance is delayed to April 1, 1983.

(4) Compliance with subsection (1)(b) of this rule shall be determined by verification of use of equipment identical to equipment most recently approved and listed for such use by the Department or by testing in accordance with Method 30 on file with the Department.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80

Bulk Gasoline Plants and Delivery Vessel(s)

340-22-120 (1) No person shall transfer or allow the transfer of gasoline to or from a bulk gasoline plant unless:

(a) Each stationary storage tank and each delivery vessel uses submerged fill when transferring gasoline;

(b) The displaced vapors from filling each tank and each delivery vessel are prevented from being released to the atmosphere through use of a vapor tight vapor balance system, or equivalent system as approved in writing by the Department. Exceptions and limitations are as follows in subsections (1)(c), (d), and (e) of this rule;

(c) If a bulk gasoline plant which is located in the Portland AQMA, transfers less than 4,000 gallons of gasoline per day (annual through-put divided by the days worked), or if each of the dispensing facilities to which the plant delivers receives less than 10,000 gallons per month, then capture of displaced vapors during the filling of delivery vessel(s) from the bulk plant is exempt from subsection (1)(b) of this rule and the bulk plant's customers are exempt from rule 340-22-110(1)(b) and (c). If a bulk gasoline plant is located in the Medford-Ashland AQMA, or in the Salem SATS, capture of displaced vapors during the filling of delivery vessel(s) from the bulk plant is exempt from subsection (1)(b) of this rule and the bulk plant's customers are exempt from rule 340-22-110(1)(b) and (c).

(d) Each stationary gasoline storage tank may release vapor to the atmosphere through a pressure relief valve set to release at no less than 3.4 kPa (.50 psi) or some other setting approved in writing by the Department.

(e) Gasoline is handled in a manner to prevent spillage, discharging into sewers, storage in open containers, or handled in any other manner that would result in evaporation. If more than five gallons are spilled, the operator shall report the spillage in accordance with rules 340-21-065 to 340-21-075.

(2) The owner(s) or operator(s) of bulk gasoline plants and delivery vessels subject to this rule shall comply with the provisions of this rule by April 1, 1981, except where added equipment is required by rule changes adopted in 1980, compliance is delayed to April 1, 1983.

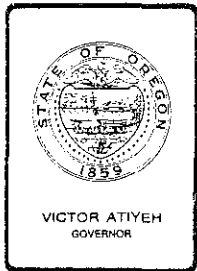
(3) Compliance with subsection (1)(b) of this rule shall be determined by verification of use of equipment approved by the Department and/or by testing and monitoring in accordance with applicable portions of rule 340-22-137 and/or Method 31 and/or 32 on file with the Department.

(4) The owner or operator of a gasoline delivery vessel shall maintain the vessel to be vapor tight at all times, in accordance with rule 340-22-137(1), if such vessel is part of a vapor balance system required by these rules.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80

imp



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. G, December 3, 1982, EQC Meeting

Request for Authorization to Hold a Public Hearing Concerning Proposed Changes in the New Source Review, Hot Mix Asphalt Plant, and Volatile Organic Compound Rules in the State Implementation Plan

Background

The Department is proposing several changes in the New Source Review, Hot Mix Asphalt Plant, and Volatile Organic Compound rules. These changes are required to correct wording problems, to update the rules where changes have been required by EPA, to make Oregon's stack height rule more consistent with EPA's stack height rule, and to streamline Department procedures. The Department feels that these changes will have no significant impact on air quality or on sources.

The proposed changes are discussed below and involve revising the following rules:

1. Definition of Non-attainment Area [OAR 340-20-225(16)].
2. Language corrections [OAR 340-20-245(2)(a)(C) and 260(2)].
3. Growth margins for volatile organic compounds [OAR 340-20-240(7)].
4. Stack Height Regulations [OAR 340-20-275].
5. Portable Hot Mix Asphalt Plants [OAR 340-25-120].
6. Commission approval for use of non-guideline models [OAR 340-20-245(4)].
7. Repeal of redundant "Bubble" rule in the Volatile Organic Compound rules [OAR 340-22-108].

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with R. G. Bunch
Administrative Analysis
epm/ps from [unclear]
[unclear]*

*approved by EPA
rural sources
epmc
include exemption used to
reside*

Statement of Need

The Statement of Need prepared pursuant to ORS 183.335(2) is presented in Attachment 1.

Discussion

1. Definition of Non-attainment Area

The term 'nonattainment area' is defined in the New Source Review Rules as follows (OAR 340-20-225(16)) : "'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".

EPA has pointed out that section 107 of the Clean Air Act requires that all designations of areas as attainment, nonattainment, or unclassifiable must be approved by EPA. It is, therefore, proposed that the phrase "and approved by the Environmental Protection Agency" be added at the end of the definition of nonattainment area.

2. Language Corrections

Two minor language changes are required to clarify the meaning of wording in the New Source Review rule. In OAR 340-20-240(6), Special Exemption for the Salem Ozone Nonattainment Area, new sources and modifications of sources which would emit volatile organic compounds (VOC) are exempted from the offset requirement. A clarification needs to be added to OAR 340-20-245(2)(a)(C) to indicate that new sources or modifications of sources of VOC near Salem but outside of the nonattainment area are also exempted as follows:

(2) Air Quality Analysis:

(a) 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, (including secondary emissions), would not cause or contribute to air quality levels in excess of:

(A)..... (No Change)

(B)..... (No Change)

(C) An impact on a designated nonattainment area greater than the significant air quality impact levels (OAR 340-20-225 definition 23)). New sources or modifications of sources which would emit volatile organic compounds which may impact the Salem ozone nonattainment area are exempt from this requirement.

In OAR 340-20-260(2), Requirements for Net Air Quality Benefit, the words "in or" should be deleted from the fourth sentence as follows: "Proposed major source 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 unless the applicant demonstrates that the proposed emissions will not impact the non-attainment area." This sentence does not make sense with "in or" included, because the preceding sentences already require sources

within the nonattainment area to provide reductions equivalent to or greater than the proposed increases.

3. Growth Margins for Volatile Organic Compounds

As part of the ozone State Implementation Plans for Medford-Ashland and Portland, growth margins were developed for new major sources of volatile organic compounds. The growth margin for Medford-Ashland presently included in the New Source Review rules at OAR 340-20-240(7) needs to be revised. The growth margin for Portland is not presently included in the rules. It is proposed that OAR 340-20-240(7) be revised to read as follows:

(7) Growth Margins

The ozone control strategies for the Medford-Ashland and Portland ozone nonattainment areas establish growth margins for new major sources or major modifications which will emit volatile organic compounds. The growth margin shall be allocated on a first-come-first served basis depending on the date of submittal of a complete permit application. No single source shall receive an allocation of more than 50% of any remaining growth margin. The allocation of emission increases from the growth margins shall be calculated based on the ozone season (April 1 to October 31 of each year). The amount of each growth margin that is available is defined in the State Implementation Plan for each area and is on file with the Department.

4. Stack Height Regulations

EPA promulgated new requirements for stack heights on February 8, 1982. It is proposed that the Oregon rules be modified to conform to the new EPA requirements by:

- a. Removing the stack height rule from the New Source Review rules and establishing a new section on Stack Heights and Dispersion Techniques to make it clear that the stack height provision applies to all sources, not just major new sources or major modifications.
- b. Modifying the definitions of "dispersion technique" and "good engineering stack height" to conform to EPA definitions and adding definitions of three other terms used in the new EPA regulations.

The stack height rule limits neither the minimum or maximum stack height that may actually be constructed at a source. The rule does limit the maximum height that can be used for air quality modeling to good engineering practice (GEP) stack height. The rule does not allow any relaxation of control equipment requirements such as Best Available Control Technology (BACT).

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restrictive
than other
states*

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In some cases, the rules may require sources to increase stack heights to avoid excessive concentrations created by downwash. The minimum definition of GEP for stacks not affected by structures or terrain features has been increased from 30 meters to 65 meters as allowed by the EPA regulations. This change will allow the Department greater flexibility in avoiding downwash problems.

In rare cases, the rules will require emission controls greater than BACT where standards or increments would be exceeded. In such cases the stack height could not be increased above good engineering practice stack height to avoid the more stringent control requirements.

It is therefore proposed that OAR 340-20-275, Stack Heights, and OAR 340-20-225(7) and (11), Definitions, be revoked and replaced by new provisions which would be renumbered OAR 340-20-340 and 345 Stack Heights and Dispersion Techniques. This provision is Attachment 2.

5. Portable Hot Mix Asphalt Plants

The rules for Hot Mix Asphalt Plants [OAR 340-25-120] need to be updated to eliminate a section that is now outdated and to change the permit issuance period from the present one year period to the same period as other permits (normally 5 years). The outdated provision was originally adopted to provide an exemption for portable hot mix plants locating in dry areas where water for scrubbers may not be available. In practice, this provision is not used and any temporary exemption for such facilities can be provided through normal variance procedures. These changes can be made by deleting the sections shown in brackets below:

Portable Hot Mix Asphalt Plants

*Original rule
deleted when
moved part 345*

~~340-25-120[(1) Portable hot mix asphalt plants temporarily located outside of special control areas and complying with the emission limitation of section 340-25-110(1) need not comply with rules 340-21-015 and 340-21-030, provided, however, that the particulate matter emitted does not create or tend to create a hazard to human, animal, or plant life, or unreasonably interfere with agriculture operations, recreation areas, or the enjoyment of life and property.]~~

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[(2)] Portable hot mix asphalt plants may apply for air contaminant discharge permits within the area of Department jurisdiction without indicating specific site locations. ~~[Said permits will be issued for periods not to exceed one (1) calendar year.]~~ As a condition of said permit, the permittee will be required to obtain approval from the Department for the air pollution controls to be installed at each site location or set-up at least ten (10) days prior to operating at each site location or set-up.

6. Commission Approval for Use of Non-guideline Models

The New Source Review rule, under OAR 340-20-245(4), requires the approval of the Commission before air quality models which are not listed in EPA's Guideline on Air Quality Models can be used for reviewing new sources. It is proposed that the Department be given the authority to approve the use of non-guideline models. The approval of EPA would still be required. OAR 340-20-245(4) would be modified to read as follows:

- (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] Department 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.

7. Repeal of Redundant "Bubble" Rule

On August 28, 1981, the Commission adopted OAR 340-20-315, Alternative Emission Controls (Bubble) as part of the Plant Site Emission Limit rules. A limited bubble rule (OAR 340-22-108) was included in the Volatile Organic Compound (VOC) Rules when they were adopted in 1980. This VOC bubble rule is now redundant and should be revoked in favor of OAR 340-20-315.

Summation

The following housekeeping revisions are proposed by the Department to up-date the New Source Review, Hot Mix Asphalt Plant, and Volatile Organic Compound Rules. The proposed changes for each rule are shown on Attachment 3.

1. The definition of Nonattainment Area needs to be revised to indicate that the approval of EPA is required for nonattainment area designations. [OAR 340-20-2245(2)(a)(C) and 260(2)]
2. Two language corrections need to be made in the New Source Review rules to clarify the intent of the rules. [OAR 340-20-240(6) and 260(2)]
3. Growth margins for volatile organic compound emissions in Medford and Portland need to be updated in the rules. [OAR 340-20-240(7)]

4. The Stack Height rules are proposed to be revised to be more consistent with the new EPA rules. [OAR 340-20-275]
5. The Portable Hot Mix Asphalt Plant rules need to be revised to delete an outdated provision and to allow the Department to issue permits for longer than one year at a time. [OAR 340-25-120]
6. The Department should be granted authority to approve the use of non-guideline air quality models, rather than requiring Commission approval each time. [OAR 340-20-245(4)]
7. The limited bubble rule contained in the Volatile Organic Compound Rules is now redundant and should be revoked. [OAR 340-22-108]
8. The Department concludes that the above changes will have little or no significant impact on air quality or on sources.

Director's Recommendation

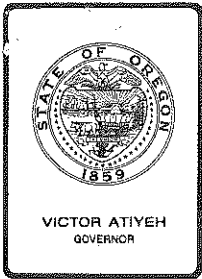
Based on the above summation, it is recommended that a public hearing be authorized concerning these proposed changes in the New Source Review, Hot Mix Asphalt Plant, and Volatile Organic Compound rules as shown in Attachment 3.

Bill

William H. Young

- Attachments: 1. Statement of Need for Proposed Rulemaking
2. Stack Heights and Dispersion Techniques - Proposed Rule
3. Rules Being Revised (for reference purposes)

L. Kostow:a
229-6459
November 9, 1982
AA2718



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. H, December 3, 1982, EQC Meeting

Request for Authorization to Hold a Public Hearing to Adopt a Lead Control Strategy for the State, and to Amend the Ambient Air Quality Standard for Lead, OAR 340-31-055, as Revisions to the Oregon State Implementation Plan.

Background

In October, 1978, the Environmental Protection Agency (EPA) adopted an ambient air standard for lead of 1.5 ug/m^3 , average for one calendar quarter. Section 110 of the Clean Air Act requires that each state adopt and submit to EPA within nine months of ambient air standards adoption, a plan to demonstrate attainment and maintenance of the standard. The purpose of the plan for areas not in attainment with the standard is to provide control strategies for attainment within three years of adoption of the plan and demonstrate continued compliance in future years.

Since all lead monitoring in the state up to 1979 indicated that no non-compliance areas existed, the EPA, Region X, placed a low priority on a lead State Implementation Plan (SIP) for Oregon. In January, 1980, the DEQ established a new monitoring site for lead in the Portland area in conformance with new EPA monitoring network design criteria. The site was established at a point that was expected to experience the highest exposure to lead in the state (I-5 near Going Street). During 1980, it became evident that the site was in violation of the lead standard when two quarters of data were 1.66 and 2.04 ug/m^3 . The Department began working on a SIP revision and control strategy in 1981 on a low-priority basis.

Recently, the Natural Resources Defense Council (NRDC) filed suit in U.S. District Court to require EPA to promulgate lead SIP's for those states that have not yet submitted them. In a recent letter to Governor Atiyeh, EPA asked that Oregon adopt and submit its lead SIP as expeditiously as practicable in order to retain options on control strategies.

The primary lead sources in the Portland area are related to the operation of gasoline powered motor vehicles. Lead emissions from this source are decreasing and are expected to continue decreasing due to the federally mandated phase-down of the lead content of leaded gasoline and an increase in catalyst equipped vehicles. A 46% reduction in lead emissions is expected from 1980 to 1983. This reduction coupled with an anticipated 5% decrease in traffic near the non-complying site with the completion of the I-205 freeway leads to a projected attainment of the standard in 1983, thereby fulfilling the Clean Air Act requirements for demonstrated compliance.

In a related matter, the current Oregon ambient air lead standard, OAR 340-31-055, is 3.0 ug/m³ average during a calendar month which is considered less stringent than the federal standard of 1.5 ug/m³ average for a calendar quarter. Revision of the lead standard would bring the Department's standard in line with the federal standard.

Problem

In order to submit an adopted SIP revision to EPA as expeditiously as possible, the hearings process must be authorized by the EQC. Holding the public hearing and considering adoption at the January 14, 1983 Environmental Quality Commission meeting would be the most expeditious schedule that could be met. Little or no testimony would be anticipated at the public hearing.

Alternatives and Evaluation

If the request for authorization for public hearing before the Environmental Quality Commission is not granted, adoption of the required SIP revisions will be delayed. Failure to obtain adoption of the proposed SIP revisions could result in possible EPA sanctions or promulgation as a result of the NRDC court decision.

Authority for the Commission to Act

Chapter 468, Section 020, gives the Commission authority to adopt necessary rules and standards, Section 295 authorizes the Commission to establish air quality rules and standards for the state. Attachment 1 contains the Statement of Need for Rulemaking and the Fiscal and Land Use Consistency Statement.

Summation

- 1) The Clean Air Act requires that each state submit a control strategy for each area in violation of federal air quality standards including the lead standard adopted in 1978.

- 2) Only one monitoring site in the Portland area, I-5 at Going Street, is in violation of the federal lead standard. A maximum concentration of 2.04 ug/m³ was measured in the fourth quarter of 1980 compared to the Federal Standard of 1.5 ug/m³.
- 3) Lead air quality is expected to continue to improve based on the federally mandated phase-down in leaded gasoline and the increase of catalyst equipped gasoline powered vehicles which use unleaded fuel. A 46% reduction in lead emissions is projected between 1980 and 1983.
- 4) Traffic at the I-5 Going Street monitoring site is expected to drop by 5% with the opening of the I-205 Bridge in 1983. This action coupled with expected reduction in lead emissions will bring the I-5 site into compliance with the lead standard by the end of 1983.
- 5) There are no expected lead air quality problems near major point sources of lead in the state and the Department's new source review rules are adequate to insure new sources of lead will not cause ambient air quality problems.
- 6) The state ambient air standard for lead is 3.0 ug/m³ monthly average which is considerably less stringent than the national standard, therefore, the state standard must be revised to be at least as stringent as the federal standard.

Director's Recommendation

Based on the Summation, the Director recommends that the EQC authorize a public hearing to be held at the January 14, 1983 EQC meeting to consider adoption of the proposed lead control strategy and revision of the state lead standard as revisions of the State Implementation Plan.



William H. Young

- Attachments: 1) Public Hearing Notice, Statement of Need for Rulemaking, and Fiscal and Land Use Consistency Statements.
2) Proposed SIP Revision Control Strategy for Lead.
3) Revision to State Ambient Air Standard for Lead -
OAR 340-31-055

S. Erickson:a
229-6458
November 10, 1982
AA2763

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

Oregon State Implementation Plan - Proposed Statewide
Control Strategy for Lead and Proposed Revised State Air Quality Standard
for Lead

Notice of Public Hearing
To Be Held January 14, 1983

WHO IS AFFECTED:

The residents of the Portland metropolitan area and potential new industrial sources of lead statewide.

WHAT IS PROPOSED:

The Department of Environmental Quality is proposing to amend OAR 340-20-047, the Oregon State Implementation Plan, by adopting a control strategy for lead pollution in the air. The Department is also proposing to revise OAR 340-31-055, the lead ambient air quality standard, to 1.5 ug/m³ average per calendar quarter to bring the standard into conformance with stricter federal standards. The proposed lead control strategy would bring the Portland area into compliance with federal standards by December 31, 1983. The DEQ will submit the strategy adopted by the EQC to the Environmental Protection Agency for approval and incorporation into the Oregon State Implementation Plan. A hearing on this matter will be held in Portland on January 14, 1983.

WHAT ARE THE HIGHLIGHTS:

Major elements of the control strategy include:

- * Reduction of leaded gasoline usage.
- * Reduction of lead content in leaded gasoline.
- * Opening of I-205 freeway, which will reduce traffic congestion on I-5 through Portland.

In addition, any new source emitting greater than 0.6 tons per year of lead will be subject to the Department's New Source Review rules.



P.O. Box 1760
Portland, OR 97207

8/10/82

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-7813, and ask for the Department of Environmental Quality.

PUBN.AH (9/82)
AA2770

HOW TO COMMENT:

Copies of the complete proposed rule package may be obtained from the Air Quality Division in Portland or the regional office nearest you.

A public hearing will be held before the Environmental Quality Commission at:

10:00 a.m.
January 14, 1983
522 S.W. 5th Ave., Room 1400
Portland, Oregon

Oral and written comments will be accepted at the public hearing. Written comments may be sent to DEQ, Air Quality Division, Box 1760, Portland, OR 97207, but must be received by no later than January 13, 1983.

WHAT IS THE NEXT STEP:

After public hearing the Environmental Quality Commission may adopt rule amendments identical to the proposed amendments, adopt modified rule amendments on the same subject matter, or decline to act. The adopted rules will be submitted to the U. S. Environmental Protection Agency as part of the State Clean Air Act Implementation Plan. The Commission's deliberation should come at their January 14, 1983 meeting following the hearing.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

PUBN.AH (9/82)
AA2770

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(2), this statement provides information on the intended action to amend a rule.

Legal Authority

This proposal amends OAR 340-20-047 and 340-31-055. It is proposed under authority of ORS Chapter 468, including Section 295 which authorizes the Commission to establish air quality standards and Section 305 which authorizes the Commission to adopt a general comprehensive plan for air pollution control.

Need for the Rule

The Portland area currently exceeds the federal lead standard. The Clean Air Act requires that control strategies be submitted to bring the area into compliance. This control strategy must be submitted as a revision to the Oregon State Implementation Plan. Also, the current state lead ambient air standard is less stringent than the federal lead standard. In order to demonstrate a commitment to enforce the federally mandated lead standard, the State must adopt a lead standard as strict as the federal standard.

Principal Documents Relied Upon

- 1) Clean Air Act Amendments of 1977, PL97-95, 8/7/77.
- 2) Guidelines for Lead Implementation Plans, EPA, 450/2-78-038, August, 1978.
- 3) DEQ Emission Inventory.
- 4) Supplementary Guidelines for Lead Implementation Plans, Revised Section 4.3 (Projecting Automotive Lead Emissions) EPA 450/2-78-038a, July, 1979.
- 5) 40 CFR 50.12, National Primary and Secondary Ambient Air Quality Standard for Lead, October 5, 1978.

Fiscal Impact Statement

Implementation of the proposed Lead Control Strategy would not have any new economic effect as it does not contain any new emission control requirements.

Land Use Consistency Statement

The proposed rule appears to affect land use and appears to be consistent with the Statewide Planning Goals.

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.

With regard to Goal 12 (transportation), the plan recognizes the benefits of the new I-205 freeway in improving traffic flow through the Portland metropolitan area.

Goal 11 (public facilities and services) is deemed unaffected by the rule. The rule does not appear to conflict with other goals.

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.

It is requested that local, state, and federal agencies review the proposed action and comment on possible conflicts with their programs affective 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.

AA2762

SIP.A (12/79)

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AA2762

SIP.A (12/79)

Section 5.1

OREGON STATE IMPLEMENTATION PLAN
STATEWIDE CONTROL STRATEGY FOR LEAD

Draft
November, 1982

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

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5.1.0 STATEWIDE CONTROL STRATEGY FOR LEAD

5.1.0.1 Introduction

The Clean Air Act Amendments of 1977 require states to submit plans to demonstrate how they will attain and maintain compliance with national ambient air standards. In 1978, the Environmental Protection Agency (EPA) promulgated a national ambient air standard for lead of 1.5 micrograms per cubic meter (ug/m^3) as a quarterly average. A plan is required for any area which has exceeded the lead standard since 1974.

The Portland area is the only portion of Oregon which has exceeded the 1.5 ug/m^3 lead standard since 1974. This document is a plan for attaining and maintaining compliance with the lead standard in the Portland area. It is submitted to EPA to fulfill the requirements of 40 CFR Part 51 (regarding the preparation, adoption and submittal of State Implementation Plans) pursuant to Section 110 of the Clean Air Act. The appendices contain more detailed data, calculations and documentation related to the statements and conclusions contained in this document.

5.1.0.2 Summary of Plan

1. Ambient lead concentrations have been monitored at various sites in Oregon since 1973. The only violations of the 1.5 ug/m^3 lead standard occurred in the Portland

metropolitan area. Thus, the Portland area is the only portion of Oregon addressed by this revision to the State Implementation Plan.

2. Only one site in the Portland area, the I-5 Roadway Site (near Going St.), has violated the lead standard since 1976 with a maximum quarterly average of 2.04 ug/m^3 in 1980.
3. The major sources of lead emissions in the Portland area are associated with the operation of gasoline-powered motor vehicles. Vehicle exhaust emissions and reentrained road dust account for about 90% of the total lead emissions in the Portland area.
4. Lead emissions from mobile sources have decreased since 1975 and are expected to dramatically decrease in future years. The expected decrease is due to the federally mandated phase-down of lead content in leaded gasoline and an increase in catalyst-equipped vehicles which use unleaded gasoline. These two factors are expected to reduce lead emissions by about 50% from 1980 to 1983.
5. Traffic volumes near the I-5 Roadway Site are expected to decrease by 5% from 1980 to 1983 due to the completion of the I-205 freeway which will divert some of the I-5

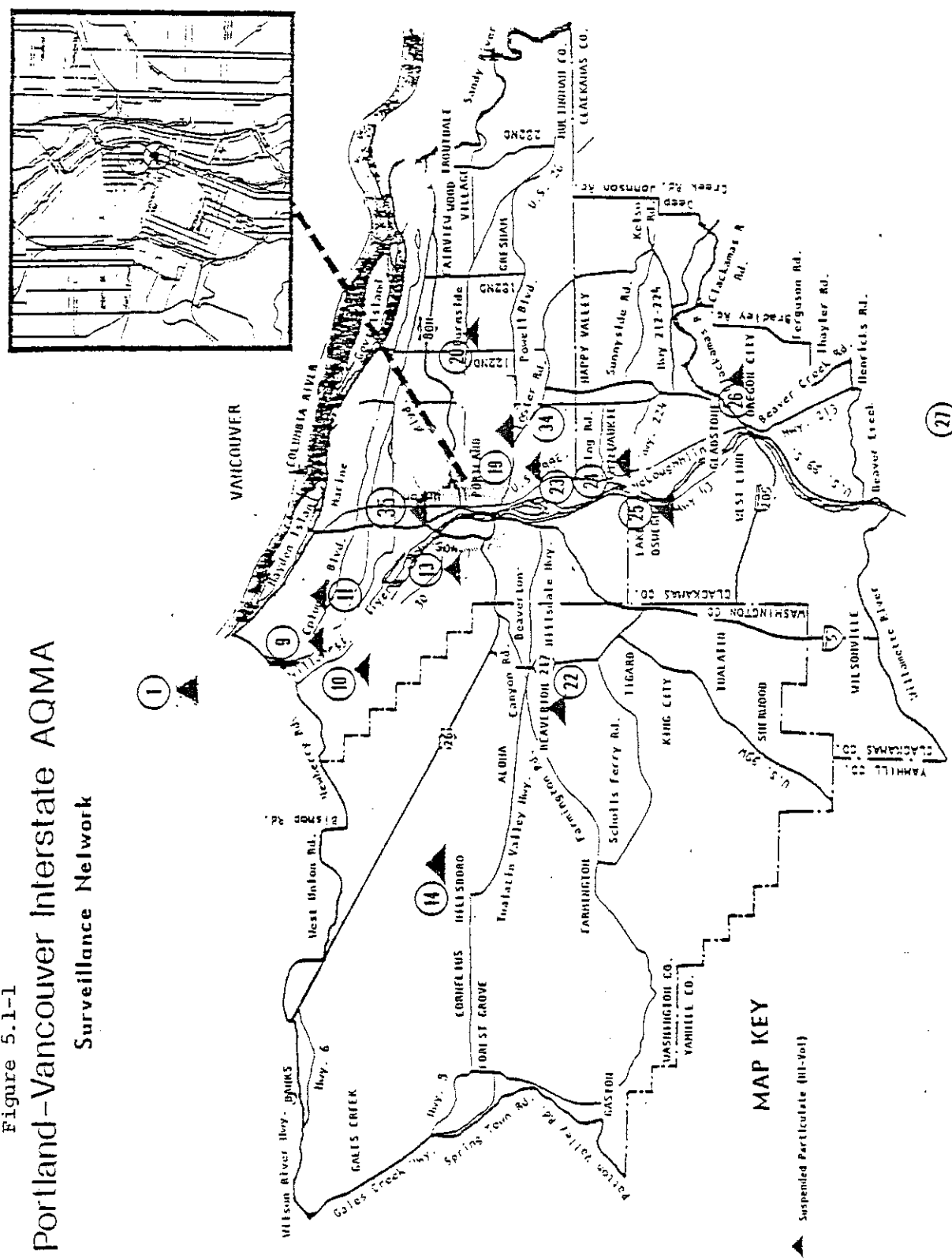
traffic. Ambient lead concentrations at the I-5 site are expected to be in compliance by 1983 due to the areawide decrease in mobile source emissions and the localized decrease in traffic volumes.

6. No site in Oregon is projected to exceed the lead standard after 1983.

5.1.1 GEOGRAPHIC DESCRIPTION OF PORTLAND AREA

The Oregon portion of the Portland-Vancouver Air Quality Maintenance Area contains the urbanized portions of three counties (Clackamas, Multnomah and Washington). This area had an estimated 1980 population of 962,000 persons covering 1,800 km² (695 mi²) of land. Geographically, this area lies at the north end of the Willamette Valley and is almost completely surrounded by mountains and hills. Temperature inversions frequently occur, trapping emissions in the valley and resulting in elevated levels of air pollutants. Portions of the area are designated nonattainment for particulate matter, ozone, and carbon monoxide. A portion of the Portland area also exceeds the lead standard.

Figure 5.1-1
 Portland-Vancouver Interstate AQMA
 Surveillance Network



MAP KEY

▲ Suspended Particulate (M-1-001)

See site location table for details

Figure 5.1-1 (continued)
 PORTLAND-VANCOUVER AQMA LEAD SURVEILLANCE NETWORK

Map No.	Site Name	Composite Filter Lead Analysis	Single Filter Lead Analysis
1	Sauvie Island	x	
9	Rivergate Waterways Term.	x	
10	Linnton Fire Station	x	
11	Roosevelt High School	x	
13	Liquid Air Products	x	
14	Hillsboro Airport	x	
19	Moffat, Nichol & Bonnie	x	
20	Multnomah County Health Department	x	
22	Beaverton First State Bk	x	
23	Pacific Motor Trucking	x	
24	Milwaukie High School	x	
25	Lakewood Gr.Sch., Lk.Os.	x	
26	Clackamas Co. Cthse., OC	x	
27	Carus	x	
31	Central Fire Station	x	
34	SE Lafayette		x
35	Interstate-5 (I-5)		x

5.1.2 AMBIENT AIR QUALITY

5.1.2.1 Monitoring Network

Most of the lead monitoring in Oregon has utilized the state-wide network established to monitor total suspended particulate (TSP). The TSP sites are located in commercial, industrial, residential and rural areas. TSP samples have been routinely analyzed for lead content.

EPA established new lead monitoring site criteria in connection with promulgation of the federal ambient lead standard. Two new types of lead monitoring sites were required by the EPA October 1978 criteria, as follows:

1. Roadway Site -located within 15 meters of a roadway with highest traffic volumes, in order to measure the maximum lead concentrations likely to occur in an area.
2. Neighborhood Site -located in a residential area of high traffic and population density, preferably near a school or playground.

DEQ established a roadway lead site at Interstate 5 (I-5) near Going Street in 1980. A residential lead site was established at S.E. Lafayette near 58th Avenue in 1981.

High-volume particulate samplers are used in both the TSP network and at the special lead sites. Samples (24-hour) are collected on a regular schedule every 6th day. The EPA reference method (single filter analysis by atomic absorption spectroscopy) is used to analyze the samples from the roadway and residential lead sites. A composite filter method is used on the samples from the TSP network. Comparison studies of the single and composite filter methods are described in the Appendix.

The Portland TSP network and special lead sites are illustrated in Figure 5.1-1.

5.1.2.2 Monitoring Data

Violations of the lead standard have been recorded at nine sites in the Portland area since January 1974. The magnitude of the violations is outlined in Table 5.1.2-1. Violations normally occurred during the 4th quarter of the year.

Table 5.1.2-1

YEAR AND MAGNITUDE OF LEAD STANDARD VIOLATIONS IN OREGON SINCE 1973

<u>Monitoring Site</u>	<u>Maximum Lead Concentration (ug/m³, Quarterly Average)</u>								
	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
CAM Station ^a	2.19	1.74	C ^d	1.63	C	C	C	C	
Beaverton	C	1.62	C	1.86	C	C	C	C	C
Mult. Co. Health Bldg.	1.51	1.63	1.63	C	C	C	C	C	C
Pacific Motor Trucking	C	C	C	1.64	C	C	C	C	C
Central Fire Station	C	1.62	C	1.57	C	C	C	C	C
N.E. Couch (Moffat)	C	C	C	1.57	C	C	C	C	C
Oregon City	C	C	C	1.56	C	C	C	C	C
Lake Oswego	C	C	C	1.56	C	C	C	C	C
S.E. Lafayette ^b									C
Interstate 5 (I-5) ^c								2.04	1.73

^a CAMS lead sampling was discontinued in January 1981 because it did not meet site criteria.

^b S.E. Lafayette site (residential site) was established in February 1981.

^c Interstate 5 site (roadway site) was established in January 1980.

^d C indicates site compliance with the lead standard.

Only one site in the Portland area, the I-5 Roadway Site, has violated the lead standard since 1976. The maximum lead concentration at the I-5 site, since monitoring began in January 1980, occurred during the 4th quarter of 1980.

5.1.2.3 Design Concentration

The maximum I-5 lead concentration (2.04 ug/m³ during the 4th quarter of 1980) was selected as the design concentration and 1980 was used as the base year for the emission inventory. The lead concentration data at various sites during the base year are outlined in Table 5.1.2-2.

Table 5.1.2-2

BASE YEAR (1980) LEAD CONCENTRATION DATA

<u>Monitoring Site</u>	<u>Lead Concentrations (ug/m³, Quarterly Average)</u>			
	<u>Jan-Mar</u>	<u>Apr-Jun</u>	<u>Jul-Sep</u>	<u>Oct-Dec</u>
CAM Station	0.51	0.30	0.31	0.67
Beaverton	0.42	0.22	0.22	0.36
Mult. Co. Health Bldg.	0.49	0.30	0.45	0.59
Pacific Motor Trucking	0.40	0.35	0.32	0.78
Central Fire Station	0.50	0.36	0.36	0.83
N.E. Couch (Moffat)	0.36	0.29	0.26	0.63
Oregon City	0.40	0.27	0.27	0.64
Lake Oswego	0.44	0.23	0.27	0.48
Interstate 5 (I-5)	1.66	NA ^a	NA ^a	2.04

^a NA indicates data not available for these quarters.

5.1.2.4 Background Concentration

Background lead data is collected at the Carus and Sauvie Island sites. Lead concentrations at these sites during 1980 are outlined in Table 5.1.2-3. Since peak lead concentrations in the Portland area typically occur during the 4th quarter, the 4th quarter background concentration (0.14 ug/m³) was used in calculating future lead concentrations.

Table 5.1.2-3

BACKGROUND LEAD CONCENTRATION DATA (1980)

<u>Monitoring Site</u>	<u>Lead Concentrations (ug/m³, Quarterly Average)</u>			
	<u>Jan-Mar</u>	<u>Apr-Jun</u>	<u>Jul-Sep</u>	<u>Oct-Dec</u>
Carus	0.07	0.05	0.09	0.12
Sauvie Island	0.12	0.05	0.05	0.15
<u>Combined Average</u>	<u>0.10</u>	<u>0.05</u>	<u>0.07</u>	<u>0.14</u>

5.1.3 EMISSION INVENTORY

5.1.3.1 Regional Emission Inventory

Lead emission inventories for the Portland area in 1980, 1983 and 1985 are summarized in Table 5.1.3-1. Future year projections were based on regional population, employment and traffic growth projections. The growth projections used in this plan are consistent with the comprehensive land-use and transportation plans in the region and the State Implementation Plans for ozone and carbon monoxide. More detailed inventories are included in the Appendix.

Table 5.1.3-1

SUMMARY OF PORTLAND AREA LEAD EMISSIONS

<u>Source Category</u>	<u>Lead Emissions (ton/yr)</u>		
	<u>1980</u>	<u>1983</u>	<u>1985</u>
Motor Vehicle Exhaust			
Light duty (LDV)	168	79	67
Heavy duty (HDG)	35	38	59
Reentrained Road Dust	72	40	27
Solid Waste Disposal	12	12	13
Industrial Processes	5	5	6
Fuel Combustion	2	2	2
<hr/>			
TOTAL	294	176	174

The major sources of lead emissions in the Portland area are mobile sources associated with the operation of gasoline-powered motor vehicles. Vehicle exhaust emissions and reentrained road dust account for about 90% of the Portland lead emissions in 1980 and about 85% of the Portland lead emissions in 1985.

Lead emissions from mobile sources are expected to dramatically decrease in future years. The expected decrease is due to the federally mandated phase-down of lead content in leaded gasoline and an increase in catalyst-equipped vehicles which use unleaded gasoline.

5.1.3.2 Roadway Site Emission Inventory

Lead emission impacts in the vicinity of the I-5 Roadway Site in 1980, 1983 and 1985 are outlined in Table 5.1.3-2. Lead emissions were estimated by DEQ from ODOT traffic projections, EPA motor vehicle emission factors and DEQ road dust emission factors. Calculation details are included in the Appendix.

Table 5.1.3-2

SUMMARY OF LEAD IMPACTS NEAR I-5 ROADWAY SITE

<u>Source Category</u>	<u>Lead Impacts (ug/m³, Maximum Quarterly Average)</u>		
	<u>1980</u>	<u>1983^a</u>	<u>1985^a</u>
Motor Vehicle Exhaust			
Light duty (LDV)	0.82	0.36	0.29
Heavy duty (HDG)	0.36	0.32	0.48
Reentrained Road Dust	0.72	0.34	0.22
Background	0.14	0.14	0.14
<hr/> TOTAL	<hr/> 2.04	<hr/> 1.16	<hr/> 1.13

a Projected impacts.

The primary reason for the projected decrease in lead emissions at the I-5 Roadway Site is the expected area-wide decrease in mobile source emissions. In addition, traffic volumes near the I-5 Roadway Site are expected to

decrease by 5% during 1980-83 due to the completion of the I-205 freeway.

5.1.3.3 Point Source Review

Bergsoe Metals Corporation, a secondary lead smelter, is the only existing point source in Oregon which emits more than five (5) tons of lead per year. Bergsoe Metals Company is allowed by permit to emit up to 19.0 tons of lead per year. This plant is located outside the Portland-Vancouver AQMA about 20 miles northwest of the City of Portland.

Lead emissions from the Bergsoe plant were modeled to determine if the plant would contribute to a violation of the ambient lead standard. The modeling results are summarized in Table 5.1.3-3.

Table 5.1.3-3

BERGSOE MODELING RESULTS

<u>Averaging Time Period (Months)</u>	<u>Maximum Lead Emission Rate (g/sec)</u>	<u>Maximum Ambient Lead Concentration (ug/m³)</u>
1	0.74	1.21
3	0.56	0.69

EPA evaluated the Bergsoe proposal in 1979 under Prevention of Significant Deterioration (PSD) review. In an August 20, 1979 letter, EPA approved the construction of the Bergsoe plant and recognized that the proposal would employ best

available control technology (BACT). EPA also determined that the Bergsoe proposal would not cause violations of any PSD air quality increments or National Ambient Air Quality Standards (NAAQS).

EPA delegated New Source Review (NSR) responsibility to DEQ in August 1982. New lead sources which emit 0.6 tons or more of lead per year are subject to NSR requirements. NSR requirements are outlined in Section 5.1.5.2.

5.1.4 CONTROL STRATEGY

5.1.4.1 Strategies Already Implemented

Most of the decrease in Portland area lead emissions will be due to the federally mandated phase-down of lead content in leaded gasoline and an increase in catalyst-equipped vehicles which use unleaded gasoline. These measures are expected to reduce areawide lead emissions by 46% from 1980 to 1983.

5.1.4.2 Strategies Scheduled for Implementation

The I-205 freeway is scheduled for completion in mid-1983 and is expected to divert a portion of the I-5 traffic. Traffic volumes on I-5 are expected to decrease by 5% during 1980-83.

5.1.4.3 Air Quality Improvement

Lead concentrations at all but one monitoring site within the Portland area are in compliance with the lead standard.

Lead emissions, and lead concentrations, are expected to decrease by almost 50% from 1980 to 1985.

Mobile source lead emissions near the I-5 Roadway Site are expected to decrease by 43% during 1980-83. Using a modified rollback analysis, lead concentrations at the I-5 site are expected to decrease from 2.04 ug/m in 1980 to 1.16 ug/m³ in 1983. Lead concentrations at the I-5 site are expected to be in compliance with the lead standard (1.5 ug/m³) by the end of 1983.

EPA adopted a more restrictive lead-in-gasoline standard in October 1982. As a result, lead emissions and ambient lead concentrations may be even lower in 1983 than projected above.

5.1.5 RULES AND REGULATIONS

The Oregon Revised Statutes (ORS) 468.275 through 468.620 authorize the Oregon Environmental Quality Commission to adopt programs necessary to meet and maintain state and federal standards. The mechanisms for implementing these programs are the Oregon Administrative Rules (OAR). Pertinent rules are outlined in Table 5.1.5-1.

Table 5.1.5-1

OREGON RULES PERTINENT TO THE LEAD CONTROL STRATEGY

<u>OAR</u>	<u>Subject</u>
340-31-055	Ambient Air Quality Standard for Lead
340-20-220 to 275	New Source Review Rules

5.1.5.1 Ambient Lead Standard

The Oregon Environmental Quality Commission adopted a statewide lead standard in January 1975. This standard was set at 3.0 ug/m³, monthly average. No violations of the statewide lead standard have been recorded by DEQ.

The federal lead standard (1.5 ug/m³, quarterly average) became effective in October 1978. The federal 1.5 ug/m³ quarterly average standard is more restrictive than the state 3.0 ug/m³ monthly average standard. The Oregon ambient lead standard is

revised to be identical with the federal standard (1.5 ug/m³, quarterly average) as part of this statewide lead control strategy.

5.1.5.2 New Source Review

The new source review rules require major new or modified point sources locating in a nonattainment area to:

1. Meet lowest achievable emission rates;
2. Provide emission offsets or demonstrate that the source will comply with the available growth increment; and
3. Provide an analysis of alternative sites, sizes, production processes and control techniques.

The new source review rules require major new or modified point sources locating in an attainment area to:

1. Provide best available control technology;
2. Demonstrate that the source would not cause violations of any PSD air quality increments or any state or federal ambient air quality standards; and
3. Demonstrate that the source would not impact a designated nonattainment area greater than the significant air quality impact levels.

New lead sources which would emit 0.6 tons per year of lead are considered major sources and are subject to the new source review rules.

5.1.6 REASONABLE FURTHER PROGRESS

Compliance with the ambient lead standard is projected by the end of 1983. Ambient lead data will be reviewed by DEQ quarterly to insure that reasonable further progress is being made toward attainment of the standard.

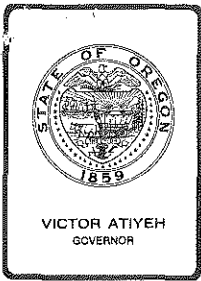
5.1.7 PUBLIC NOTICE AND HEARING

A public hearing on the lead control strategy is scheduled before the Environmental Quality Commission on January 14, 1983. The public hearing notice will be issued 30 days prior to the hearing.

The public hearing notice will be distributed for local and state agency review by the A-95 State Clearinghouse 45 days prior to adoption of the lead control strategy.

Ambient Air Quality Standard for Lead

340-31-055 The lead concentration measured at any individual sampling station, using sampling and analytical methods on file with the Department, shall not exceed [3.0 ug/m³] 1.5 ug/m³ as an arithmetic average concentration of all samples collected at that station during any one calendar [month] quarter period.



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. I , December 3, 1982, EQC Meeting

Request for an Additional Extension of a Variance from
OAR 340-25-315(1)(b), Dryer Emission Limits, by Mt. Mazama
Plywood Company

Background

Mt. Mazama Plywood Company has requested an additional time extension for compliance with the veneer dryer emission limit rule, OAR 340-25-315(1)(b). The request was received on July 26, 1982 and additional supporting information was submitted on November 9, 1982. The variance conditions proposed by the Company are:

1. That by March 1, 1983, the Company submit a control strategy for all veneer dryers.
2. That by August 31, 1983, they issue purchase orders for all necessary equipment.
3. That by January 31, 1984, they begin construction of the veneer dryer control equipment.
4. That by August 31, 1984, they complete equipment installation and demonstration of compliance.

Mt. Mazama proposed that they be required to submit quarterly financial statements and that the variance may be revoked in the event dryer emissions would cause any adverse impact on the community or airshed.

The Company claims the "current (plywood) market conditions make it economically unreasonable and burdensome to undertake the expenditure at this time to bring the dryers into full compliance with the opacity limits." More specifically, they state that cash flow does not generate sufficient funds to pay for such a unit nor does the Company currently have the borrowing capacity for the required capital expenditure.

The initial variance was granted on March 21, 1980. Two subsequent variance modifications were approved, one of which included an extended final compliance date. Each variance had intermediate increments of progress dates. The final compliance dates included for each variance are summarized as follows:

	<u>Action Date</u>	<u>Final Compliance</u>
Permit Issued	February 10, 1978	June 1, 1979
Variance Approval	March 21, 1980	November 30, 1981
Variance Approval	July 17, 1981	July 1, 1983
Variance Approval	April 16, 1982	July 1, 1983
Variance Request	December 3, 1982	August 31, 1984*

* Submitted by Company as part of the current variance request to be considered by the Commission.

The Company has provided audited financial statements for the consolidated corporation, Mazama Timber Products, Inc. Mazama Timber Products, Inc., includes Mt. Mazama Plywood Company, Mazama Timber (a mill in Creswell), and Emerald Valley Forest Inn and Golf Course.

The Company has also submitted a review of measures taken during the period of the variances which are stated to have reduced emissions. Their current position on a selected control strategy was presented.

The Commission is authorized by ORS 468.345 to grant variances from Department rules if it finds that strict compliance would result in substantial curtailment or closing down of a business, plant or operation.

Evaluation and Alternatives

All three veneer dryers at Mt. Mazama Plywood Company are out of compliance with State air emission standards. The Company took positive action to bring their dryers into compliance by installing a new heat source which included an emission control system on one dryer in 1979. This system failed to achieve visible compliance as evidenced by excessive emissions from the cooling section exhaust point. Several control devices which would control emissions from the two steam heated dryers have been investigated by the Company. However, plans have never been submitted to the Department for final approval. Approved deadlines for purchases and installations of control devices occurred at a time when the plywood market had already begun to decline. By this time, many other companies were either in compliance or were proceeding with control strategies. The plant was shut down for three months in early 1980 for economic based reasons. In 1980 the Company opted to request a variance from the veneer dryer emission rule, expecting the market downturn to be only temporary.

The Commission granted the initial variance and each subsequent variance extension upon finding that because of the adverse financial condition of the Company, strict compliance with Department rules could result in substantial curtailment or closing down of the plant. The Company has kept the Department informed of their progress or any inability to proceed and requested variances from mandated compliance steps in a timely manner in most cases.

The Company has failed to meet the variance conditions of the incremental progress compliance dates granted on July 17, 1981 and revised on April 16, 1982: 1.) By July 1, 1982, submit to the Department approvable detailed plans and specifications for the control of the veneer dryer emissions. 2.) By September 1, 1982, issue purchase orders for the necessary control equipment and affirm maintenance of schedule increments 3, 4, and 5 (begin construction, complete construction and demonstrate compliance, submit quarterly corporate financial reports) of the July 17, 1981 variance.

This is the only veneer drying facility subject to DEQ rules which has not either demonstrated compliance or received Department approval to implement a process change as a control strategy (temperature control, specie separation, etc.) or add control devices to achieve compliance. Any market advantage that would be attributed to cost savings by not implementing veneer dryer controls is unknown to the Department.

Mt. Mazama Plywood Company is the largest employer in the small town of Sutherlin. Douglas County remains an area of high unemployment due to the depressed timber products market. The Company reports that any requirements to make expenditures for controls for veneer dryer air emission compliance at this time would necessitate the closing of the mill, resulting in the layoff of a large number of citizens of the community and a loss of income to the allied and supportive businesses. Analysis by the Company's auditors, Coopers and Lybrand, pointed out that the Company's current liabilities exceed its current assets and that these factors, among others, indicate that the Company may be unable to continue in existence.

Mt. Mazama Plywood Company has shown some profit during the period of the variances. A review of the financial sheets for specific but limited months indicate that there has been a change from net profit to increasing losses during calendar year 1981. The present profit or loss position of the plywood operation is not known to the Department. The revenues from the plywood operation were shared with the parent corporation, which has incurred a net loss consistently for more than two years. Audited statements of the consolidated operation show a loss of \$3,162,883 for year 1981 and \$6,352,641 for year 1982. Although requested by letter of October 25, 1982, sufficient information has not been received by the Department to allow a detailed study of actual cash which would may have been available for pollution control, had it not been routed to offset losses in subsidiaries of the parent corporation. The consolidated financial statements received on November 10, 1982 were incomplete in that they did not include the notes referred to on the statement sheets.

The Company indicates that they are not in a position to commit to the selection of a specific control strategy at this time. The partial reason for this appears to be that they are uncertain about Department acceptability of Burley scrubbers or Georgia-Pacific packed tower scrubbers as now operating on other veneer dryer facilities. The Department has certified specific models of these units as being capable of satisfactorily controlling emissions.

The nature of the pollution from the facility includes the characteristic visible blue haze, usually generated by drying veneer. The opacity level was observed at more than 50% opacity in June, 1982 (the standard is 10% average and 20% maximum opacity). There is no other identified significant nuisance condition or violation of the ambient air quality standard in the vicinity of the source at this time.

The Company has expended more than \$77,000 on modifications to the dryers which, in part, are alleged to have reduced emissions from the plant. The Department's observations or records do not quantify these reductions. Several different pieces of point emission control equipment have been considered by the Company.

The Department has identified four alternatives:

1. Grant the variance with increments of progress and a final compliance date of August 31, 1984 as requested by the Company. Considering that essentially all other veneer dryer facilities

have implemented some type of compliance control, Mt. Mazama Plywood may have an advantage in the plywood market. Also, there is the risk that the Company will still not be in a significantly better cash flow position on August 31, 1983, when purchase orders must be issued.

2. Grant the portion of the variance extension request through the incremental step of submitting a control strategy. The control strategy must be submitted by March 1, 1983, and in the form of detailed plans and specifications which are acceptable for construction approval by the Department. A staff report will be made at the April 1983 Commission meeting for consideration of an appropriate schedule for further progress and a final compliance date.
3. Deny the variance extension request and require a revised increment of progress schedule with a final compliance date of July 1, 1983 (the current variance final compliance date). However, this final date cannot likely be met even if purchase orders were placed now. This alternative does not seem appropriate based on the adverse financial status claimed by the Company as presented in statements made available to the Department up to this time.
4. Deny the request until the additional information as requested in the Department's October 28, 1982 letter is received and evaluated. The Commission could then consider the time extension requested in light of the additional facts at their January 14, 1982 meeting.

The staff concludes that progress toward final compliance could be demonstrated by a firm adoption of a control strategy and the submittal of detailed plans and specifications to the Department for review and approval by March 1, 1983. Such action would not require a large capital expenditure. With a better understanding of the selected technical aspects and cost factors, coupled with a more complete assessment of the Company's exact economic position at that time, the Department and Commission may then be in a better position to evaluate an appropriate further compliance time table.

The letter requesting the variance and supplementary information is attached.

Summation

1. All three veneer dryers at Mt. Mazama Plywood Company are in violation of State air emission standards.
2. The Company has unsuccessfully installed an emission control system on one dryer. Control efforts on other dryers have not gone beyond the technical evaluation stage by the Company.
3. The Commission has granted a variance and subsequent variance time extensions from an initial compliance target of June 1, 1979 to the current approved date of July 1, 1983 for reasons that Company financial conditions would render strict compliance with the rules unreasonable to cause substantial curtailment or closing down of the plant.

4. The Company has failed to meet the conditions of variance granted on April 16, 1982 requiring 1) submittal of approvable detailed plans and specifications by July 1, 1982, and 2) issuance of purchase orders and affirm maintenance for other increments of progress and final compliance by September 1, 1982.
5. This is the only veneer drying facility subject to DEQ rules which has not demonstrated compliance or obtained a Department-approved strategy. Cost savings through failure to comply may provide a product market advantage to the Company.
6. The requirement to expend money for emission control devices at this time may result in closing of the mill which would have a significant effect on the social and economic position of the community.
7. Revenues generated by Mt. Mazama Plywood Company have been shared with subsidiaries of the parent corporation. Audited statements of the consolidated operation show losses of more than three million dollars in 1981 and more than six million dollars in 1982.
8. The Department has been unable to completely evaluate the ability of Mt. Mazama Plywood Company to provide funds for emission control equipment because all requested financial information has not yet been received.
9. The Company has not adopted a final control strategy for Department review.
10. Four alternatives have been identified:
 - o Grant the variance extension as requested.
 - o Grant the variance extension for submittal of a control strategy by no later than March 1, 1983. Delay further compliance scheduling until after that date.
 - o Deny the variance extension request.
 - o Deny the variance extension request until information requested is received.
11. The Commission is authorized by ORS 468.345 to grant variances from Department rules if it finds that strict compliance would result in substantial curtailment or closing down of a business, plant or operation.
12. The Commission should find that strict compliance would result in substantial curtailment or closing down of the Mt. Mazama Company plant in Sutherlin.

Director's Recommendation

Based on the Summation, it is recommended that the Commission grant an extension to the incremental progress step which requires submitting a control strategy subject to the following conditions:

1. By March 1, 1983, submit a final control strategy in the form of detailed plans and specifications which are acceptable for construction approval by the Department.

2. By March 1, 1983, the Company shall submit a financial statement which documents the current profit and loss position of Mt. Mazama Plywood Company.
3. A Department report be made at the April 1983 Commission meeting for the Commission to consider appropriate further scheduling of progress and a final compliance date.

Bill

William H. Young

Attachments

- I - Mt. Mazama's submittal of additional information
Letter dated November 9, 1982
- II - DEQ request for additional information
Letter dated October 28, 1982
- III - Variance extension request - Letter dated July 19, 1982
- IV - Copy of Director's Memorandum re variance extension request
for April 16, 1982 EQC meeting (with attachments)

D.K. Neff:a
229-6480
November 15, 1982
AA2774

WISWALL, SVOBODA, THORP & DENNETT, P.C.

William Wiswall
John L. Svoboda
Laurence E. Thorp
Douglas J. Dennett
Dwight G. Purdy
Jill E. Golden
Robert A. Miller
Scott M. Galenbeck

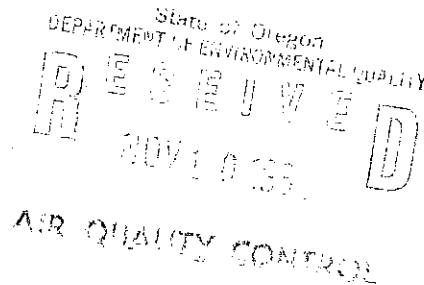
LAW OFFICES
644 North A Street
Springfield, Oregon 97477
(503) 747-3354

G. David Jewett
Robert A. Thrall
James M. O'Kief
Karen Hendricks
Jeffrey D. Herman

Marvin O. Sanders
(1912-1977)
Jack B. Lively
(1923-1979)

November 9, 1982

H.M. Patterson, Manager
Program Operations
Air Quality Division
Department of Environmental Quality
P.O. Box 1760
Portland OR 97207



Re: Mt. Mazama Plywood Co.
Permit #10-0022 Variance Request

Dear Mr. Patterson:

I want to thank your people for meeting with Mr. Kline on the 14th of October to review this matter.

I am enclosing a copy of the current consolidated financial statement as audited. I do not have a more recent financial statement, but can assure you that in fact the situation has not improved from either an asset standpoint or a cash flow standpoint.

We had previously indicated an interest in installing Burley Scrubbers and the associated equipment. Our interest in that system was, of course, premised upon the fact that it had obtained DEQ approval and would perform. We now find that it has not been approved and that it is still in the experimental stage. Mt. Mazama cannot, of course, afford to become involved in experimental operations and, therefore, have at least at this time discarded the possibility of the utilization of the Burley Scrubbers system. It appears further that the system produced by Georgia Pacific is also not available.

As you know the directly fired dryer presents special problems. We understand that Boise Cascade at Sweethome is currently experimenting with a system up there which they hope will solve that problem. As yet, however, we understand that it is now fully operable. We will be keeping a close eye on that system and the results of their efforts. If it becomes a system which is in fact workable, we hopefully will then be able to provide you with some cost figures that we may evaluate to determine why we would be able to implement such a system.

H. M. Patterson
Re: Mt. Mazama Plywood Co. Permit
November 9, 1982
Page 2

Enclosed is a letter forwarded from Mr. Jim Kline in response to your request number 3 of your October 28, 1982 letter.

We would appreciate having the opportunity to review the staff recommendation to the Commission before it is submitted so that if it appears necessary we may appear before the Commission hearing to present any further matters. Obviously, if a favorable recommendation is forwarded, we will not deem it necessary to supplement our request. In that regard, however, if you feel any additional material is necessary or advantageous, please do not hesitate to let us know.

Sincerely,

WISWALL, SVOBODA, THORP
& DENNETT, P.C.

John Svoboda

JS/ljs

Enclosures

Mt. Mazama Plywood Co.

POST OFFICE BOX 738 • SUTHERLIN, OREGON 97479 • TELEPHONE 503/459-9555

November 5, 1982

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

Attention: Don Neff

Re: Permit #10-0022 Variance Request

Gentlemen:

As requested by your letter of October 28, 1982 a list of all work associated with emission control that has been completed on our dryers is included below. From the beginning of our efforts to develop a program to bring our dryers into compliance, we have realized that while there are scrubbers available that are capable of eliminating our stack emissions, we also had serious problems with fugitive emissions, and so while we have done some work reducing stack emissions our primary focus has been the reduction of fugitive emissions.

Completed Emission Control Projects

1. New dry end baffles on #1 dryer.
Materials = \$2,500.00 (Purchased custom made baffles)
Labor = \$ 480.00
2. Install steam throttle control valve on #2 dryer to allow us to run redry at lower temperatures thus reducing both fugitive and stack emissions.
Materials = \$5,000.00
Labor = \$1,950.00
3. Replace side panels #2 dryer.
Materials = \$ 450.00
Labor = \$ 960.00
4. Install sheet metal top #2 dryer.
Materials = \$7,440.00
Labor = \$9,520.00
5. Rebuild fan housings #2 dryer.
Materials = \$ 240.00
Labor = \$ 480.00

Mt. Mazama Plywood Co.

POST OFFICE BOX 738 • SUTHERLIN, OREGON 97479 • TELEPHONE 503/459-9555

Page 2 Con't.

6. Repair of Super heater structure.
Materials = \$ 450.00
Labor = \$ 960.00
7. New baffles for #2 dryer. (This project is in progress and will be completed by 11/30/82)
Materials = \$2,000.00 (Our own shop is fabricating these)
Labor = \$3,200.00
8. Slowed #2 dryer main fan by 20%.
Materials = \$ 800.00
Labor = \$ 160.00
9. Fabricate and install 4 new doors #2 dryer.
Materials = \$4,800.00
Labor = \$2,400.00
10. Fabricate and install 2 new doors #3 dryer.
Materials = \$1,120.00
Labor = \$ 450.00
11. Slowed cooling fan #3 dryer by 20%.
Materials = \$ 400.00
Labor = \$ 180.00
12. Grouted around bottom frame all dryers.
Materials = \$1,200.00
Labor = \$1,950.00
13. New door seals partial replacement all dryers.
Materials = \$16,000.00
Labor = \$12,000.00

Total Cost All Projects

Materials = \$42,400.00
Labor = \$34,690.00

Nature and Magnitude of Decreased Emissions

1. Stack emissions
 - a. #2 dryer dried stacks 20% reduction. (The reduction is greater during period when redry is being run.)
 - b. #3 dryer cooling section stack 20% reduction.

Mt. Mazama Plywood Co.

POST OFFICE BOX 738 • SUTHERLIN, OREGON 97479 • TELEPHONE 503/459-9555

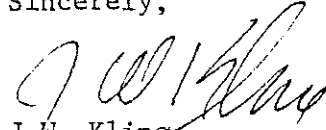
Page 3 Con't.

2. Fugitive emissions

These emissions are not measurable but they have been significantly reduced on all dryers.

If you have any questions about this list please contact Arnold Jackson or myself at 459-9555.

Sincerely,



J.W. Kline
General Manager

JK:mk

To the Stockholders and
Board of Directors
Mazama Timber Products, Inc.:

We have examined the consolidated balance sheets of Mazama Timber Products, Inc. and Subsidiaries at June 30, 1982 and 1981, and the related consolidated statements of operations and retained earnings (deficit) and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

As shown in the financial statements, the Company incurred a net loss of \$6,352,223 during the year ended June 30, 1982 (\$2,847,085 in 1981) and, as of that date, the Company's current liabilities exceeded its current assets by \$18,763,841 (\$11,788,425 at 1981). These factors, among others, as discussed in Note 1, indicate that the Company may be unable to continue in existence. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might be necessary should the Company be unable to continue in existence.

In our opinion, subject to the effects on the financial statements of such adjustments, if any, as might have been required had the outcome of the uncertainty about the recoverability and classification of recorded asset amounts and the amounts and classification of liabilities referred to in the preceding paragraph been known, the financial statements referred to above present fairly the consolidated financial position of Mazama Timber Products, Inc. and Subsidiaries at June 30, 1982 and 1981, and the results of their operations and changes in financial position for the years then ended, in conformity with generally accepted accounting principles consistently applied during the period subsequent to the change, with which we concur, made as of July 1, 1980, in the method of computing depreciation as described in Note 1 to the financial statements.

Coopers & Lybrand

Eugene, Oregon
September 17, 1982

MAZAMA TIMBER PRODUCTS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEET
June 30, 1982 and 1981

	<u>1982</u>	<u>1981</u>
ASSETS		
Current assets:		
Cash	\$ 56,912	\$ 20,693
Accounts and notes receivable	1,320,980	2,144,826
Refundable income taxes	132,048	1,394,911
Inventories	1,886,643	2,899,386
Timber, timber deposits and logging roads, at cost	1,403,250	6,986,725
Prepaid expenses	57,791	38,760
Total current assets	<u>4,857,624</u>	<u>13,485,301</u>
Properties		
Less accumulated depreciation	18,031,255	16,896,730
	<u>7,163,194</u>	<u>5,934,140</u>
	<u>10,868,061</u>	<u>10,962,590</u>
Timber, timberlands and logging roads, at cost less depletion and amortization, less current portion		
	<u>16,454,115</u>	<u>8,582,528</u>
Other assets:		
Notes receivable, less current portion	209,140	1,499,147
Cash surrender value of life insurance, net of policy loans of \$273,113, with interest at 5.7%	33,568	233,758
Advances to stockholders and affiliates	3,701,198	3,474,144
Deposits	53,211	28,503
	<u>3,997,117</u>	<u>5,235,552</u>
	<u>\$36,176,917</u>	<u>\$38,265,971</u>

The accompanying notes are an integral part of this statement.

	<u>1982</u>	<u>1981</u>
LIABILITIES		
Current liabilities:		
Bank overdraft	\$ 388,386	\$ 468,305
Short-term notes payable	12,816,316	7,678,951
Current maturities of long-term debt	1,013,559	2,920,432
Timber contracts payable	3,031,879	7,694,195
Accounts payable	2,835,680	3,521,985
Accrued payroll and related taxes	993,168	1,191,665
Other accrued liabilities	2,323,701	1,525,397
Income taxes payable	218,776	272,796
Total current liabilities	<u>23,621,465</u>	<u>25,273,726</u>
Long-term debt	2,585,042	3,316,951
Timber contracts payable, noncurrent portion	12,029,994	5,382,237
Minority interest in subsidiary	150,649	151,067
	<u>38,387,150</u>	<u>34,123,981</u>
Commitments and contingencies (Note 12)		
STOCKHOLDERS' EQUITY (DEFICIT)		
Common stock, no par value; 5,000 shares authorized, 500 shares issued	50,000	50,000
Retained earnings (deficit)	(2,095,051)	4,257,172
	(2,045,051)	4,307,172
Less cost of 475 shares of common stock held in treasury	165,182	165,182
	<u>(2,210,233)</u>	<u>4,141,990</u>
	<u>\$36,176,917</u>	<u>\$38,265,971</u>

CONSOLIDATED STATEMENT OF OPERATIONS AND
RETAINED EARNINGS (DEFICIT)
for the years ended June 30, 1982 and 1981

	<u>1982</u>	<u>1981</u>
Net sales	\$36,930,524	\$55,842,147
Cost of sales	<u>38,464,341</u>	<u>55,731,246</u>
	(1,533,817)	110,901
General and administrative expenses	<u>2,513,503</u>	<u>3,216,013</u>
Operating loss	(4,047,320)	(3,105,112)
Loss on the sale of timber and timber cutting contracts		(54,040)
Other income	<u>1,036,786</u>	<u>928,357</u>
	(3,010,534)	(2,230,795)
Interest expense	<u>3,342,107</u>	<u>2,655,288</u>
Loss before income taxes, minority interest and cumulative effect of an accounting change	(6,352,641)	(4,886,083)
Provision for income tax benefit		<u>(1,723,200)</u>
Loss before minority interest and cumulative effect of an accounting change	(6,352,641)	(3,162,883)
Minority interest in net income (loss) of subsidiary	<u>(418)</u>	<u>95,331</u>
	(6,352,223)	(3,258,214)
Cumulative effect of change in accounting principle		<u>411,129</u>
Net loss	(6,352,223)	(2,847,085)
Retained earnings at beginning of year	<u>4,257,172</u>	<u>7,104,257</u>
Retained earnings (deficit) at end of year	<u>\$(2,095,051)</u>	<u>\$ 4,257,172</u>

The accompanying notes are an integral
part of this statement.

CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION
for the years ended June 30, 1982 and 1981

	<u>1982</u>	<u>1981</u>
Working capital used:		
In operations:		
Net loss	\$ 6,352,223	\$ 2,847,085
(Add) deduct items not affecting working capital:		
Depreciation and amortization	(1,278,401)	(1,236,515)
Minority interest's share of net (income) loss of subsidiary	418	(95,331)
Gain (loss) on sale of:		
Timber and timber cutting contracts		(54,040)
Properties	131,448	19,635
Deferred income taxes		416,173
Cumulative effect of change in accounting principle		411,129
Working capital used in operations	5,205,688	2,308,136
Purchase of properties, net of related long-term debt incurred of \$147,817 (\$517,830 in 1981)	173,850	467,282
Long-term debt paid or currently maturing	647,656	1,305,000
Increase in long-term timber, timberlands and logging roads, net of related noncurrent timber contracts payable	1,223,830	1,041,265
Increase in advances to stockholders and affiliates	227,054	1,088,864
Acquisition of 10% minority interest's stock in Mt. Mazama Plywood Co., net of related long-term debt of \$144,040		75,470
Property received in settlement of note receivable, net of related debt assumed of \$122,000	778,000	
Long-term debt restructured as a demand note	949,245	
Other	24,708	33,495
Total working capital used	9,230,031	6,319,512

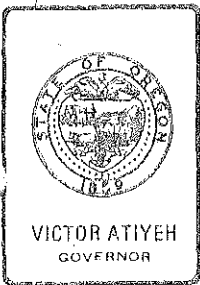
Continued

CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL
POSITION, Continued

for the years ended June 30, 1982 and 1981

	<u>1982</u>	<u>1981</u>
Working capital provided:		
Proceeds from the sale of:		
Timber and timber cutting contracts		\$ 380,000
Properties	\$ 169,243	145,557
Short-term note payable refinanced as long-term debt	90,000	
Borrowings on life insurance policies, net of increase in related cash surrender value of \$72,923	200,190	
Other long-term debt incurred	505,175	
Long-term receivables:		
Collected or currently maturing	1,504	327,500
Written off as uncollectible		843,840
Exchanged for property, net of note received of \$122,000	<u>1,288,503</u>	
Total working capital provided	<u>2,254,615</u>	<u>1,696,897</u>
Decrease in working capital	<u>\$(6,975,416)</u>	<u>\$(4,622,615)</u>
 <u>Changes in Working Capital Components:</u>		
Cash	\$ 36,219	\$ 1,664
Accounts and notes receivable	(823,846)	(819,098)
Refundable income taxes	(1,262,863)	1,394,911
Inventories	(1,012,743)	(396,826)
Timber, timber deposits and logging roads	(5,583,475)	(1,792,951)
Prepaid expenses	19,031	(447,298)
Deferred tax benefit		(58,784)
Bank overdraft	79,919	420,631
Short-term notes payable	(5,137,365)	(1,851,155)
Current maturities of long-term debt	1,906,873	74,811
Timber contracts payable	4,662,316	411,712
Accounts payable	686,305	(1,609,254)
Accrued payroll and related taxes	198,497	93,915
Other accrued liabilities	(798,304)	(670,097)
Income taxes payable	54,020	401,699
Accrued profit-sharing contribution		<u>223,505</u>
Decrease in working capital	<u>\$(6,975,416)</u>	<u>\$(4,622,615)</u>

The accompanying notes are an integral
part of this statement.



Department of Environmental Quality

522 SOUTHWEST 5TH AVE. PORTLAND, OREGON

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

October 28, 1982

- Wiswall, Svoboda, Thorp & Dennett, T.C.
Law Offices
Attn: John L. Svoboda
544 N. A Street
Springfield, OR 97477

Re: Mt. Mazama Plywood Co.
Permit #10-0022 Variance Request

Gentlemen:

This is in response to your July 1982 letter requesting a variance from OAR 340-25-315(1)(b) veneer dryer emissions on Mt. Mazama Plywood Co's. veneer driers.

We met with Mr. Jim Kline on October 14, 1982 to review current conditions relating to the company's need for a variance. As a result of that meeting, we determined that certain additional information should be submitted to support the request and complete a review report to the Environmental Quality Commission.

Please submit the following as soon as practicable so the staff report can be prepared for the December Environmental Quality Commission meeting by November 11, 1982:

1. The most recent audited financial balance sheet and statements showing cash flow for both Mt. Mazama Plywood Company and the Consolidated Corporation. Also, any current financial statements which reflects the firm's current position since the audit.
2. An update on the proposed control strategy for subsequent Department approval of detailed plans, including the type of equipment and/or other technique the company intends to use to control each veneer dryer. Include a current cost estimate, if available, for each major item.
3. Details and costs of any work or changes which have been done since July 17, 1981 that have resulted in emission decreases. Identify the nature and magnitude of any decreases.

Wiswall, Svoboda, Thorp & Dennett, T.C.
October 28, 1982
Page 2

Please review the enclosed portion of the ORS on variances and identify a specific reason from those items under ORS 468.345(1) that the Company wishes the Commission to consider.

Should you have any questions concerning this letter, please contact Don Neff at 229-6480 here in Portland.

Sincerely,

H. M. Patterson, Manager
Program Operations
Air Quality Division

DKN:a
AA2705
Enclosure

cc: Jim Kline, Mt. Mazama Plywood Co.,
P.O. Box 738, Sutherland, Oregon

Southwest Regional Office - DEQ

WISWALL, SVOBODA, THORP & DENNETT, P.C.

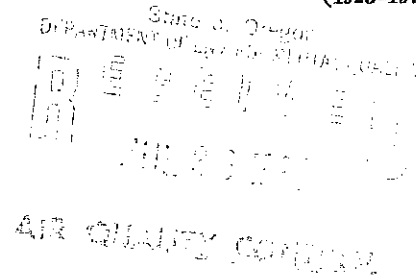
LAW OFFICES
644 North A Street
Springfield, Oregon 97477
(503) 747-3354

July 19, 1982

William Wiswall
John L. Svoboda
Laurence E. Thorp
Douglas J. Dennett
Dwight G. Purdy
Jill E. Golden
Robert A. Miller
Scott M. Galenbeck

G. David Jewett
Robert A. Thrall
James M. O'Kief
Karen Hendricks
Jeffrey D. Herman

Marvin O. Sanders
(1912-1977)
Jack B. Lively
(1923-1979)



Department of Environmental Quality
Air Quality Control Division
522 Southwest 5th Avenue
P. O. Box 1760
Portland, OR 97202

Attn: Mr. Ed Woods
Re: Mt. Mazama Plywood Air Contaminant Discharge
Permit and Variance Granted by Commission
on July 17, 1981

Gentlemen:

On behalf of Mt. Mazama Plywood Company and pursuant to ORS 468.345, the following should be considered as a request for variance from air contamination rules and standards and OAR 340-25-315(1)(b) veneer dryer emission limits.

Factual Background

Enclosed is a copy of a March 11, 1981 letter submitted in request for a variance which was subsequently granted. That letter sets forth in part the factual background. It will be supplemented by the following.

Mt. Mazama has continued sporadic operation due totally to the decline and lack of recovery of the plywood market. Mt. Mazama as a plywood producing plant has generated some revenues, those revenues have been shared with the parent company and when combined with the financial picture of the parent company and all subsidiaries, has resulted in a net loss consistently for in excess of the past two years.

The cost factor of installing the Burley Scrubbers and associated equipment is at this time not feasible for the company. The cash flow does not generate sufficient funds to pay for such a unit, nor does Mt. Mazama currently have the borrowing capacity for such a capital expenditure.

Department of Environmental Quality
Re: Mt. Mazama Plywood
July 19, 1982
Page 2

Mt. Mazama has continued to seek out other possibilities in terms of emission particulate reduction apparatus. In that regard, we have previously forwarded by my letter of June 29, 1982, some proposed but previously unproven equipment as a stop-gap measure. Mt. Mazama in talking with those people was of the belief that this equipment could be manufacturer financed to make its installation feasible. Based on the latest contact with this company, it would appear that the company financing is not available. As a result, once again for economic reasons, Mt. Mazama is unable to pursue this alternative.

It appears that currently, as in the past, the particulate emissions are not having a significant impact on air quality.

Summary of Request for Variance

Mt. Mazama requests a variance from OAR 340-25-315(1)(b) veneer dryer emission limits on the following grounds:

1. Current market conditions make it economically unreasonable and burdensome to undertake the expenditure at this time to bring the dryers in full compliance with the opacity limits. The market condition has been depressed for quite some time. The company has consistently lost money during its sporadic operation and it appears that no major change in market condition is foreseeable. The requirement to make such expenditures or failing that be denied a variance from the existing permit would result in the necessity of closing the plant in Sutherlin, Oregon, resulting in the layoff of a large number of the citizens of that community and a loss of income to other allied and supportive businesses.
2. The company has in the past made expenditures for installation of equipment which proved non-effective. Litigation was considered against the manufacturer and installer, but again because of cost factors that litigation was not pursued. The company continued to pursue other means and methods of meeting the standards, but have found to date all of those to be prohibitive by cost. The efforts to seek out alternative methods, either by alternative equipment or continued search for financing is on-going.

It is submitted therefore, that a variance as above

Department of Environmental Quality
Re: Mt. Mazama Plywood
July 19, 1982
Page 3

requested be granted on the following time table.

(1) That by March 1, 1983 the company submit a control strategy for all veneer dryers.

(2) That by August, 1983 they issue purchase orders for all necessary equipment.

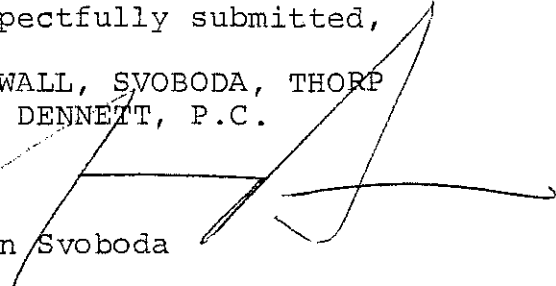
(3) That by January, 1984 they begin construction of the veneer dryer control equipment.

(4) That by August, 1984 they complete equipment and demonstrate compliance.

Mt. Mazama should require to submit quarterly financial statements. It would further be understood that in the event the variance is granted, it may be revoked in the event dryer emissions would cause an adverse impact on the community or air shed.

Respectfully submitted,

WISWALL, SVOBODA, THORP
& DENNETT, P.C.


John Svoboda

JS/ljs

cc: Jim Kline

WISWALL, SVOBODA, THORP & DENNETT, P.C.

LAW OFFICES

644 North A Street
Springfield, Oregon 97477
(503) 747-3354

William Wiswall
John L. Svoboda
Laurence E. Thorp
Douglas J. Dennett
Dwight G. Purdy
Jill E. Golden
Robert A. Miller
Scott M. Galenbeck

G. David Jewett
Robert A. Thrall
James M. O'Kief
Karen Hendricks
Jeffrey D. Herman

Marvin O. Sanders
(1912-1977)
Jack B. Lively
(1923-1979)

March 11, 1981

Department of Environmental Quality
Air Quality Control Division
522 Southwest Fifth Avenue
P. O. Box 1760
Portland, Oregon 97202

Attention: Mr. Ed Woods

Re: Mt. Mazama Plywood Company Air Contaminant
Discharge Permit and Variance Granted by the
Commission on March 21, 1980 as Variance from
OAR 340-25-315(1)(b) Veneer Dryer Emission Limits

Gentlemen:

On behalf of Mt. Mazama Plywood Company and pursuant to
ORS 468.345 the following should be considered as a request for
variance from air contamination rules and standards and
OAR 340-25-315(1)(b) veneer dryer emission limits.

Factual Background

A current and correct factual background statement is con-
tained in the Environmental Quality Commission memorandum which
is marked Exhibit A and attached hereto and made a part hereof as
if set forth in full.

The plywood market for the calendar year 1980 and 1981 to
date has remained severely depressed, both in terms of price of
product and volume of sales. Economically, northwest plywood
producers have operated on a day-to-day basis fed only by day-to-
day sales, with no long-range plans or commitments from buyers.
The same holds true for Mt. Mazama Plywood Company who was faced
with a three-month shutdown in the first part of 1980. They have
been able to operate almost continuously since then, but on a
very thin margin.

The company had previously installed the wood fired system as
an attempt for compliance with the opacity limits. In spite of

the company's attempt for compliance, the installation of the new system did not meet the opacity limits. In an attempt to bring the equipment into compliance as originally anticipated, legal efforts were made with the manufacturing and installing company which were pursued until the latter part of 1980. It became apparent to the company that to further pursue that matter with the manufacturer and installer would consume, including court litigation, time which would run them far past the November, 1981 compliance date. Pursuing that remedy would further leave them up in the air as to whether they should undertake any other independent steps concerning repair, reconstruction or replacement of the existing dryer system.

The company made the decision not to pursue further remedies against the original manufacturer and installer. They are currently receiving cost estimates for sealing the veneer dryers and installing, repairing and replacing scrubbers. There are three dryers which are in question. One cost estimate has been received to date concerning two of those units. Burley Industries, after reviewing the plant, has advised that at a minimum, Mt. Mazama would incur charges of \$345,000 for two scrubbers and attempted repair of all three dryers, assuming there is no panel replacement. Assuming further a 50% panel replacement, an additional cost of \$132,000 as a minimum is estimated, thus bringing the minimum total cost for repair of two dryers to \$477,000.

Burley Industries declined to submit a bid for their wet-type veneer dryer scrubber for use on the third dryer since it would not control the chloride emission created by the enterjex burner. Bids have not yet been received from someone willing to submit a bid on that unit. It is estimated that the cost for a scrubber on the third unit will exceed the cost of any one of the other two units, thus placing the total expense at a minimum in the area of \$700,000 to \$800,000.

Mt. Mazama is also soliciting competitive bids from Radar Pneumatics and Georgia-Pacific, as well as attempting to review installations in other plants.

Summary of Request for Variance

Mt. Mazama requests a variance from OAR 340-25-315(1)(b) veneer dryer emission limits on the following grounds:

1. Current market conditions make it economically unreasonable and burdensome to undertake the expenditure at this time to bring the dryers in full compliance with opacity limits. Such expenditures could result in a substantial curtailment or necessitate a closing of the plant.

2. That in an attempt to gain repair and replacement of the non-complying equipment by the manufacturer and installer through legal redress, thereby negating the necessity of additional cost to the company, much time was consumed and without success to date. Those efforts have therefore been abandoned. This attempt, however, did delay the company in pursuing other avenues which they are now undertaking, but are far behind prior commitments.

It is submitted that the variance as above requested be granted on the following time table.

1. By October 1, 1981, final control strategy for wood fired veneer dryers shall be submitted.

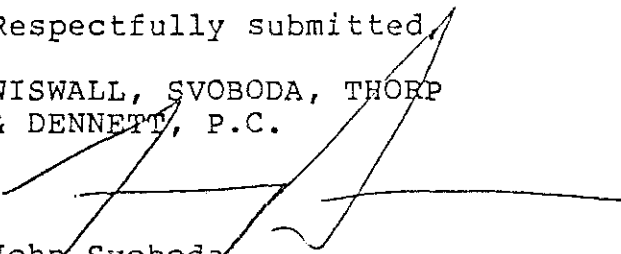
2. By March 1, 1982, purchase orders for all equipment necessary to control all three dryers shall be issued.

3. By November, 1982, the construction of controls of all three dryers shall have been started.

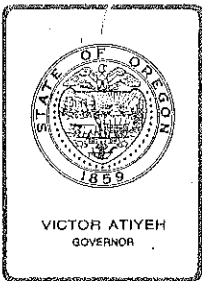
4. By July, 1983, controls for all three dryers shall be completed and compliance demonstrated.

Respectfully submitted,

WISWALL, SVOBODA, THORP
& DENNETT, P.C.


John Svoboda
Attorney for Mt. Mazama Plywood Co.

bc: Jim Klein



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 I, April 16, 1982, EQC Meeting

Request for an Extension of a Variance by Mazama Plywood Company, Sutherlin, from OAR 340-25-315(1)(b), Veneer Dryer Emission Limits.

Background

Mr. Mazama Plywood Company, by letter of February 15, 1982, requested an extension of variance from OAR 340-24-315(1)(b), Veneer Dryer Emission Limits. The Commission has granted Mt. Mazama Plywood Company a variance and extension of variance from this rule on March 21, 1980 and July 17, 1981 respectively. The July 17, 1981 EQC action was subject to the following conditions:

1. By October 1, 1981, submit a control strategy for all three veneer dryers.
2. By March 1, 1982, issue purchase orders for the necessary control equipment.
3. By November 1, 1982, begin construction of the veneer dryer controls.
4. By July 1, 1983, complete construction and demonstrate compliance.
5. Submit quarterly, corporate, financial reports until purchase orders have been issued.
6. If the Department determines that the veneer dryer emissions cause significant adverse impacts on the community or airshed, the variance may be revised or revoked.

The Company, by letter of September 17, 1981, submitted the following final control strategy (but did not submit detailed plans):

1. Continue its on-going program of roof patching and replacement of door seals in the dryers to help reduce fugitive emissions.
2. By March 1, 1982, issue purchase orders to Georgia Pacific Corporation for the Georgia Pacific Emission Eliminator.
3. By November 1, 1982, begin installation of the veneer control equipment.
4. By July 1, 1983, complete construction and demonstrate compliance.

The strategy was approved by the Department on September 17, 1981. The Company has failed to issue purchase orders (Item 2) and is requesting a 6 months extension.

Mt. Mazama Plywood Company has provided accounting (non-certified) information in conjunction with their request for variance extension. This is a consolidated report of Mazama Timber Products, Inc. and subsidiaries, the status of this subject source being referenced as Mt. Mazama (copy Attachment #1). The cost of dryer emission control and continued plywood manufacturing losses are claimed to be the cause of current compliance schedule default.

Evaluation

Mt. Mazama Plywood Company has missed the purchase order issuance compliance increment date of March 1, 1982 stipulated in Condition 8(b) of Air Contaminant Discharge Permit #10-0022. The Company has recently installed baghouse controls on the dry fuel system that was inspected March 8, 1982 and certified in compliance by Southwest Region staff. The plant site is located in an attainment area and the Department has no knowledge of any ambient air quality violations brought on as a result of past veneer dryer non-compliance. It is however, located in downtown Sutherlin in a strip area of commercial and industrial land uses.

This plywood manufacturing facility has three (3) veneer dryers; two that utilize steam and the third is direct wood-fired with an Energex suspension burner. The latter direct wood-fired dryer uses ground ply trim for fuel, a waste by-product of the manufacturing process.

Industry has found it difficult to control direct wood-fired veneer dryers using dry ply trim as a fuel, particularly if it is contaminated with a high salt content glue residue. "Wet ionic" or electric precipitator type controls have been used in many cases to capture the sub-micron salt particulates formed in the combustion process. Steam dryers have been simpler to control with the application of medium energy wet scrubbers and filter apparatus.

The Mt. Mazama Plywood Company mill is not a modern facility. The dryers are old and leaky which would add to the costs of effective control. The plant has changed from producing a high grade sanded product to producing sheathing typically made from lower grade veneers. Given marginal plywood market conditions, it is doubtful that this plant could, on its own, support any significant capital and operational expenditures for veneer dryer control equipment. Whether or not the parent company, Mazama Timber Products, Inc., would carry that economic burden is unknown except for the fact that they haven't to date.

The facility is the last veneer drying plant in Southwest Region without an implemented control strategy. The extent that this represents an unfair market advantage to competitors is unknown to the Department. The plant is claimed to employ in excess of 150 workers. Unemployment in Douglas County is currently in the 19 - 20% range.

Summation

1. Mt. Mazama Plywood Company in Sutherlin, Oregon has by letter of February 15, 1982 requested an extension of their Commission-granted variance to OAR 340-23-315(1)(b), Veneer Dryer Emission Limits.
2. The Commission has granted two (2) previous variances to Mt. Mazama Plywood based upon economic hardship as provided for in ORS 468.345(1)(c).
3. Mt. Mazama Plywood Company has three (3) veneer dryers that have been found in noncompliance with OAR 340-25-135, Veneer Dryer Emission Limits.
4. Mt. Mazama Plywood Company is the only plywood manufacturer in the Southwest Region operating uncontrolled and under variance for veneer dryer emission controls installation.
5. Mt. Mazama Plywood Company has furnished the Department with a financial statement showing a \$136,445 loss for Mt. Mazama Plywood Company for the month of January 1982 and a collective year to date loss of \$2,523,820 for Mazama Timber Products, Inc., the parent company (reporting basis is on the fiscal year).
6. Controlling the fine particulate emissions from the direct wood-fired veneer dryer, controlling the two steam-fired veneer dryers, and sealing or rebuilding of all dryers would be a capital-intensive venture for a financially sound company.
7. There is technology available to effectively control the emissions from Mt. Mazama Plywood Company's three (3) veneer dryers that has been applied to other plywood mills in Southwest Region.
8. Mt. Mazama Plywood Company is located in an attainment area and does have process and boiler emissions controlled to Department standards.
9. Mt. Mazama Plywood Company employs 150-plus employees in an area now averaging 19-20% unemployment.
10. Mt. Mazama Plywood Company has not submitted detailed plans or issued purchase orders for the controlling emissions from the three veneer dryers.

Director's Recommendation

Based upon the summation, it is recommended that conditions 1. and 2. of the variance granted by the EQC on July 17, 1981 be amended as follows:

1. By July 1, 1982, submit to the Department approvable detailed plans and specifications for control of the veneer dryer emissions.
2. By September 1, 1982, issue purchase orders for the necessary control equipment and affirm maintenance of schedule increments 3, 4 and 5 of the July 17, 1981 variance.

William H. Young

G.Grimes:h
(503) 776-6010
March 24, 1982
Attachment:

2/15/82 Mt. Mazama Letter and financial statement

Mt. Mazama Plywood Co.

POST OFFICE BOX 738 • SUTHERLIN, OREGON 97479 • TELEPHONE 503/459-9555

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED
FEB 18 1982

AIR QUALITY CONTROL

February 15, 1982

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

Re: Final Control Strategy - File No. 10-0022

Gentlemen:

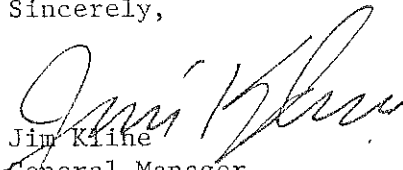
The continuing depressed state of the plywood industry makes it impossible for Mt. Mazama Plywood Company to meet the increment schedule of the air quality emission variance granted by the E.Q.C. on July 17, 1981. Financial conditions have not improved and it is not possible for us to obtain funding for a project of this magnitude.

Please accept this letter as a request for a six month extension of all increments of the existing variance. Upon your approval our revised control strategy will be as follows:

1. Continue our on-going program of roof patching and replacement of door seals in the dryers to help reduce fugitive emissions.
2. By September 1, 1982, issue purchase orders to Coe Manufacturing Company for the Georgia Pacific Emission Eliminator.
3. By May 1, 1983, begin installation of the emissions control equipment.
4. By January 1, 1984, complete construction and demonstrate compliance.

Our ability to meet these planned dates will of course depend on substantial improvement in current economic conditions. If you need further information please contact Arnold Jackson at this office.

Sincerely,


Jim Kihe
General Manager

JK:mk

MAZAMA TIMBER PRODUCTS, INC. & SUBSIDIARIES
DECEMBER 31, 1981
Individual and Combined Balance Sheet

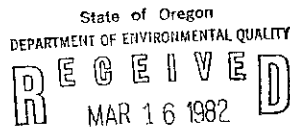
	<u>MAZAMA</u>	<u>EVSC</u>	<u>MT. MAZAMA</u>	<u>COMBINED TOTAL</u>	<u>ELIMINATIONS</u>	<u>TOTAL</u>
ASSETS:						
Current Assets						
Cash		\$ 9,262	\$ 1,755	\$ 11,017		\$ 11,017
Accounts & notes receivable	\$ 831,517	48,561	435,603	1,315,681		1,315,681
Inventories (LIFO)	1,505,787	75,298	664,385	2,245,470		2,245,470
Timber, timber deposits at cost; less depletion	6,967,491			6,967,491		6,967,491
Prepaid expenses	2,405,497	50,037	57,973	2,513,507		2,513,507
Other current assets	1,200,846			1,200,846		1,200,846
Total current assets	<u>12,911,138</u>	<u>183,158</u>	<u>1,159,716</u>	<u>14,254,012</u>		<u>14,254,012</u>
Properties at cost, less accum. dep'n.	8,755,246	6,292,971	2,987,668	18,035,885		18,035,885
	<u>4,213,896</u>	<u>805,612</u>	<u>1,479,594</u>	<u>6,499,102</u>		<u>6,499,102</u>
	<u>4,541,350</u>	<u>5,487,359</u>	<u>1,508,074</u>	<u>11,536,783</u>		<u>11,536,783</u>
Timber, timberlands, at cost less dep'n., less current portion	<u>4,216,013</u>			<u>4,216,013</u>		<u>4,216,013</u>
Other Assets						
Notes receivable non-current	1,396,123		1,150	1,396,273		1,396,273
Cash surrender value life ins. Advances to affiliates and to stockholders	8,939,352	101,914	1,121,000	10,162,266	6,568,372	3,593,894
Investment in affiliate	444,510			444,510	252,750	191,760
Deposits	26,900			26,900		26,900
Organizational costs	1,085			1,085		1,085
	<u>10,806,970</u>	<u>101,914</u>	<u>1,122,150</u>	<u>12,031,034</u>		<u>5,209,912</u>
Total Assets	<u>\$ 32,475,471</u>	<u>\$ 5,772,431</u>	<u>\$ 3,789,940</u>	<u>\$ 42,037,842</u>		<u>\$ 35,216,720</u>

MAZAMA TIMBER PRODUCTS, INC. & SUBSIDIARIES
 DECEMBER 31, 1981
 Individual and Combined Balance Sheet

	<u>MAZAMA</u>	<u>EVSC</u>	<u>MT. MAZAMA</u>	<u>COMBINED TOTAL</u>	<u>ELIMINATIONS</u>	<u>TOTAL</u>
<u>LIABILITIES:</u>						
Current liabilities	\$ 656,951	\$ 50,275	\$ 1,009,523	\$ 713,226		\$ 713,226
Book overdraft			1,009,523	1,009,523		1,009,523
Current debt			94,272	11,594,938		11,594,938
Current portion-long term debt	10,601,660	899,000		5,080,752		5,080,752
Timber and road contracts payable	5,080,752			1,274,568		1,274,568
Accounts payable	537,832	172,696	564,040	551,753		551,753
Accrued payroll and related taxes	207,974	191,782	151,997	2,271,280		2,271,280
Other accrued liabilities	1,772,527	449,364	49,389			< 1,019,177 >
Income taxes payable				1,019,177		
Account with affiliate	2,238,667	4,329,705		6,568,372	6,568,372	
Total current liabilities	<u>21,096,369</u>	<u>6,098,822</u>	<u>1,869,221</u>	<u>29,064,412</u>		<u>21,476,863</u>
Long Term Debt	<u>4,549,542</u>	<u>1,488,493</u>	<u>297,203</u>	<u>6,335,238</u>		<u>6,335,238</u>
Timber and Road Contracts Payable, Non-Current Portion	<u>4,156,979</u>			<u>4,156,979</u>		<u>4,156,979</u>
Total Liabilities	<u>29,802,890</u>	<u>7,587,315</u>	<u>2,166,424</u>	<u>39,556,629</u>		<u>31,969,080</u>
<u>STOCKHOLDER'S EQUITY:</u>						
Common Stock	50,000		277,750	327,750	252,750	75,000
Retained Earnings:						
Beginning of Year	4,297,583	< 1,164,111 >	1,400,776	4,534,248		4,534,248
Current Year Income (Loss)	< 1,509,820 >	< 650,773 >	< 55,010 >	< 2,215,603 >	< 1,019,177 >	< 1,196,426 >
Less cost of treasury stock	165,182			165,182		165,182
Total Liabilities and Equity	<u>32,475,471</u>	<u>5,772,431</u>	<u>3,789,940</u>	<u>42,037,842</u>		<u>35,216,720</u>

INDIVIDUAL AND COMBINED INCOME STATEMENT
DECEMBER 31, 1981

	MAZAMA	EVSC	MT. MAZAMA	COMBINED TOTAL	ELIMINATIONS	CONSOLIDATED	
						MONTH	YEAR TO DATE
Sales				115,410		115,410	2,031,800
Log	115,410			115,410		115,410	2,031,800
Net	<u>865,156</u>	<u>150,988</u>	<u>1,058,344</u>	<u>2,074,488</u>	<u>168,889</u>	<u>1,905,599</u>	<u>15,205,013</u>
	<u>980,566</u>	<u>150,988</u>	<u>1,058,344</u>	<u>2,189,898</u>	<u>168,889</u>	<u>2,021,009</u>	<u>17,236,813</u>
Cost of Sales	<u>967,187</u>	<u>169,750</u>	<u>1,046,789</u>	<u>2,183,726</u>	<u>168,889</u>	<u>2,014,837</u>	<u>16,923,821</u>
Gross Profit	13,379	< 18,762 >	11,555	6,172		6,172	312,992
Gen'l. & Admin. Expense	<u>48,523</u>	<u>44,068</u>	<u>30,692</u>	<u>123,283</u>		<u>123,283</u>	<u>766,560</u>
Operating Profit (Loss)	< 35,144 >	< 62,830 >	< 19,137 >	< 117,111 >		< 117,111 >	< 453,568 >
Depreciation	57,000	29,000	21,000	107,000		107,000	587,000
Interest Expense	<u>193,692</u>	<u>29,565</u>	<u>19,533</u>	<u>242,790</u>		<u>242,790</u>	<u>1,496,300</u>
	< 285,836 >	< 121,395 >	< 59,670 >	< 466,901 >		< 466,901 >	< 2,536,868 >
Other Income	<u>80,048</u>		< 3963 >	<u>76,085</u>		<u>76,085</u>	<u>321,265</u>
Income (Loss) Before Taxes	< 205,788 >	< 121,395 >	< 63,633 >	< 390,816 >		< 390,816 >	< 2,215,603 >
Provision for Taxes (Benefit)						< 179,775 >	< 1,019,177 >
Net Income (Loss)						< 211,041 >	< 1,196,426 >



MAZAMA TIMBER PRODUCTS, INC. & SUBSIDIARIES
JANUARY 31, 1982
Individual and Combined Balance Sheet

	<u>MAZAMA</u>	<u>EVSC</u>	<u>MT. MAZAMA</u>	<u>COMBINED TOTAL</u>	<u>ELIMINATIONS</u>	<u>TOTAL</u>
ASSETS:						
SOUTHWEST REGION OFFICE						
Current Assets						
Cash	\$ 991,390	\$ 9,262	\$ 1,763	\$ 1,025		\$ 11,025
Accounts & notes receivable	1,389,844	49,491	531,636	1,572,517		1,572,517
Inventories (LIFO)	6,968,245	68,955	602,576	2,061,375		2,061,375
Timber, timber deposits at cost, less depletion	2,520,227			6,968,245		6,968,245
Prepaid expenses	102,942	44,238	49,407	2,613,872		2,613,872
Other current assets	11,972,648			102,942		102,942
Total current assets	11,972,648	171,946	1,185,382	13,329,976		13,329,976
Properties at cost, less accum. dep'n.	8,730,130	6,292,971	2,990,168	18,013,269		18,013,269
Timber, timberlands, at cost less dep'n., less current portion	4,270,896	834,612	1,500,594	6,606,102		6,606,102
	4,459,234	5,458,359	1,489,574	11,407,167		11,407,167
	4,194,863			4,194,863		4,194,863
Other Assets						
Notes receivable non-current	1,501,167		1,050	1,502,217		1,502,217
Cash surrender value life ins.						
Advances to affiliates and to stockholders	8,816,149	103,463	991,154	9,910,766	6,506,257	3,404,509
Investment in affiliate	444,510			444,510	252,750	191,760
Deposits	26,900			26,900		26,900
Organizational costs	1,085			1,085		1,085
	10,789,811	103,463	992,204	11,885,478		5,126,471
Total Assets	\$ 31,416,556	\$ 5,733,768	\$ 3,167,160	\$ 40,817,484		\$ 31,058,477

MAZAMA TIMBER PRODUCTS, INC. & SUBSIDIARIES
 JANUARY 31, 1982
 Individual and Combined Balance Sheet

	<u>MAZAMA</u>	<u>EVSC</u>	<u>MT. MAZAMA</u>	<u>COMBINED TOTAL</u>	<u>ELIMINATIONS</u>	<u>TOTAL</u>
LIABILITIES:						
Current liabilities	\$ 359,826	\$ 30,702	\$	\$ 390,528		\$ 390,528
Book overdraft				999,585		999,585
Current debt				11,504,995		11,504,995
Current portion-long term debt	10,511,723	899,000	94,272	4,933,633		4,933,633
Timber and road contracts payable	4,933,633			1,542,327		1,542,327
Accounts payable	772,299	186,615	583,413	719,739		719,739
Accrued payroll and related taxes	340,646	216,529	162,564	1,555,904		1,555,904
Other accrued liabilities	1,049,946	455,011	50,947			
Income taxes payable	2,105,852	4,400,405		6,506,257	6,506,257	
Account with affiliate	200,739,25	6,188,262	1,890,781	28,152,968		28,152,968
Total current liabilities	<u>200,739,25</u>	<u>6,188,262</u>	<u>1,890,781</u>			<u>28,152,968</u>
Long Term Debt	4,510,994	1,488,493	289,308	6,288,795		6,288,795
Timber and Road Contracts Payable, Non-Current Portion	4,202,725			4,202,725		4,202,725
 Total Liabilities	<u>28,787,644</u>	<u>7,676,755</u>	<u>2,180,089</u>	<u>38,644,488</u>		<u>38,644,488</u>
STOCKHOLDER'S EQUITY:						
Common Stock	50,000		277,750	327,750	252,750	75,000
Retained Earnings:						
Beginning of Year	4,297,583	< 1,164,111 >	1,400,776	4,534,248		4,534,248
Current Year Income (Loss)	< 1,553,489 >	< 778,876 >	< 191,455 >	< 2,523,820 >		< 2,523,820 >
Less cost of treasury stock	165,182			165,182		165,182
	<u>3,628,912</u>	<u>< 1,942,987 ></u>	<u>1,487,071</u>	<u>2,172,996</u>		<u>1,920,246</u>
 Total Liabilities and Equity	<u>\$ 31,416,556</u>	<u>\$ 5,733,768</u>	<u>\$ 3,667,160</u>	<u>\$ 40,817,484</u>		<u>\$ 34,058,477</u>

INDIVIDUAL AND COMBINED INCOME STATEMENT
JANUARY 31, 1982

	MAZAMA	EVSC	MT. MAZAMA	COMBINED TOTAL	ELIMINATIONS	CONSOLIDATED	
						MONTH	YEAR TO DATE
Sales							
Log Net	$\begin{array}{r} 176,183 \\ 1,217,607 \\ \hline 1,393,790 \end{array}$	$\begin{array}{r} 101,021 \\ 101,021 \\ \hline \end{array}$	$\begin{array}{r} 1,100,898 \\ 1,100,898 \\ \hline \end{array}$	$\begin{array}{r} 176,183 \\ 2,419,526 \\ \hline 2,595,709 \end{array}$	$\begin{array}{r} 174,039 \\ 174,039 \\ \hline \end{array}$	$\begin{array}{r} 176,183 \\ 2,245,487 \\ \hline 2,421,670 \end{array}$	$\begin{array}{r} 2,207,983 \\ 17,450,500 \\ \hline 19,658,483 \end{array}$
Cost of Sales	1,319,188	130,250	1,165,419	2,614,857	174,039	2,440,818	19,364,639
Gross Profit	74,602	< 29,229 >	< 64,521 >	< 19,148 >		< 19,148 >	293,844
Gen'l. & Admin. Expense	51,450	37,146	26,918	115,514		115,514	882,074
Operating Profit (Loss)	23,152	< 66,375 >	< 91,439 >	< 134,662 >		< 134,662 >	< 588,230 >
Depreciation	57,000	29,000	21,000	107,000		107,000	694,000
Interest Expense	$\begin{array}{r} 260,479 \\ 294,327 \\ \hline \end{array}$	$\begin{array}{r} 32,728 \\ 128,103 \\ \hline \end{array}$	$\begin{array}{r} 20,850 \\ 133,289 \\ \hline \end{array}$	$\begin{array}{r} 314,057 \\ 555,719 \\ \hline \end{array}$		$\begin{array}{r} 314,057 \\ 555,719 \\ \hline \end{array}$	$\begin{array}{r} 1,810,357 \\ 3,092,587 \\ \hline \end{array}$
Other Income	250,658		< 3,156 >	247,502		247,502	568,767
Income (Loss) Before Taxes	< 43,669 >	< 128,103 >	< 136,445 >	< 308,217 >		< 308,217 >	< 2,523,820 >
Provision for Taxes (Benefit)							
Net Income (Loss)						< 308,217 >	< 2,523,820 >

MAZAMA TIMBER PRODUCTS, INC. & SUBSIDIARIES
 DECEMBER 31, 1981
 Individual and Combined Balance Sheet

	<u>MAZAMA</u>	<u>EVSC</u>	<u>MT. MAZAMA</u>	<u>COMBINED TOTAL</u>	<u>ELIMINATIONS</u>	<u>TOTAL</u>
ASSETS:						
Current Assets						
Cash		\$ 9,262	\$ 1,755	\$ 11,017		\$ 11,017
Accounts & notes receivable	\$ 831,517	48,561	435,603	1,315,681		1,315,681
Inventories (LIFO)	1,505,787	75,298	664,385	2,245,470		2,245,470
Timber, timber deposits at cost, less depletion	6,967,491			6,967,491		6,967,491
Prepaid expenses	2,405,497	50,037	57,973	2,513,507		2,513,507
Other current assets	1,200,846			1,200,846		1,200,846
Total current assets	<u>12,911,138</u>	<u>183,158</u>	<u>1,159,716</u>	<u>14,254,012</u>		<u>14,254,012</u>
Properties at cost, less accum. dep'n.	8,755,246	6,292,971	2,987,668	18,035,885		18,035,885
	<u>4,213,896</u>	<u>805,612</u>	<u>1,479,594</u>	<u>6,499,102</u>		<u>6,499,102</u>
	<u>4,541,350</u>	<u>5,487,359</u>	<u>1,508,074</u>	<u>11,536,783</u>		<u>11,536,783</u>
Timber, timberlands, at cost less dep'n., less current portion	<u>4,216,013</u>			<u>4,216,013</u>		<u>4,216,013</u>
Other Assets						
Notes receivable non-current	1,395,123		1,150	1,396,273		1,396,273
Cash surrender value life ins.						
Advances to affiliates and to stockholders	8,939,352	101,914	1,121,000	10,162,266	6,568,372	3,593,894
Investment in affiliate	444,510			444,510	252,750	191,760
Deposits	26,900			26,900		26,900
Organizational costs	1,085			1,085		1,085
	<u>10,806,970</u>	<u>101,914</u>	<u>1,122,150</u>	<u>12,031,034</u>		<u>5,209,912</u>
Total Assets	<u>\$ 32,475,471</u>	<u>\$ 5,772,431</u>	<u>\$ 3,789,940</u>	<u>\$ 42,037,842</u>		<u>\$ 35,216,720</u>

MAZAMA TIMBER PRODUCTS, INC. & SUBSIDIARIES
 DECEMBER 31, 1981
 Individual and Combined Balance Sheet

	<u>MAZAMA</u>	<u>EVSC</u>	<u>MT. MAZAMA</u>	<u>COMBINED TOTAL</u>	<u>ELIMINATIONS</u>	<u>TOTAL</u>
<u>LIABILITIES:</u>						
Current liabilities						
Book overdraft	\$ 656,951	\$ 56,275		\$ 713,226		\$ 713,226
Current debt			\$ 1,009,523	1,009,523		1,009,523
Current portion-long term debt	16,601,666	899,000	94,272	11,594,938		11,594,938
Timber and road contracts payable	5,080,752			5,080,752		5,080,752
Accounts payable	537,832	172,696	564,040	1,274,568		1,274,568
Accrued payroll and related taxes	207,974	191,782	151,997	551,753		551,753
Other accrued liabilities	1,772,527	449,364	49,389	2,271,280		2,271,280
Income taxes payable						
Account with affiliate					1,019,177	< 1,019,177 >
Total current liabilities	<u>2,238,667</u>	<u>4,329,705</u>	<u>1,869,221</u>	<u>6,568,372</u>	<u>6,568,372</u>	<u>21,476,863</u>
	<u>21,096,369</u>	<u>6,098,822</u>	<u>1,869,221</u>	<u>29,064,412</u>		
Long Term Debt	<u>4,549,542</u>	<u>1,488,493</u>	<u>297,203</u>	<u>6,335,238</u>		<u>6,335,238</u>
Timber and Road Contracts Payable, Non-Current Portion	<u>4,156,979</u>			<u>4,156,979</u>		<u>4,156,979</u>
	<u>29,802,890</u>	<u>7,587,315</u>	<u>2,166,424</u>	<u>39,556,629</u>		<u>31,969,080</u>
<u>STOCKHOLDER'S EQUITY:</u>						
Common Stock	50,000		277,750	327,750	252,750	75,000
Retained Earnings:						
Beginning of Year	4,297,583	< 1,164,111 >	1,400,776	4,534,248		4,534,248
Current Year Income (Loss)	< 1,509,820 >	< 650,773 >	< 55,010 >	< 2,215,603 >	< 1,019,177 >	< 1,196,426 >
Less cost of treasury stock	<u>165,182</u>			<u>165,182</u>		<u>165,182</u>
	<u>2,672,581</u>	<u>< 1,814,884 ></u>	<u>1,623,516</u>	<u>2,481,213</u>		<u>3,247,640</u>
Total Liabilities and Equity	\$ <u>32,475,471</u>	\$ <u>5,772,431</u>	\$ <u>3,789,940</u>	\$ <u>42,037,842</u>		\$ <u>35,216,720</u>

INDIVIDUAL AND COMBINED INCOME STATEMENT
DECEMBER 31, 1981

	<u>MAZAMA</u>	<u>EVSC</u>	<u>MT. MAZAMA</u>	<u>COMBINED TOTAL</u>	<u>ELIMINATIONS</u>	<u>CONSOLIDATED MONTH</u>	<u>YEAR TO DATE</u>
Sales							
Log	\$ 115,410			\$ 115,410		\$ 115,410	\$ 2,031,800
Net	<u>865,156</u> 980,566	<u>150,988</u> 150,988	<u>1,058,344</u> 1,058,344	<u>2,074,488</u> 2,189,898	<u>168,889</u> 168,889	<u>1,905,599</u> 2,021,009	<u>15,205,013</u> 17,236,813
Cost of Sales	<u>967,187</u>	<u>169,750</u>	<u>1,046,789</u>	<u>2,183,726</u>	<u>168,889</u>	<u>2,014,837</u>	<u>16,923,821</u>
Gross Profit	\$ 13,379	\$ (18,762)	\$ 11,555	\$ 6,172		\$ 6,172	\$ 312,992
Gen'l. & Admin. Expense	<u>48,523</u>	<u>44,068</u>	<u>30,692</u>	<u>123,283</u>		<u>123,283</u>	<u>766,560</u>
Operating Profit (Loss)	\$ (35,144)	\$ (62,830)	\$ (19,137)	\$ (117,111)		\$ (117,111)	\$ (453,568)
Depreciation	57,000	29,000	21,000	107,000		107,000	587,000
Interest Expense	<u>193,692</u> < 285,836 >	<u>29,565</u> < 121,395 >	<u>19,533</u> < 59,670 >	<u>242,790</u> < 466,901 >		<u>242,790</u> < 466,901 >	<u>1,496,300</u> < 2,536,868 >
Other Income	<u>80,048</u>		\$ (3963)	<u>76,085</u>		<u>76,085</u>	<u>321,265</u>
Income (Loss) Before Taxes	\$ < <u>205,788</u> >	\$ < <u>121,395</u> >	\$ < <u>63,633</u> >	\$ < <u>390,816</u> >		\$ < <u>390,816</u> >	\$ < <u>2,215,603</u> >
Provision for Taxes (Benefit)						\$ < <u>179,775</u> >	\$ < <u>1,019,177</u> >
Net Income (Loss)						\$ < <u>211,041</u> >	\$ < <u>1,196,426</u> >

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

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MAZAMA TIMBER PRODUCTS, INC. & SUBSIDIARIES
JANUARY 31, 1982
Individual and Combined Balance Sheet

ASSETS:

SOUTHWEST REGION OFFICE

Current Assets

	<u>MAZAMA</u>	<u>EVSC</u>	<u>MT. MAZAMA</u>	<u>COMBINED TOTAL</u>	<u>ELIMINATIONS</u>	<u>TOTAL</u>
Cash	\$ 991,390	\$ 9,262	\$ 1,763	\$ 11,025		\$ 11,025
Accounts & notes receivable	1,389,844	49,491	531,636	1,572,517		1,572,517
Inventories (LIFO)	6,968,245	68,955	602,576	2,061,375		2,061,375
Timber, timber deposits at cost, less depletion	2,520,227	44,238	49,407	6,968,245		6,968,245
Prepaid expenses	102,942			2,613,872		2,613,872
Other current assets				102,942		102,942
Total current assets	<u>11,972,648</u>	<u>171,946</u>	<u>1,185,382</u>	<u>13,329,976</u>		<u>13,329,976</u>
Properties at cost, less accum. dep'n.	8,730,130	6,292,971	2,990,168	18,013,269		18,013,269
	<u>4,270,896</u>	<u>834,612</u>	<u>1,500,594</u>	<u>6,606,102</u>		<u>6,606,102</u>
	<u>4,459,234</u>	<u>5,458,359</u>	<u>1,489,574</u>	<u>11,407,167</u>		<u>11,407,167</u>
Timber, timberlands, at cost less dep'n., less current portion	<u>4,194,863</u>			<u>4,194,863</u>		<u>4,194,863</u>

Other Assets

Notes receivable non-current	1,501,167		1,050	1,502,217		1,502,217
Cash surrender value life ins.						
Advances to affiliates and to stockholders	8,816,149	103,463	991,154	9,910,766	6,506,257	3,404,509
Investment in affiliate	444,510			444,510	252,750	191,760
Deposits	26,900			26,900		26,900
Organizational costs	1,085			1,085		1,085
	<u>10,789,811</u>	<u>103,463</u>	<u>992,204</u>	<u>11,885,478</u>		<u>5,126,471</u>
Total Assets	\$ <u>31,416,556</u>	\$ <u>5,733,768</u>	\$ <u>3,667,160</u>	\$ <u>40,817,484</u>		\$ <u>34,058,471</u>

MAZAMA TIMBER PRODUCTS, INC. & SUBSIDIARIES
JANUARY 31, 1982
Individual and Combined Balance Sheet

	<u>MAZAMA</u>	<u>EVSC</u>	<u>MT. MAZAMA</u>	<u>COMBINED TOTAL</u>	<u>ELIMINATIONS</u>	<u>TOTAL</u>
<u>LIABILITIES:</u>						
Current liabilities	\$ 359,826	\$ 30,702	\$ 999,585	\$ 390,528		\$ 390,528
Book overdraft				999,585		999,585
Current debt			94,272	11,504,995		11,504,995
Current portion-long term debt	10,511,723	899,000		4,933,633		4,933,633
Timber and road contracts payable	4,933,633		583,413	1,542,327		1,542,327
Accounts payable	772,299	186,615	162,564	719,739		719,739
Accrued payroll and related taxes	340,646	216,529	50,947	1,555,904		1,555,904
Other accrued liabilities	1,049,946	455,011				
Income taxes payable						
Account with affiliate	2,105,852	4,400,405		6,506,257	6,506,257	
Total current liabilities	<u>20,073,925</u>	<u>6,188,262</u>	<u>1,890,781</u>	<u>28,152,968</u>		<u>21,646,711</u>
Long Term Debt	4,510,994	1,488,493	289,308	6,288,795		6,288,795
Timber and Road Contracts Payable, Non-Current Portion	<u>4,202,725</u>			<u>4,202,725</u>		<u>4,202,725</u>
Total Liabilities	<u>28,787,644</u>	<u>7,676,755</u>	<u>2,180,089</u>	<u>38,644,488</u>		<u>32,138,231</u>
<u>STOCKHOLDER'S EQUITY:</u>						
Common Stock	50,000		277,750	327,750	252,750	75,000
Retained Earnings:						
Beginning of Year	4,297,583	(1,164,111)	1,400,776	4,534,248		4,534,248
Current Year Income (Loss)	(1,553,489)	(778,876)	(191,455)	(2,523,820)		(2,523,820)
Less cost of treasury stock	165,182			165,182		165,182
Total Retained Earnings	<u>2,628,912</u>	<u>(1,942,987)</u>	<u>1,487,071</u>	<u>2,172,996</u>		<u>1,920,246</u>
Total Liabilities and Equity	<u>\$ 31,416,556</u>	<u>\$ 5,733,768</u>	<u>\$ 3,667,160</u>	<u>\$ 40,817,484</u>		<u>\$ 34,058,477</u>

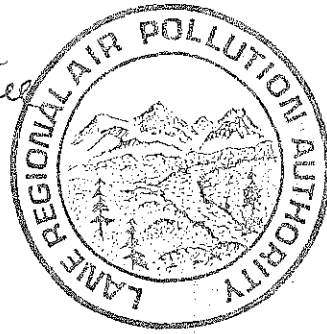
INDIVIDUAL AND COMBINED INCOME STATEMENT

JANUARY 31, 1982

	<u>MAZAMA</u>	<u>EVSC</u>	<u>MT. MAZAMA</u>	<u>COMBINED TOTAL</u>	<u>ELIMINATIONS</u>	<u>CONSOLIDATED MONTH</u>	<u>YEAR TO DATE</u>
Sales							
Log	\$ 176,183	\$	\$	\$ 176,183		176,183	\$ 2,207,983
Net	<u>1,217,607</u> <u>1,393,790</u>	<u>101,021</u> <u>101,021</u>	<u>1,100,898</u> <u>1,100,898</u>	<u>2,419,526</u> <u>2,595,709</u>	<u>174,039</u> <u>174,039</u>	<u>2,245,487</u> <u>2,421,670</u>	<u>17,450,500</u> <u>19,658,483</u>
Cost of Sales	<u>1,319,188</u>	<u>130,250</u>	<u>1,165,419</u>	<u>2,614,857</u>	<u>174,039</u>	<u>2,440,818</u>	<u>19,364,639</u>
Gross Profit	84,602	< 29,229 >	< 64,521 >	< 19,148 >		< 19,148 >	293,844
Gen'l. & Admin. Expense	<u>51,450</u>	<u>37,146</u>	<u>26,918</u>	<u>115,514</u>		<u>115,514</u>	<u>882,074</u>
Operating Profit (Loss)	23,152	< 66,375 >	< 91,439 >	< 134,662 >		< 134,662 >	< 588,230 >
Depreciation	57,000	29,000	21,000	107,000		107,000	694,000
Interest Expense	<u>260,479</u> < 294,327 >	<u>32,728</u> < 128,103 >	<u>20,850</u> < 133,289 >	<u>314,057</u> < 555,719 >		<u>314,057</u> < 555,719 >	<u>1,810,357</u> < 3,092,587 >
Other Income	<u>250,658</u>		< 3,156 >	<u>247,502</u>		<u>247,502</u>	<u>568,767</u>
Income (Loss) Before Taxes	\$ < <u>43,669</u> >	\$ < <u>128,103</u> >	\$ < <u>136,445</u> >	\$ < <u>308,217</u> >		< <u>308,217</u> >	< <u>2,523,820</u> >
Provision for Taxes (Benefit)							
Net Income (Loss)						< <u>308,217</u> >	< <u>2,523,820</u> >

LANE REGIONAL

*Young
Mc Cle
Weatherhead
Neff*



(503) 686-7618
1244 Walnut Street, Eugene, Oregon 97403
State of Oregon

DEPARTMENT OF ENVIRONMENTAL QUALITY

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Donald R. Arkell, Director
DEC 2 1982

...R POLLUTION AUTHORITY

State of Oregon
AIR QUALITY CONTROL
DEPARTMENT OF ENVIRONMENTAL QUALITY
November 29, 1982

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DEC 1 1982

Mr. Joe Richards, Chairman
Oregon Environmental
Quality Commission
P. O. Box 1760
Portland, OR 97207

OFFICE OF THE DIRECTOR

Re: 12/03/82 EQC Meeting
Agenda Item No. I
Request for Variance,
Mount Mazama Plywood Co.

Dear Mr. Richards;

A little less than a year ago, December of 1981, companies operating veneer dryers in Lane County were required by the Authority's rules to comply with visible emissions limits identical to those imposed by the Commission on all similar operations statewide. This compliance has been achieved through expenditure of several million dollars of initial capital cost and hundreds of thousands of dollars per year of operation and maintenance costs.

The Regional Air Pollution Authority considered requests from several companies for variances from the rules, based on assertions that the general difficult economic circumstances presented risk of closing or curtailing operations if the LRAPA requirements were enforced on schedule. For each request, the possibility of plant closure had to be weighed against the economic penalties for those companies who had made the capital expenditures and were operating control systems needed to meet the requirements. As the depressed wood products economy persisted, the issue of equal treatment under the rule became dominant, outweighing air quality issues.

It is this same question which now, in our view, should be weighed by the Commission as it considers the Mount Mazama request to extend its variance.

The Authority has done its best to apply the veneer dryer rules in an even-handed fashion so that there is minimal influence on existing competitive market pressures. Presently, all veneer dryers in Lane County are in compliance with LRAPA's rules. Those firms who had to install control systems to achieve compliance have done so. Several have since shut down or sharply curtailed their operations.


It is my understanding that Mount Mazama Plywood competes heavily in the same national markets as other plywood manufacturers in Oregon. Although it is difficult to assess the full impact of the proposed action, a number of veneer plant operators in Lane County indicate that the succession of variances issued to Mount Mazama has, in their opinion, placed them at a competitive disadvantage.

Mr. Joe Richards
November 29, 1982
Page 2

The Authority is, of course, sensitive to the implications of mill closures, and we are certainly not advocating action which would cause a shut-down. By the same token, we do not wish for additional curtailment of veneer production in Lane County as an indirect result of a variance issued by the State. We hope that any action which provides relief to the applicant includes conditions to mitigate the economic disadvantage to veneer drying operators in Lane County.

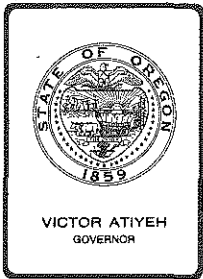
Thank you for your consideration of this concern.

Sincerely,



Donald R. Arkell
Director

DRA/mjd



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. J, December 3, 1982, EQC Meeting

Request for a Variance from OAR 340-21-015(2)(b) Visible Air Contaminant Limits and OAR 340-21-030(2) Particulate Emission Limits for the Oil-Dri Corporation of America, Christmas Valley Plant.

Background and Problem Statement

Oil-Dri Corporation of America owns and operates a diatomaceous earth processing plant near Christmas Valley, Oregon, 75 air miles and 110 road miles southeast of Bend. The company utilizes a series of crushers, screens, elevators and a rotary dryer to produce products such as cat litter and oil absorbents.

The company purchased the plant in 1979. At the time of purchase, the plant had severe air pollution problems. Material processing, handling and drying creates a fine dust. In 1979 a number of points, including the wet scrubber stack, were emitting dust which violated the 20 percent opacity standard in the company's Air Contaminant Discharge Permit (19-0018). Fugitive emissions from the facility and from previously mined lands added to the problem. Due to the flat, open terrain, the emissions were visible from anywhere in the Christmas Valley area. The nearest residence is more than one mile from the plant site.

In 1979 Oil-Dri Corporation and the Department's Central Region Office worked closely together on a compliance schedule and plan for correction of the emission problems. The schedule called for final compliance by May 1980.

The company modified processing equipment and installed pollution control equipment which significantly cut emissions. These actions satisfied the complainants and minimized the aesthetic impact of the operations. However, the company could not control scrubber emissions enough to meet permit standards and requested another compliance schedule. A new schedule

was negotiated and a final compliance date of February 1, 1982 was added to the company's permit. In June 1982 the Department sent the company a five-day warning notice for failure to meet the February 1 date. The company stated its desire for a formal variance shortly after receiving the five-day notice and requested a variance in a letter dated August 24, 1982.

Oil-Dri has submitted a variance request to postpone the final compliance date for correction of the excessive emissions from the wet scrubber until April 1, 1984 ". . . to enable the company to spread out its capital spending requirements during the current economic slump."

The variance request states that net operating losses combined with the cost of process and pollution control modifications have exceeded \$1 million in the past three years. This has severely impacted Oil-Dri Corporation at a time when the recession is creating a similar impact on the company's other operations. The present product shipment levels from the Christmas Valley Plant are running 32 percent below the projected break-even point.

The Commission is authorized by ORS 468.345 to grant variances from Department rules if it finds strict compliance is inappropriate for one of the reasons specified in the statute, including ". . . conditions exist that are beyond the control of the persons granted such variance."

Alternatives and Evaluation

The company has submitted a schedule for bringing scrubber emissions into compliance by April 1, 1984. The schedule calls for installation of a new cyclone and fan by March 1, 1983, followed by testing to determine if the existing scrubber should be modified or replaced with a baghouse. The cyclone and fan installation will cost about \$42,000; a baghouse would cost an additional \$104,000.

An alternative available, but not considered reasonable in view of the assessed environmental impact and economic conditions, would be to require immediate compliance and invoke civil penalties.

An alternative also available would be to require compliance at an earlier date than proposed by the company. However, the detailed compliance schedule submitted by the company appears to staff to be a thorough step-by-step approach that, if followed closely, will result in compliance by the date requested by the company.

The staff is, however, concerned about the company's determination to meet the compliance schedule it has submitted. The company and the Department have negotiated two compliance schedules in the past as part of permit modifications. In each case the company has failed to meet the dates it has proposed to the Department. Staff intends to bring the company back before the Commission quickly if the company does not meet the specific dates of the variance.

The Department supports the variance request essentially as submitted by Oil-Dri Corporation for the scrubber at the Christmas Valley plant, subject to the following conditions:

1. The company shall meet the compliance schedule contained in the Summary.
2. The variance may be revised or revoked by the Commission if they determine that the emissions from the plant cause a nuisance to persons or property.

Summation

1. Oil-Dri Corporation has requested a variance from OAR 340-21-015(2)(b) Visible Air Contaminant Limits and OAR 340-21-030(2) Particulate Emission Limits for the wet scrubber at its Christmas Valley facility.
2. The Commission has the authority under ORS 468.345 to grant a variance from a rule if ". . . conditions exist which are beyond the control of persons granted such variance."
3. Oil-Dri Corporation has submitted information which show that present product shipment levels from the Christmas Valley plant will be 32 percent below the break-even point for this year. Net operating losses, combined with the cost of processing and pollution control equipment, have exceeded \$1 million during the past three years and have severely impacted the company.
4. Emissions from the scrubber have been controlled by the company to a point where they are not offensive to residents of the area.
5. Alternatives to the compliance schedule requested by the company (immediate strict enforcements of the OAR's or a tighter compliance schedule) may be unreasonable. The current environmental impact and the poor economic condition at the Christmas Valley facility provide evidence that strict enforcement of the rules may be inappropriate.
6. The staff has recommended approval of a compliance schedule with increments of progress as follows:
 - a. By no later than January 1, 1983, the permittee shall submit a Notice of Construction, including plans and specifications for the cyclone and fan system improvements, to the Department for review.
 - b. By March 1, 1983 complete installation of a new cyclone and I.D. fan system.
 - c. By June 1, 1983 complete stack testing program to evaluate cyclone performance and provide design data for second stage pollution control equipment.

- d. By no later than August 1, 1983, the permittee shall submit a Notice of Construction, including plans and specifications for the secondary pollution control system, to the Department for review.
 - e. By no later than October 1, 1983, the permittee shall issue purchase orders for the major work and components of the approved secondary pollution control system.
 - f. By no later than December 1, 1983, the permittee shall begin construction.
 - g. By no later than February 1, 1984, the permittee shall complete construction.
 - h. By no later than April 1, 1984, the permittee shall demonstrate compliance.
7. The Commission should find that adverse market conditions are beyond the control of the applicant and strict compliance is inappropriate.

Director's Recommendation

Based upon the findings of the Summation, it is recommended that the Commission grant a variance from OAR 340-21-015(2)(b) and OAR 340-21-030(2) until April 1, 1984 for the wet scrubber at the Oil-Dri Corporation diatomaceous earth processing facility at Christmas Valley, Oregon, subject to the following conditions:

1. The company shall meet the compliance schedule contained in the Summary.
2. If the Commission determines that the scrubber emissions cause a nuisance to persons or property, this variance may be revised or revoked.

Bill

William H. Young

- Attachments (2):
1. Notice of Violation and Intent to Assess Civil Penalty to Company dated June 8, 1982.
 2. Variance Request dated August 24, 1982.

Richard J. Nichols
388-6146
November 9, 1982



Department of Environmental Quality

522 SOUTHWEST 5TH AVE. PORTLAND, OREGON

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

June 8, 1982

CERTIFIED MAIL NO. B13-3492424

DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED
JUN 10 1982

Oil-Dri Corporation of America
c/o C. T. Corporations System,
Registered Agent
800 Pacific Building
Portland, OR 97204

Re: Notice of Violation and Intent to Assess Civil Penalty
AQ-CR-82-49
Lake County

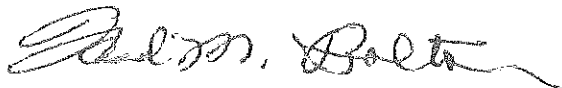
The Air Contaminant Discharge Permit issued for the Oil-Dri Production Company facility located in Christmas Valley, Oregon, contains a compliance schedule requiring you to demonstrate control of emissions from the plant site by May 1, 1980. The Department by letter extended that date to January 1, 1981. Following an unsuccessful grain loading test conducted by your consultant on the modified scrubber on April 15, 1981, an additional extension to February 2, 1982 was granted by permit addendum. That test led to the recognition that additional control equipment was needed.

On May 29, 1981, you submitted alternative control strategies. The amended permit required you to choose a specific control strategy by September 1, 1981 from the alternatives submitted, begin installation of the chosen control equipment by December 1, 1981, and demonstrate compliance by February 1, 1982. This has not been done even though there has been considerable correspondence between your company and our Central Regional office regarding your non-compliance with the schedule.

Although we have been very patient with your failure to meet the compliance schedule over the last two years, we still now do not have a firm commitment from your company as to what control equipment it chooses to install, when it will be installed, and when the equipment will be source tested. In order to encourage you to expedite compliance with Condition 7 of your permit, I have enclosed a Notice warning you of the Department's intent to assess civil penalties should the violations cited continue unresolved. The civil penalty schedule provides for penalties of from \$50 to \$10,000 for each day you are in violation of any condition of the permit.

If you have any questions about the requirements of your permit, this Notice, or the consequences of your failure to comply, please contact Mr. Robert Danko of our Central Region office in Bend at 388-6146.

Sincerely,



Fred M. Bolton
Administrator
Regional Operations

FMB:o

GB1031.L

Enclosure

cc: Air Quality Division, DEQ
Central Region, DEQ
Department of Justice
EPA, Oregon Operations Office

1 BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
2 OF THE STATE OF OREGON

3 DEPARTMENT OF ENVIRONMENTAL QUALITY,) NOTICE OF VIOLATION AND
4 OF THE STATE OF OREGON,) INTENT TO ASSESS CIVIL PENALTY
5) No. AQ-CR-82-49
6) LAKE COUNTY
7)
8) v.)
9)
10 OIL-DRI CORPORATION OF AMERICA,)
11 a Delaware corporation,)
12)
13) Respondent.)
14

15 I

16 This notice is being sent to Respondent, Oil-Dri Corporation of
17 America, a Delaware corporation, pursuant to Oregon Revised Statutes
18 ("ORS") 468.125(1) and Oregon Administrative Rules ("OAR") Section 340-12-
19 040(1) and (2).

20 II

21 On or about February 22, 1980, the Department of Environmental Quality
22 ("Department") issued Air Contaminant Discharge Permit No. 19-0018
23 ("Permit") to Respondent. The Permit authorized Respondent to discharge,
24 from Respondent's Oil-Dri Production Company located in Christmas Valley,
25 Oregon, exhaust gases containing air contaminants including emissions from
26 those processes and activities directly related or associated thereto in
accordance with the requirements, limitations, and conditions of the
Permit. On or about July 7, 1981, Department issued Respondent Addendum
No. 1 to the Permit. The Permit expires on January 1, 1985. At all
material times cited herein, the Permit as amended was and is now in
effect.

1 III

2 A. From on or about September 2, 1981, through the present, Respondent
3 has violated Condition 7a of the Permit, as amended, in that Respondent
4 failed to notify the Department by no later than September 1, 1981 of the
5 specific emission control alternative Respondent has chosen from the
6 strategies Respondent submitted to Department on May 29, 1981.

7 B. From on or about December 2, 1981, through the present, Respondent
8 has violated Condition 7b of the Permit, as amended, in that Respondent, by
9 no later than December 1, 1981, failed to begin installation of the
10 emission control equipment referred to in Paragraph A above.

11 C. From on or about February 2, 1982, through the present, Respondent
12 has violated Condition 7c of the Permit, as amended, in that Respondent, by
13 no later than February 1, 1982, failed to demonstrate that Respondent's
14 pollution control equipment is capable of operating in continuous
15 compliance with Condition 2a of the Permit by submitting the results of a
16 particulate emissions source test performed in accordance with the testing
17 procedures on file with the Department or in conformance with applicable
18 standard methods approved in advance by the Department.

19 IV

20 If five (5) or more days after Respondent receives this notice, the
21 one or more violations cited in Paragraph III of this notice continue,
22 or any similar violation occurs, the Department will impose upon Respondent
23 a civil penalty pursuant to Oregon statutes and OAR, Chapter 340, Divisions
24 11 and 12. In the event that a civil penalty is imposed upon Respondent,
25 it will be assessed by a subsequent written notice, pursuant to ORS
26 468.135(1) and (2), ORS 183.415(1) and (2), and OAR 340-11-100 and

1 340-12-070. Respondent will be given an opportunity for a contested case
2 hearing to contest the allegations and penalty assessed in that notice,
3 pursuant to ORS 468.135(2) and (3), ORS 183, and OAR Chapter 340, Division
4 11. Respondent is not entitled to a contested case hearing at this time.

5

6 June 8, 1982
Date

Fred M. Bolton
Fred M. Bolton, Administrator
Regional Operations, DEQ

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Certified Mail P13 3192424

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520 North Michigan Avenue
Chicago, Illinois 60611
Phone 312-321-1515

Cable Oil-Dri - Chicago, U.S.A.
TWX 910-221-5280

OILDRI

CORPORATION OF AMERICA

August 24, 1982

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
AUG 30 1982
BEND DISTRICT OFFICE

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

ATTN: Mr. Fred Bolton
Administrator

RE: REQUEST FOR VARIANCE OF AIR CONTAMINANT DISCHARGE PERMIT NO. 19-0018

Dear Sir:

Since purchasing the assets of American Fossil Company in the spring of 1979, Oil-Dri Corporation has been working to solve the many problems related to processing and pollution control at its Christmas Valley Oregon plant. Because these problems are interrelated, a comprehensive approach has been taken to develop an optimum plan that would integrate the solution to each set of problems.

Unfortunately there have been several factors that have prevented Oil-Dri Corporation from meeting its profit and pollution control plans. At the top of this list would have to be the deplorable state of the Christmas Valley plant facility when purchased by Oil-Dri Corporation. The Department of Environmental Quality (D.E.Q.) records will confirm American Fossil's apparent disregard to matters of pollution control. Another serious problem was the difficulty that Oil-Dri Corporation had in solving the process problems related to the Christmas Valley raw materials.

The current business recession has had an extreme negative impact on Oil-Dri Corporation's ability to overcome the problems at the Christmas Valley facility and generate the necessary revenues to finance major expenditures, such as those required to complete the pollution control plan. To demonstrate the effect the recession is having on the company, Oil-Dri's shipments for the last quarter of the 1982 fiscal year (May-June, 1982) were down 19% from the same period of the previous year. At this level of shipments, the Oregon operation is running at 32% below its projected breakeven point.

Under the existing economic conditions, Oil-Dri finds itself in a struggle just to keep its Oregon operation in existence. Since Oil-Dri Corporation purchased the assets of American Fossil the cost of process and pollution control modifications combined with the net operating losses have exceeded \$1,000,000 during this three year period. This has had an extreme negative impact on Oil-Dri Corporation during a time when the recession is creating a similar impact on the remainder of the company's other operations.

Mr. Fred Bolton

REQUEST FOR VARIANCE OF AIR CONTAMINANT DISCHARGE PERMIT NO. 19-0018

Page Two

During this period of time, Oil-Dri has shown good faith in its pollution control efforts by accomplishing the following:

1. Installation of a fines washout system to reduce dust loading to the existing scrubber.
2. Installation of a mill/screening system capable of processing raw materials ahead of the drying operation.
3. Modified existing scrubber system to improve water spray/particulant interaction.
4. Eliminated unnecessary conveyor belt transfer points.
5. Completed raw feed crusher modifications resulting in reduced amount of waste fines being generated.
6. Made extensive revisions to its mining operation to reduce the potential of fugitive dust emissions from this source.
7. Eliminated need for a second dryer, thereby, reducing dust load to existing scrubber.
8. Increased dryer output, thereby leading to reduced number of dryer operating hours.
9. Continuing research and development efforts to produce a harder product which would lead to considerable reduction in the dust loading to the scrubber.
10. Continue program to replace existing worn-out equipment with new units that are designed to minimize fugitive dust emissions.
11. Purchase of Western Precipitator Stack Testing equipment to analyze dryer emissions. Have conducted three stack testing programs at the Christmas Valley facility since March 1981.

As a result of the above modifications, Oil-Dri Corporation has been able to reduce dust emissions by 80% from the levels that existed when American Fossil ran the operation.

Although enduring current economic hardships, Oil-Dri Corporation is still dedicated to solving the problems associated with its Oregon facility and establishing this operation as a major economic contributor to the area. To realize this goal, Oil-Dri Corporation desperately needs and requests an extension to the compliance schedule to enable the company to spread out its capital spending requirements during the current economic slump.

Specifically Oil-Dri Corporation requests the following variance to its Air Contaminant Discharge Permit No. 19-0018:

1. By December 1, 1982 complete detailed layouts and design of a new cyclone and I.D. fan system for the existing dryer.
2. By March 1, 1983 complete installation of a new cyclone and I.D fan system.

Mr. Fred Bolton

REQUEST FOR VARIANCE OF AIR CONTAMINANT DISCHARGE PERMIT NO. 19-0018

Page Three

3. By June 1, 1983 complete stack testing program to evaluate cyclone performance and provide design data for second stage pollution control equipment. Determine feasibility of baghouse versus wet scrubber system.
4. By August 1, 1983 complete final detailed design for secondary pollution control system.
5. Place orders and receive all pollution control equipment by December 1, 1983.
6. By February 1, 1984 complete installation of secondary pollution control system.
7. By March 1, 1984 complete certified stack emission tests.
8. By April 1, 1984 submit stack test results to demonstrate compliance with D.E.Q. requirements.

Cost estimates for the above program are as follows:

CYCLONE/I.D. FAN SYSTEM

I.D. Fan (Used)	\$ 6,000
Refurbish I.D. Fan	4,000
Support Tower Foundations	3,000
Support Tower Fabrication/Erection	7,000
Cyclone	5,500
Set Fan and Cyclone Unit	2,000
Ductwork Modifications	4,000
Duct Insulation	3,000
Electrical	500
Engineering	<u>2,500</u>
	\$37,500
Contingency	<u>4,500</u>
ESTIMATED TOTAL	\$42,000

SECONDARY POLLUTION CONTROL SYSTEM

It is impossible to estimate this cost until a decision is made concerning the feasibility of a dry baghouse versus a wet scrubber system.

Oil-Dri's previous construction costs indicate that a baghouse system would run in the neighborhood of \$8/acfm. Our stack tests indicate a need for 13,000 acfm. On this basis a rough estimate for this system would indicate a need for \$104,000.

There may also be a need for an additional well for washout water or a small silo for storing dry fines.

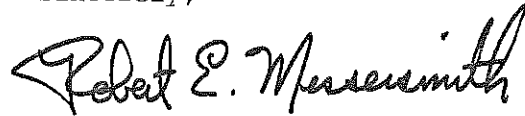
Mr. Fred Bolton

REQUEST FOR VARIANCE OF AIR CONTAMINANT DISCHARGE PERMIT NO. 19-0018

Page Four

Mr. Robert Danko of the Bend D.E.Q. office has indicated that a meeting will be held in Portland to review Oil-Dri's request for a variance. Oil-Dri Corporation would like to be represented at this meeting by Mr. Bruce Sone of Oil-Dri Corporation, Portland office. Mr. Sone is the President of Oil-Dri Corporation's Oregon operation. The telephone number for the Oil-Dri Portland office is: 503/223-1851.

Sincerely,

A handwritten signature in black ink that reads "Robert E. Messersmith". The signature is written in a cursive style with a large, stylized initial "R".

ROBERT E. MESSERSMITH
Director of Engineering

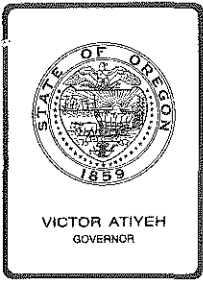
REM:pj

cy: Richard Nichols, Regional Manager, Bend D.E.Q.

Robert Danko, Regional Engineer, Bend D.E.Q.

E. Allbritton

B. Sone



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. K, December 3, 1982, EQC Meeting

Request for a Variance from OAR 340-21-025(b) Particulate Emission Limits for a Crematorium Proposed by the Rajneesh Neo-Sannyas International Commune.

Background and Problem Statement

The Rajneesh Neo-Sannyas International Commune proposed to construct and operate a crematorium facility at an isolated site on the 64,000-acre Rancho Rajneesh (formerly Big Muddy Ranch). The crematorium would not be of conventional retort design. It would, instead, allow a body to be incinerated in a pyre. The unusual design is intended to allow the cremation to be observed by the followers of the Bhagwan Shree Rajneesh as part of a religious ceremony or experience. The applicant has stated that cremation at the proposed facility will be limited to deceased residents of Rancho Rajneesh. The applicant contends that actual use will be very infrequent because the residents have relatively low median age and have, in general, above average health. In the past year there have been no natural deaths and one accidental death on the Ranch.

The burning will be done on a five (5) foot by ten (10) foot slotted metal grate. Combustion will be fueled by well-seasoned wood amply laid under, around and covering the remains. A propane burner and air jets will be located under the grate to enhance combustion. Pyre shielding will be provided to prevent spillage in the case of use under windy conditions. A propane afterburner will be located in the chimney to assure complete combustion. The afterburner should allow the facility to meet the Department's 20 percent opacity rule, but the crematorium may be unable to meet the particulate emission limit required by OAR 340-21-025(b).

The Commune has submitted a variance request to permanently waive the 0.1 grains per standard cubic foot (scf) particulate emission limit. The request is based upon the belief that strict compliance is unreasonable because of ". . . the limited use and isolated character of the facilities."

The Commission is authorized by ORS 468.345 to grant variances from Department rules if it finds strict compliance is inappropriate for one of the reasons specified in the statute, including "Special circumstances (that) render strict compliance unreasonable, burdensome or impractical due to special physical conditions or cause."

Evaluation and Alternatives

The propane afterburner in the chimney of the crematorium should reduce the emission opacity to less than the Department's 20 percent limitation. The afterburner should also significantly reduce, if not eliminate, odors. Obviously, the staff has no experience with this type of crematorium. However, there are afterburner systems in use in the state of Oregon to control fume emissions from an asphalt manufacturing plant and to reduce opacities from incinerators.

The afterburner design will likely not allow the crematorium to meet the 0.1 grain per scf particulate emission limit because ash is entrained in the stack. The particulate emission limit has been established in the rules to control total particulate in air sheds. Because of the limited use, remoteness of the facility and design of the facility, the particulate emissions from the crematorium should not measurably impact the air shed on the Ranch. The major source of particulate in the area is windblown dust. The area receives less than ten inches of rainfall per year.

As an alternative, the Commune could install a standard retort-type crematorium. This type of crematorium could meet all Department emission standards. However, such a unit would not allow viewing of the cremation and would not provide the religious experience desired by the Commune.

Another alternative would be to install a control device, such as a baghouse, to remove particulate emissions. Estimated cost to add a baghouse to the proposed crematorium is about \$75,000. Costs would be lowered to perhaps \$30,000 if the configuration of the proposed crematorium were drastically changed. In either case, ducting, fans and other associated equipment would be required. Visual and noise impacts from this equipment would seriously disrupt the religious experience and would not be desirable to the Commune.

A final alternative would be to consider the variance only after a source test confirms that the particulate emission limit cannot be met. There are several impracticalities to this alternative. The first is that source tests are usually scheduled several weeks in advance. If a member of the Commune dies, his body will probably be disposed of within 24 hours. The source test personnel and equipment would also disrupt the religious experience. A source test could be conducted with wood only. This, however, would not be representative of the actual cremation.

Based upon the isolated nature of the facility and its infrequent use, it is not unreasonable for the Commune to request a permanent waiver to the particulate emission limitation. The Commune would still be required to

meet the 20 percent opacity standard and not be allowed to create nuisance odors. The Department, therefore, supports the Commune's variance request, subject to the following conditions:

1. Visible emissions from the crematorium shall not exceed standards specified in OAR 340-21-015(2).
2. The variance may be revoked by the Commission if the Commission determines that the crematorium emissions cause a nuisance.
3. The variance shall apply only to this specific location and the crematorium shall be available only to deceased followers residing at the Ranch.

Summation

1. Rajneesh Neo-Sannyas International Commune has submitted a variance request to waive the particulate emission limit for a proposed crematorium, OAR 340-21-025(b).
2. The proposed crematorium will be located in an isolated area and will be limited to cremation of deceased residents of Rancho Rajneesh.
3. The crematorium includes an afterburner and is designed to meet the emission opacity requirement and will control nuisance odors. It may not achieve the particulate emission standard of 0.1 grain per scf.
4. There are several alternatives to granting the variance. The Commune could install a conventional retort design unit or could add control equipment to its proposed unit. The cost of a baghouse is estimated at \$75,000. Both of these alternatives would either prevent or disrupt the desired religious experience. Another alternative would be to source test the proposed facility after it is constructed. If it failed to achieve emission standards, a variance could be considered. This alternative appears impracticable.
5. The staff recommends that the variance be granted. Visual and nuisance limitation conditions will be in the permit to prevent any significant air pollution problems.
6. The Commission should find that special circumstances render strict compliance unreasonable, burdensome, or impracticable due to special physical conditions or cause.

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Commission grant a variance from OAR 340-21-025(2)(b) for the crematorium proposed by the Rajneesh Neo-Sannyas International Commune, subject to the following conditions:

1. Visible emissions from the crematorium shall not exceed standards specified in OAR 340-21-015(2).

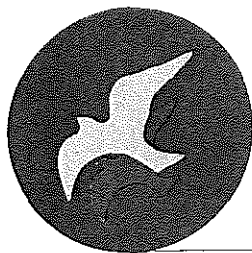
2. The variance may be revised or revoked by the Commission if the Commission determines that the crematorium emissions cause a nuisance.
3. The variance shall apply only to this specific location and the crematorium shall be available only to the deceased followers residing at the Ranch.

Bill

William H. Young

- Attachments (7)
1. Letter from Rajneesh Neo-Sannyas International Commune dated July 18, 1982.
 2. Permit Application Letter and Request for Variance
 3. Letter from Rajneesh Neo-Sannyas International Commune dated October 30, 1982.
 4. Map - The Planning Area - Area Location Map
 5. Map - State of Oregon - State Location Map
 6. Map - Jesus Grove Area - Location of Crematorium
 7. Print of Proposed Crematorium

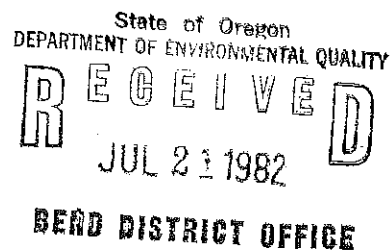
R.J.Nichols:h
388-6146
November 4, 1982



RAJNEESH NEO-SANNYAS INTERNATIONAL COMMUNE
PO Box 12A, Antelope, OR 97001 USA (503) 489-3303

July 18, 1982

Mr. Dick Nichols
Department of Environmental Quality
Central Region Office
2150 N.E. Studio Road
Bend, OR 97701



Beloved Mr. Nichols,

Love.

The purpose of this letter is to provide information to the department on the Crematory we plan to construct on the Rancho Rajneesh in Jefferson County. The County has previously determined that zoning is appropriate for construction of this facility.

The structure is needed to perform cremation of the remains of deceased members of the Rajneesh religion. It is an important traditional ritual of our religion.

This activity will neither be harmful to the environment nor endanger public health or safety. How the activity is to be performed is set out below. The lack of impact on the environment or public health and safety is assured because of the infrequency and remoteness of the activity as well as the efficient and controlled manner of burning.

Infrequency of the Activity

Cremation at this facility will be available only to members of the religion of Rajneeshism who have given their consent to the Commune to perform this function when they are deceased. It will, in the main, be further limited to members who are resident at the Rajneesh community here. Currently there are approximately 320 residents. The population profile of the residents is a median age of 33 with above average health. A very low mortality rate is expected. There were no resident deaths over the past year, although one visitor died in an accident.

This facility will not be available to persons not members of the religion.

Remoteness of the Facility

The crematory will be located in a remote canyon on the Ranch (NW $\frac{1}{4}$ of Section 1, T9S, R18E) over four miles from the closest neighboring property. Population density in the surrounding area is very low. A location map is enclosed as Exhibit A.

Manner of Cremation

Cremation will be performed in a structure that has been specially designed for this purpose. Exhibit B is a rendering of what this beautiful and functional building will look like when completed. The design and operation of the combustion system will insure complete, efficient and controlled oxidation. At the same time the burning will take place in a manner consistent with what has been traditional for this ritual. Exhibits C and D show details of the system referred to in the following description:

The burning will be done on a 5' x 10' slotted metal grate. Fuel will be well seasoned wood amply laid under, around, and covering the remains. Propane jets coming up from the pipes under the burning surface will ignite the wood quickly and evenly.

The combustion exhaust will be directed up through a hood and chimney flue by a $\frac{1}{2}$ " wide air curtain immediately surrounding the burning area and assisted by a $\frac{3}{4}$ horsepower draft inducer installed in the chimney. Combustion air will be controlled by adjustable air jets under the grate and chimney damper to insure design combustion. A spark arrestor will be installed at the top of the stack.

The burning will be monitored and controlled at all times during the operation. Temperatures of 1400°F-1600°F are anticipated. Remains will be substantially reduced to ashes in 8-12 hours with total oxidation of the wood within 48 hours.

The products of emission from the body will be largely water from evaporation and carbon dioxide from oxidized organic compounds. No toxic material will be emitted.

The Rajneeshpuram Rural Fire Protection District will be notified prior to each cremation. It has advised that its equipment and personnel will be put on stand-by so as to be immediately available in the remote chance of outside fire.

This manner of burning will result in no noxious odors. The products of combustion are not expected to leave the general vicinity of the canyon where the crematory is located.

The structure will be made of metal and rock to insure it's non-combustibility and will comply with all applicable fire codes. The closest observers will be about 45 feet from the burning surface.

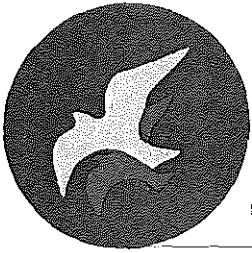
We believe this facility will insure that there is no adverse impact to the environment or the public health and safety. At the same time, it will allow the practice of a traditional ritual important to our religion and will allow fulfillment of the wishes of our individual members.

If you need further information, please let us know.

His blessings,

A handwritten signature in cursive script that reads "Robin Reinhart". The signature is written in dark ink and is positioned centrally on the page.

Robin Reinhart
Secretary



RAJNEESH NEO-SANNYAS INTERNATIONAL COMMUNE

P.O. Box 47, Madras, OR 97741

(503) 489-3303

J/M220:dd/dp
September 14, 1982

Mr. Ray Potts
Department of Environmental Quality
Box 1760
Portland, OR 97207

Beloved Mr. Potts,

Love.

Enclosed you will find:

1. Two copies of an application for an air contaminant discharge permit for a crematorium.
2. A check in the amount of \$350.00.
3. A set of plans for the structure and mechanical systems, including a detail of the vent stack and burn out section arrangement by Mr. Leslie Turner of Turco Engineering, Inc.
4. Our request to proceed with the application pending receipt of a compatibility statement.
5. Request for a variance from OAR 340-21-025 (b), and the inclusion of monitoring ports in the stack.

Pyre shielding will be provided to prevent spillage in the case of use under windy conditions.

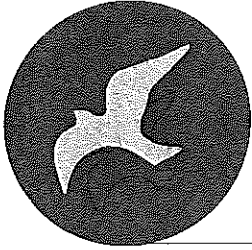
Thank you for your assistance.

His blessings,

Sandesh

Swami Deva Sandesh
Chuang Tzu Department

cc: Mr. Donald Bramhall, DEQ, Bend
Enclosure



RAJNEESH NEO-SANNYAS INTERNATIONAL COMMUNE

Rajneeshpuram, OR 97741, U.S.A.

(503) 489-3303

J/M 220 DP.pl ✓

Mr. Richard J. Nichols
Department of Environmental Quality
1250 N.E. Studio Rd.
Bend, OR 97701

October 30, 1982

Beloved Dick,

Love.

We are writing to clarify our request for a variance submitted as part of our application for an APCF permit to operate a crematorium (your file no. 16-0021). The revised design of the crematorium to include a propane afterburner located in the chimney will reduce the emission opacity to less than the 20% limits, so a variance is not requested on that standard.

However, we request that the particulate emission standard be permanently waived. The reason for this request is that, without resorting to a more conventional enclosed "retort"-type crematorium or without using extensive additional emission control equipment, we would be unable to meet the 0.1 grains per standard cubic foot (scf) particulate emission limit.

The enclosed "retort"-type crematorium would not be at all suitable for our religious ceremony of cremation. We see this occasion as a joyous send-off to the beyond of a loved one. Enclosure within a mechanical device would disrupt and severely detract from the intent and experience of this important ceremony.

Another alternative to meet the particulate emission standard would be to install additional emission control equipment. We feel that to do this would also create a disruption of the ceremony by having noisy and unsightly equipment surrounding the basically simple and elegant structure.

. . . / . . .

A variance to raise the emission limit to some higher limit would be at best a guess as to what that limit would be and access to the sampling ports during operation by testing personnel would also be a disturbance. In addition, as we cremate very soon after death (if possible, within 6 hours and never more than 24 hours), it is impractical to think of getting qualified testing personnel to the site on such short notice.

Therefore we request that the particulate emission standard be waived altogether. The consequences of waiving this standard, we feel, would be insignificant for the following reasons:

1. The frequency of use would be probably not more than 2 or 3 times per year. The median age of residents at Rajneeshpuram is a low 34 years. In the past 16 months there has been one accidental death here. Use of the crematorium would be limited to adherents of Rajneeshism who were residents of Rajneeshpuram.
2. The remote location of the proposed site would have virtually no air quality impact on the nearest habited area, which is the Jesus Grove area of Rajneeshpuram, about 1 (one) mile away (see enclosed location map). Further, the site is located out of sight of both the incorporated city area and the County Road #305 (Muddy Road) because of the steep intervening hilly terrain. The site is on a high shoulder with the possibility of receiving breezes from 360° so that rapid dispersion of the stack emissions would be possible. The next nearest occupied dwelling, other than those owned by Rajneesh corporations, is approximately 5 (five) miles to the north of the crematorium site. As a result of these site factors, we feel that impact on any habited area would be insignificant.

Thank you very much for your assistance in this application. If I can answer any further questions about this facility, let me know and I will be happy to do so.

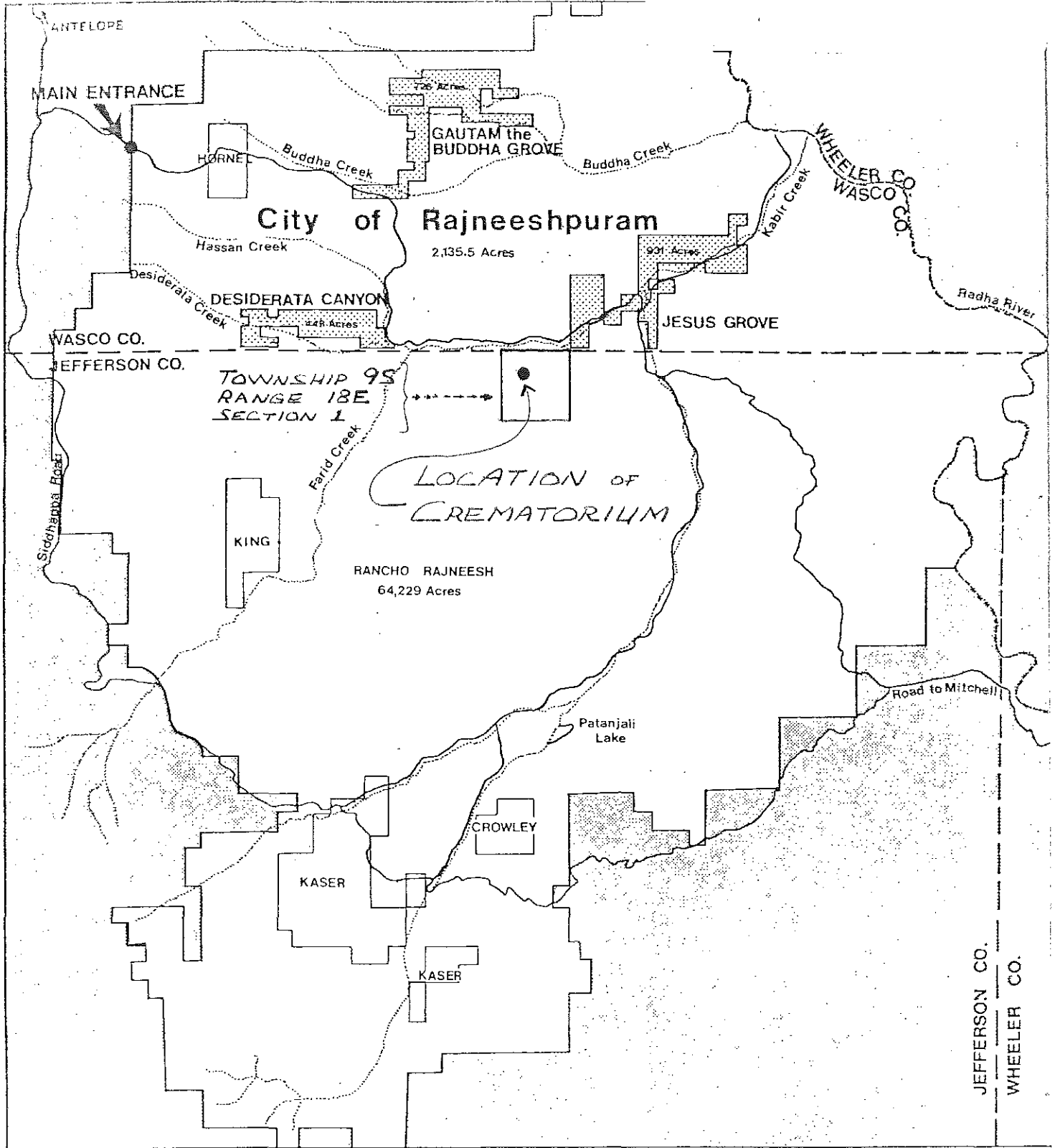
His blessings,


Devaprem

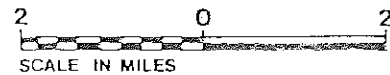
Swami Devaprem
Chuang Tzu Department

Encl.

THE PLANNING AREA - Area Location Map

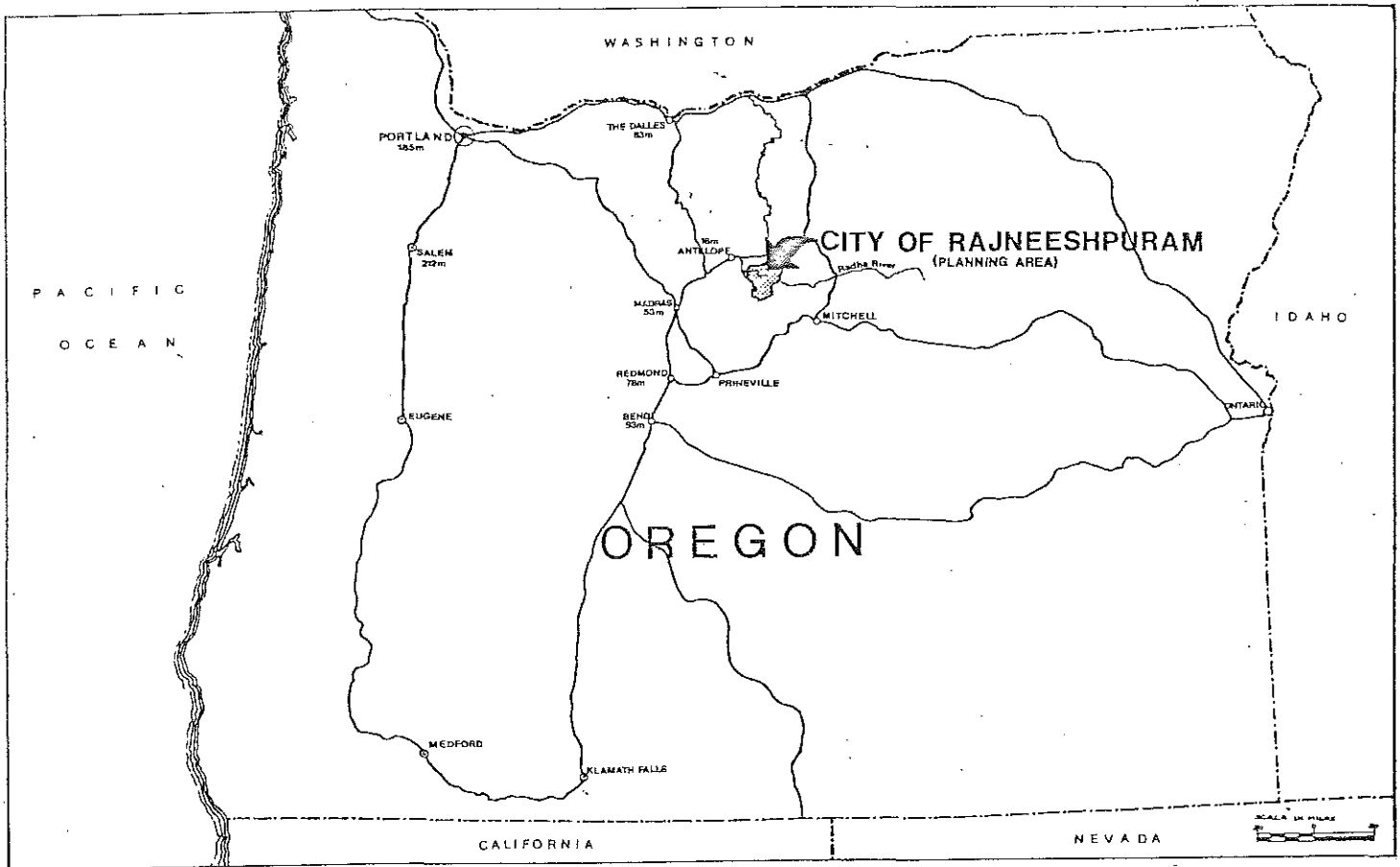


 City of Rajneeshpuram
 (including connecting road, 33.5 acres)



JEFFERSON CO.
WHEELER CO.

STATE OF OREGON - State Location Map



Ref: USDT State Highway System Map (12/31/81)

**JESUS GROVE
AREA**
**City of
RAJNEESHPURAM**

Wasco Co. Road 305 (Muddy Road)

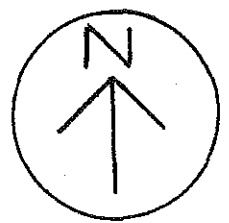
WASCO CO
JEFFERSON CO

WASCO CO
JEFFERSON CO

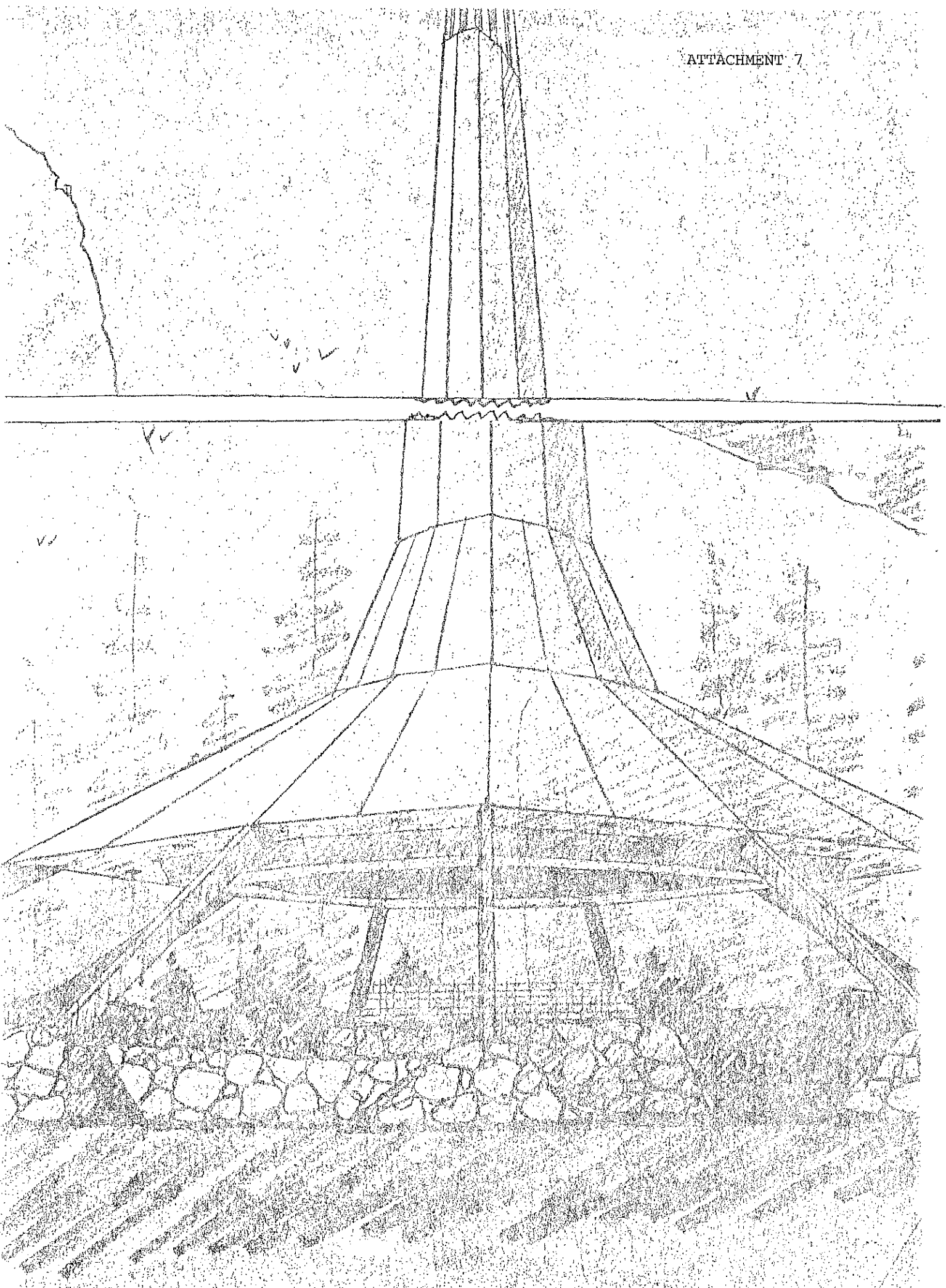


Location of Crematorium

Township 9S, Range 18E, Section 1



Scale 4" = 1mile

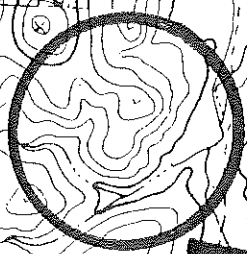


**JESUS GROVE
AREA**
**City of
RAJNEESHPURAM**

Wasco Co. Road 305 (Muddy Road)

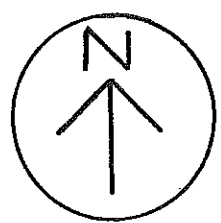
WASCO CO
JEFFERSON CO

WASCO CO
JEFFERSON CO

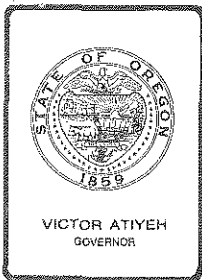


Location of Crematorium

Township 9S, Range 18E, Section 1



Scale 4" = 1mile



Department of Environmental Quality

522 S.W. 5th AVENUE, BOX 1760, PORTLAND, OREGON 97207

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Addendum to Agenda Item L, December 3, 1982, EQC Meeting
Request for a Variance from OAR 340-21-030(3), Particulate
Emission Limits, and OAR 340-21-060(1), Fugitive Emissions,
for Diamond International, Bend

On December 1, 1982, Central Region staff received a letter from Diamond International outlining recent approval of capital expenditures for two projects which pertain to the company's variance request. A copy of the company's letter is attached. Staff met with representatives of Diamond on November 30 to discuss the new information.

In its letter, Diamond International commits to cutting the use of its sander by 80 percent by May 15, 1983. Staff has identified the sander-dust handling system as one cause of the nuisance condition in neighborhoods near the facility. Staff believes that this reduced operation of the sander will significantly lessen the number of occasions the nuisance occurs.

In its letter, the company submitted an amended schedule of compliance for controlling sanderdust emissions with a final compliance date of June 15, 1984. In its variance application, the company requested a final compliance date of December 15, 1984 and the Department recommended a final compliance date of December 15, 1983. With the company's commitment to reduce sander operations by 80 percent by May 15, 1983, the Department can support the company's amended compliance schedule.

On November 15, 1982, the Department sent a notice concerning the variance request by Diamond to 20 persons who had complained in the last two and one-half years about the nuisance caused by the fine wood dust. As of December 1, two written and two verbal responses were received. The verbal responses supported a tight schedule to correct the nuisance problem. The written responses are attached.

Therefore, the Department supports the variance request submitted by Diamond International, subject to the company meeting the compliance schedule contained in the Summation, with the changes to the Summation listed below.

Summation

5. Completion of the planer system modification by May 15, 1983 will reduce the sanderdust emission problem because the sander will operate 80 percent less.
6. The company requests a variance to controlling emissions until June 15, 1984. Because of the reduction in use of the sander, staff supports this request. The staff has recommended approval of a compliance schedule with increments of progress as follows:
 - a. After May 15, 1983, the permittee shall not operate the sander more than 96 hours in any four-week period.
 - b. By no later than November 15, 1983, the permittee shall submit a notice of construction, including plans and specifications for correcting the sanderdust emissions to the Department for review.
 - c. By no later than December 15, 1983, the permittee shall issue purchase orders for the major components of the improvements.
 - d. By no later than February 15, 1984, the permittee shall begin construction.
 - e. By no later than April 15, 1984, the permittee shall complete construction.
 - f. By no later than June 15, 1984, the permittee shall demonstrate compliance.

Director's Recommendation

Based upon the findings in the Summation, as amended, it is recommended that the Commission grant a variance from OAR 340-21-030(2) and OAR 340-21-060(1) until June 15, 1984 for the sanderdust handling system at the Diamond International Bend sawmill, subject to the following condition:

1. The company shall meet the compliance schedule contained in the Summation, as amended.

Bill

William H. Young

Attachments:

1. Diamond International letter to Central Region dated November 30, 1982.
2. Two responses by citizens concerning Diamond's variance request.

Robert Danko:dmc
388-6146
December 1, 1982



**Diamond
International**

Lumber

*Oregon Lumber
a division of
Diamond International Corporation*

*P.O. Box 1111
Bend, OR 97701
503/382-2511*

November 30, 1982 ✓

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
DEC 1 1982

BEND DISTRICT OFFICE

Richard J. Nichols
Regional Manager
Department of Environmental Quality
2150 NE Studio Road
Bend, OR 97701

Dear Mr. Nichols:

With reference to Agenda Item L, December 3, 1982, EQC meeting. Since the time of our request for a variance, we have received approval of capital expenditures for two projects which will have a significant impact on the nuisance condition referred to in the original citation.

Project #1: Boiler Modifications. This consists of the installation of 60 1-1/4" stainless steel nozzles in the grate surface of each boiler. Nozzles will be fed with high pressure air to improve combustion efficiency. This method is in use at Diamond's Old Town, Maine plant, and has proven effective. Tests were conducted at Old Town this fall, simulating the conditions at the Bend plant. Final engineering specifications were developed for this project based on test results.

We are currently soliciting bids for equipment. We anticipate project completion March 30, 1983. Earlier completion of this project may occur if equipment deliveries permit.

Project #2: Planer Modifications. Our practice is to sand lumber to size, prior to planing. This improves the grade by eliminating certain defects. A new infeed/outfeed system has been developed which will produce very nearly the same result without sanding. We will install this system on #2 Planer by January 22, 1983. This will eliminate 50% of our sanding operation. By February 15, 1983, we expect our test results will prove the efficiency of the system. At which time, we will request approval of capital to modify #1 and #3 Planers. Upon approval, we would complete the project by May 15, 1983. This would limit our sanding

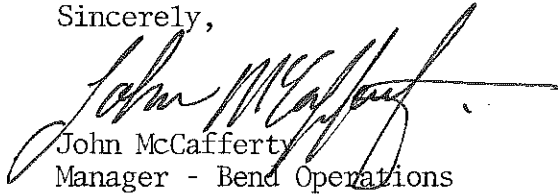
operation to special orders (primarily export), or 20% of our current operating time, which is, 480 hours per a 4 week period. Therefore, upon completion of the project, our maximum sander use would be 96 hours per 4 week period.

Given the above, it is our belief that a more cost effective method of conveying the reduced volume of sander dust can be developed.

Therefore, we respectfully submit the following amended schedule for compliance:

1. By no later than November 15, 1983, the permittee shall submit a notice of construction, including plans and specifications for correcting the sander dust emissions to the Department for review.
2. By no later than December 15, 1983, the permittee shall issue purchase orders for the major components of the improvements.
3. By no later than February 15, 1984, the permittee shall begin construction.
4. By no later than April 15, 1984, the permittee shall complete construction.
5. By no later than June 15, 1984, the permittee shall demonstrate compliance.

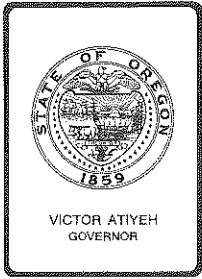
Sincerely,



John McCafferty
Manager - Bend Operations

JMcC/dg

cc: Bob Danko



Department of Environmental Quality
CENTRAL REGION

2150 N.E. STUDIO ROAD, BEND, OREGON 97701 PHONE (503) 388-6146
State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED
NOV 17 1982

NOTICE

BEND DISTRICT OFFICE

The staff of the Department of Environmental Quality in Bend has identified some equipment at Diamond International which is likely a major source of fine wood dust which lands on nearby property. The company has submitted a schedule which will result in the correction of the identified problem by December 1984. The company proposes to postpone correction until that date because of the operational losses the company has suffered and anticipated financial problems in 1983. Department staff is preparing a report concerning the company's request which will be finalized in the next two weeks.

The Environmental Quality Commission (the body that governs the DEQ) will act on the company's request at its next scheduled meeting:

Date: December 3, 1982
Location: Room 1400
522 SW Fifth Avenue
Portland, OR

Please send any written comments that you may have on Diamond International's request to:

Environmental Quality Commission
c/o Department of Environmental Quality
2150 NE Studio Road
Bend, OR 97701

If you have any questions about this matter or want a copy of the detailed staff report concerning the company's request, please contact Bob Danko at 388-6146.

*It is unthinkable to believe that the DEQ would consider postponing correction of this problem if they realize the harmful effects on the residents! - sinus trouble, sore throats and eye irritation
To sleep in a room with the window open is almost impossible and*

I didn't come here to shut out the fresh air.

They have had years to correct this problem and done nothing to relieve it. The whole area here should be declared a disaster area and the value of the property lowered —

If we have to have a class action suit declared would we have to sue the State W. e. g., The City of Bend or Diamond Match?

It is intolerable! and unwise to remain here.

Times are tough all over but why should we endure the hazard of ~~our~~ continued pollution at our own expense?

Please send me the detailed Staff Report. —

Thank you
Yellie B. Massman
143 S.W. Cleveland
Bend, 97702

I didn't come here to shut out the fresh air.

They have had years to correct this problem and done nothing to relieve it. The whole area here should be declared a disaster area and the value of the property lowered —

If we have to have a class action suit declared would we have to sue the State W. e. g. the City of Bend or Desiring Match?

It is intolerable! and unwise to remain here.

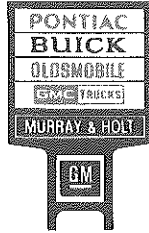
Juries are tough all over but why should we endure the hazard of ~~our~~ continued pollution at our own expense?

Please send me the detailed Staff Report. —

Thank you
Yellie Z. Massman
143 S.W. Cleveland
Bend, 97702

MURRAY AND HOLT

MOTORS, INC.



■ 181 N.E. FRANKLIN AVENUE, BEND, OREGON 97701

(503) 382-2222

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

November 17, 1982

RECEIVED
NOV 19 1982

DEAD ENDPOINT OFFICE

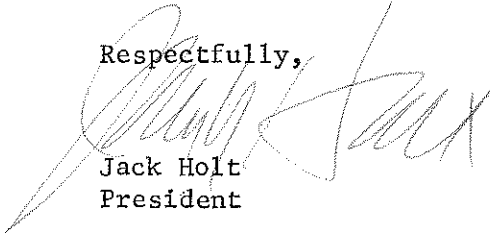
Environmental Quality Commission
c/o Department of Environmental Quality
2150 NE Studio Road
Bend, OR 97701

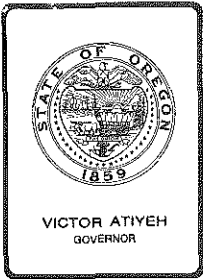
SUBJECT: Diamond International Schedule of Correction.

We are aware of the fine dust situation to which you refer. It is our hope that the lumber economy will once again make it a "problem". The "problem" is a little like putting off fixing the roof because it's not raining now; there is justification for it. Let's wait for a little rain.

It would be fair to say that the situation is annoying, rather than a problem. Our car inventory probably requires more washing when the fine dust is present. My sympathy is with Diamond International in this business climate. It just does not seem practical or imparative to force this expense on them at this time. Let these funds be used rather to help insure their continued operation in our community.

Respectfully,


Jack Holt
President



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 L, December 3, 1982, EQC Meeting

Request for a Variance from OAR 340-21-030(3), Particulate Emission Limits, and OAR 340-21-060(1), Fugitive Emissions, for Diamond International, Bend

Background and Problem Statement

Diamond International owns and operates a large sawmill on the southwest edge of the City of Bend. Located in the same wood products complex is a particleboard plant owned and operated by Willamette Industries. For many years the Department's Bend office has received complaints from residents and business owners near the complex concerning nuisances created by black soot and fine wood dust.

The staff has spent many hours investigating the nuisance conditions and working with both Diamond International and Willamette Industries to minimize the environmental impact of their operations. The wood products complex is located in a sensitive area and even regular activities of Diamond and Willamette, although conducted in compliance with Department rules, are not compatible with residential neighborhoods nearby.

Willamette Industries had a major fire in 1979 and the rebuilding of the facility resulted in the control of its major fugitive sources.

Meanwhile, Diamond has continually worked with Central Region staff in addressing these problems: a) fallout (fine wood dust) from the sanderdust handling system; b) fallout (black soot) from the hog fuel boilers; and c) excessive smoke from the boilers during the winter months.

Since the fire and improvements at Willamette Industries, the staff has determined that the sanderdust handling system at Diamond International is now a major contributor to the continuing wood dust nuisance problem. A cyclone which handles the sanderdust may violate OAR 340-21-030(2), Particulate Emission Limits, and the Company's Air Contaminant Discharge Permit (09-0001).

The company began experimenting with a sander to replace its planers in 1977. The company chose to keep its planers, but the one sander remained in use. The cyclone that the staff has identified as a problem was not designed to handle sanderdust. Excess emissions come from both the cyclone and a conveyor that takes the sanderdust to the fuel pile.

Boiler fallout can be tied partly to the use of four "older" Dutch oven boilers and the excessive steaming rates of these boilers and the two "newer" spreader stoker boilers. The Department sent notices of violation concerning excessive steaming rates to the company in October, 1980 and August, 1982.

The company's hog fuel pile covers two and one-half acres. Last winter the moisture content in the fuel exceeded 60 percent and created serious combustion problems in the boilers. The boilers often could not produce enough steam for lumber drying and power generation and emissions periodically exceeded the 40 percent opacity allowed in the company's permit.

The company plans boiler modifications within the next year to improve boiler performance and control of emissions.

Of the three problem areas at Diamond (wood dust fallout, boiler fallout, and excessive smoke), the staff believes that sanderdust emissions would be the quickest and easiest to control and would provide a noticeable improvement in nuisance conditions. In the notice of violation concerning excessive sanderdust emissions sent to Diamond on November 19, 1981, the Department requested a schedule to control the emissions. Staff met with the company representative on December 23, 1981 and agreed to allow the company until July 1, 1982 to submit a control strategy and time schedule. The company requested a formal variance on June 17, 1982 and submitted additional information justifying the request on October 28, 1982.

The variance request discusses two other planned projects besides improvements in sanderdust handling system, one of which will impact the nuisance created by the fine wood dust. Diamond is currently investigating modifications for its planers which, if implemented, would eliminate about 60 percent of the sanding that now occurs. If this project is approved, completion is proposed by March 31, 1983. Capital cost of this project is estimated at \$100,000.

The planer modifications should provide environmental benefits to the Bend community and address problems previously cited by staff by lessening the nuisance caused by sanderdust. The staff has been told by company representatives that planer modifications will economically benefit the company and are not being undertaken primarily for pollution control benefits. At this time the company cannot give staff a firm commitment that the planer modifications will be approved by corporate headquarters although local representatives indicate that both will be.

Diamond International has submitted a variance request to postpone the improvements to the sanderdust system until December 15, 1984 ". . . because of the current economic climate, and in particular, depressed markets and prices for our products."

The variance request states that the Bend operation posted net losses in 1981 and is showing a net loss as of October for 1982. The company does not anticipate substantial improvements in prices for its products in 1983. Diamond states that ". . . costs will increase because of labor contracts and stumpage costs." and "This will put us in a continuing mode of survival."

The commission is authorized by ORS 468.345 to grant variances from Department rules if it finds strict compliance is inappropriate for one of the reasons specified in the statute, including ". . . conditions exist that are beyond the control of the persons granted such variance."

Alternatives and Evaluation

The company has submitted information detailing the corrections to the sander-dust handling system. The cost is estimated to be about \$200,000. The company proposes to install equipment during the two-week summer shutdown period of 1984 and conduct compliance testing in the fall of 1984.

One alternative would be to require the company to immediately control emissions from the sanderdust handling system. However, this may not be reasonable under the company's present economic conditions. Also, improvements can best be made during the normal plant shutdown that occurs each summer.

The company has asked for a variance which would postpone improvements to the sanderdust handling system until the fall of 1984. Staff is concerned about postponing correction that long. The Bend office has received about twenty complaints since the spring of 1980 concerning nuisances caused by fine wood dust from the Diamond-Willamette complex. When staff discusses the problem with area residents, they are quick to point out that the nuisance is continuous and many do not bother to complain any more. Business operators on Bend's Third Street, especially two car dealerships, do not want to complain against the area's biggest employer, but when staff visits these locations the nuisance is easily identified.

The planer modifications that Diamond hopes to undertake in the next year should lessen the nuisance condition because the sander will operate less. The implementation of the modifications may justify the variance request to postpone improvements to the sanderdust handling system. However, staff is reluctant to recommend approval of Diamond's request based upon the planer modifications the company may undertake. At this time there is no assurance that the planer modifications will be completed or will noticeably improve the nuisance in surrounding neighborhoods.

Another alternative studied by staff would be to postpone any action on Diamond's variance request concerning the sanderdust handling system, until it is known whether Diamond will proceed with the planer modifications. While the Commission may be more comfortable acting on the request with that additional information, the company cannot say when the additional information will be available. Diamond International, headquartered in New York City, may be purchased by an English company. Diamond's representatives in Bend have indicated they cannot obligate the company to capital expenditures at this time.

Based upon the company's present financial condition, it is not considered unreasonable for the company to request a long compliance schedule for correction of the sanderdust emissions. However, the assessed environmental impact of the emissions warrants quick correction. With this in mind, staff recommends that the final compliance date be moved to December 15, 1983, instead of December 15, 1984, which the company proposes.

Therefore, the Department supports the variance request submitted by Diamond International, subject to the company meeting the compliance schedule contained in the Summation.

Summation

1. Diamond International has requested a variance from OAR 340-21-030(2), Particulate Emission Limits, and OAR 340-21-060(1), Fugitive Emissions for Sanderdust Emissions, at its Bend facility.
2. The Commission has the authority under ORS 468.345 to grant a variance from a rule if ". . . conditions exist which are beyond the control of persons granted such variance."
3. Diamond International has stated that the Bend operation posted net losses in 1981 and is showing a net loss for 1982. Substantial improvement in economic conditions is not anticipated in 1983.
4. Fallout of fine wood dust regularly causes a nuisance in the neighborhoods near the plant site. Staff believes a major contributor of the fine wood dust is the sanderdust handling system at Diamond.
5. Completion of the planer system modification in March, 1983, as proposed, could reduce the sanderdust emission problem because the sander will operate less. The company, however, is not committed to that project.
6. The company requests a variance to controlling sanderdust emissions until December 15, 1984. Staff recommends a final compliance date of December 15, 1983. The staff has recommended approval of a compliance schedule with increments of progress as follows:
 - a. By no later than May 15, 1983, the permittee shall submit a notice of construction, including plans and specifications for correcting the sanderdust emissions to the Department for review.
 - b. By no later than June 15, 1983, the permittee shall issue purchase orders for the major components of the improvements.
 - c. By no later than August 15, 1983, the permittee shall begin construction.
 - d. By no later than October 15, 1983, the permittee shall complete construction.
 - e. By no later than December 15, 1983, the permittee shall demonstrate compliance.
7. The Commission should find that adverse market conditions exist which are beyond the control of the applicant and that strict compliance is inappropriate.

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Commission grant a variance from OAR 340-21-030(2) and OAR 340-21-060(1) until December 15, 1983 for the sanderdust handling system at the Diamond International Bend

sawmill, subject to the following conditions:

1. The company shall meet the compliance schedule contained in the Summation.

Bill

William H. Young

Attachments:

1. Notice of Violation to company dated November 19, 1981
2. Diamond International letter to Central Region dated December 23, 1981
3. Diamond International letter to Department dated June 17, 1982
4. Diamond International letter to Central Region dated October 28, 1982

Robert Danko:ahc
388-6146
November 9, 1982

November 19, 1981

Mr. Leo Hopper
Vice President and General Manager
Diamond International
P.O. Box 1111
Bend, OR 97701

NOTICE OF VIOLATION
AQ-CR-82-10
Diamond International
Bend

Dear Mr. Hopper:

On several occasions in the past year, Bob Danko of this office has observed excessive emissions coming from the cyclone which transfers sanderdust from the abrasive planer to either your fuel pile or Willamette Industries. We have concluded that these emissions also result in a nuisance condition to surrounding neighbors. On November 5, 1981, we investigated a complaint at a residence just to the south of your facility. That was the sixth complaint concerning fine wood fiber in that area this year.

We also are concerned about your method of depositing sanderdust on your fuel pile. Presently the dust drops to the pile from a conveyor. Often a wind will intercept the fine material before it gets to the pile.

By no later than December 18, 1981, please submit a strategy to this office for control of the sanderdust emissions, both from the cyclone next to the boiler house and from the dropping of sanderdust on your fuel pile.

The strategy should contain a schedule for implementation and a final control date. We will not take enforcement actions for air quality violations attributable to your sanderdust transfer system through your final control date, provided you have an acceptable control strategy.

We appreciate your cooperation in this matter. Please have your staff contact Bob Danko if there are questions or comments.

Sincerely,

RJN:dmc

cc: Dave Miller, Diamond International
: Bruce Biller, " "
: Air Quality Division via Regional
Operations, DEQ Portland

Richard J. Nichols
Regional Manager



**Diamond
International**

BEND

Lumber

Attachment 2

Oregon Lumber
a division of
Diamond International Corporation

P.O. Box 1111
Bend, OR 97701
503/382-2511

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
DEC 25 1981

BEND DISTRICT OFFICE

December 23, 1981

Mr. Richard J. Nichols
Regional Manager
Department of Environmental Quality
2150 N.E. Studio Road
Bend, Oregon 97701

Dear Mr. Nichols:

I am writing to confirm the agreement reached by Messrs McCafferty, Dave Miller, Bruce Miller and myself, representing Diamond International, with you and Mr. Danko of the Department of Environmental Quality in our meeting today.

In discussing the notice of violation as per your letter of November 19, 1981, we have agreed that the solution of this problem will be effected by the changes that we will make in both our planer mill and powerhouse, (if any). We need some additional time for feasibility studies and engineering in order to determine what action we will take in these areas. Therefore, we understand you are allowing us additional time until mid-year to submit the strategy and time schedule for control of sanderdust emissions at our Bend sawmill.

I appreciate your willingness to discuss these issues with us, and your understanding of our problems in dealing with them.

Sincerely,

Leo M. Hopper
Vice President-General Manager

LMH:km

cc: J. McCafferty
B. Miller



Diamond International

Lumber

Attachment 3

Oregon Lumber
a division of
Diamond International Corporation

P.O. Box 1111
Bend, OR 97709
503/382-2511

DEPT OF ENVIRONMENTAL QUALITY

R JUN 18 1982

FROM DISTRICT OFFICE

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

R JUN 19 1982

June 17, 1982

Mr. William H. Young, Director
Department of Environmental Quality
P. O. Box 1760
Portland, Oregon 97207

Dear Sir:

On November 19, 1981, the Bend Operations of Diamond International Corporation was issued a notice of violation (AQ-CR-82-10) by Mr. Richard J. Nichols, Regional Manager of the Department of Environmental Quality.

In subsequent meetings with Mr. Nichols and Mr. Danko, Diamond agreed to submit a strategy and timetable to solve the problem of wood fibre emissions from our plant. This agreement was based on plans to modify the planer mill and powerhouse.

Because of the current economic climate, and in particular, depressed markets for our products, we find that capital is not available for feasibility studies and engineering for these projects. We are therefore, requesting a variance for the condition referred to in the notice of violation.

Our request is based on ORS 468.345 (A) "Conditions exist that are beyond the control of persons granted such variance." It is our intent to conduct these studies when economic conditions improve sufficiently to justify the capital expenditure.

Sincerely,

Leo M. Hopper
Vice President-General Manager

LMH/pb
cc: Mr. Richard J. Nichols



**Diamond
International**

Lumber

Attachment 4

*Oregon Lumber
a division of
Diamond International Corporation*

*P.O. Box 1111
Bend, OR 97701
503/382-2511*

October 28, 1982

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED

BEND DISTRICT OFFICE

R. J. Nichols
Regional Manager
Department of Environmental Quality
522 SW 5th Avenue
Box 1760
Portland, OR 97207

Dear Mr. Nichols:

On November 19, 1981, the Bend Operations of Diamond International Corporation was issued a notice of violation (AQ-CR82-10) by your office. Since that time, we have been seeking solutions to the problems of wood fibre emissions from our plant. Conversations between your staff and Diamond's management have put the source of the problem at the large cyclone on the north east corner of the power plant, which is emitting sander dust. We propose to correct the problem by relocating the high pressure blower system and surge bin in accordance with the attached quote from U. S. Metal Works. Capital cost is estimated to be approximately \$200,000.

We are currently investigating new technology for our knife planers which, if feasible, would eliminate the necessity for sanding about 60% of our production. The capital cost for three planers is expected to be about \$100,000. If this project is approved, and funds are available, we would expect completion by March 31, 1983. This would reduce the volume of emissions substantially.

We do, however, plan to proceed with relocating the high pressure blower system and surge bin at a later date.

We are also proceeding with a series of independent modifications to #1 and #2 boilers designed to improve the efficiency of these units and help eliminate problems experienced in the past with wet fuel. Cost of these improvements is estimated at \$150,000, with completion scheduled for August 31, 1983.

We feel that the power house project should take precedence since the level of complaints about smoke seem to be greater than about wood fibre.

Because of the current economic climate, and in particular, depressed markets and prices for our products, we are requesting a variance for the condition referred to in the notice of violation. The variance to be in effect until December 15, 1984. We anticipate commencing the project in July, 1984.

We are requesting this variance based on ORS 468.345 (A).

To support our request, we offer the following:

- 1) This operation posted net losses in 1981.
- 2) We are showing a net loss as of October, 1982.
- 3) We are proposing to spend \$100,000 on our planers which will eliminate a substantial portion of sander dust emissions.
- 4) The power house project will cost an estimated \$150,000 and will help eliminate nuisance from smoke and cinders.
- 5) We do not anticipate substantial improvements in prices for our products in 1983. We know that costs will increase because of labor contracts and stumpage costs. This will put us in a continuing mode of survival.
- 6) Staff reductions as a result of the current recession, limit our ability to take on additional projects.

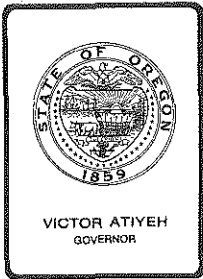
Sincerely,



John McCafferty
Manager - Bend Operations

JMcC/dg

cc: Bob Danko



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. M, December 3, 1982, EQC Meeting

Approval of Non-Guideline Air Quality Models for the
Proposed Alumax Pacific Corporation Primary Aluminum
Reduction Plant at Umatilla

Background

The Department has received an Air Contaminant Discharge Permit Application from Alumax Pacific Corporation to construct a Primary Aluminum Reduction Plant. This proposed facility would be located approximately 4 miles east of Umatilla on the bank of the Columbia River. The plant would be the second largest aluminum plant in the Northwest and would be capable of producing 220,000 tons of aluminum per year.

Alumax has conducted air quality modeling for the proposed facility using non-guideline models. These models have not been formally incorporated into the EPA Guideline on Air Quality Models. In order to approve the use of these models, the Department must obtain the written approval of EPA and the concurrence of the Commission, as required by OAR 340-20-245(4) (Attachment 1).

Discussion

Alumax Pacific Corporation retained the services of the H.E. Cramer Company to conduct air quality modeling for the proposed Umatilla aluminum plant. The proposed plant would be a major emitter of particulate, fluorides, sulfur dioxide, nitrogen oxides, and carbon monoxide.

Because of the complex nature of aluminum plant emissions, the H.E. Cramer Company chose to use models which have been developed specially for modeling aluminum plant emissions. Two models were used in the analysis:

1. The BLP (Buoyant Line and Plume) model was used to estimate impacts from the proposed plant on the flat terrain surrounding the plant.
2. The Short-Z model was used to predict hillside emissions from the proposed plant.

The results of the modeling are discussed in the Environmental Assessment for the proposed plant (Attachment 2).

EPA has sent a letter approving the use of these models as alternatives to the guideline models for this plant (Attachment 3).

Under a separate agenda item, the Department is requesting the authority to approve the use of non-guideline models without having to seek Commission approval. A change in the New Source Review rule is being requested as part of the proposed rule changes in Agenda Item G.

Summation

1. The Department's rules currently require the approval of the Commission before non-guideline air quality models can be used for analyzing new source impacts.
2. Alumax Pacific Corporation has used non-guideline models to analyze the air quality impacts of their proposed aluminum reduction plant at Umatilla.
3. The models used by Alumax are the BLP model and the Short-Z model which are particularly useful for analyzing the complex emission sources found at aluminum plants.
4. The Department has reviewed these models and has found them acceptable for modeling the proposed Alumax emissions.
5. EPA has approved the use of these models for the Alumax permit application.

Recommendation

Based on this summation, it is recommended that the BLP model and the Short-Z model be approved for use by Alumax for modeling aluminum plant emissions for their proposed Umatilla plant.

Bill

William H. Young

- Attachments:
1. OAR 340-20-245(4)
 2. Environmental Assessment for the Proposed Alumax Pacific Corporation Primary Aluminum Reduction Plant at Umatilla
 3. Letter from EPA approving use of non-guideline models.

LK:al
229-6459
November 10, 1982
AA2756

OREGON ADMINISTRATIVE RULES
CHAPTER 340, DIVISION 20 — DEPARTMENT OF ENVIRONMENTAL QUALITY

(b) Major modifications are not exempted under this section unless the source including the modifications meets the requirements of paragraphs (a)(A) and (B) above. Owners or operators of proposed sources which are exempted by this provision should refer to OAR 340-20-020 to 340-20-032 and OAR 340-20-140 to 340-20-185 for possible applicable requirements.

(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 "Guidelines 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)(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 or any applicable increment.

(B) 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.

(C) 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:

- (i) Carbon monoxide — 575 ug/m³, 8 hour average,
- (ii) Nitrogen dioxide — 14 ug/m³, annual average,
- (iii) Total suspended particulate — 10 ug/m³, 24 hour average,
- (iv) Sulfur dioxide — 13 ug/m³, 24 hour average,
- (v) Ozone — Any net increase of 100 tons/year or more of volatile organic compounds from a source of modification subject to PSD is required to perform an ambient impact analysis, including the gathering of ambient air quality data,
- (vi) Lead — 0.1 ug/m³, 24 hour average,
- (vii) Mercury — 0.25 ug/m³, 24 hour average,
- (viii) Beryllium — 0.0005 ug/m³, 24 hour average,
- (ix) Fluorides — 0.25 ug/m³, 24 hour average,
- (x) Vinyl chloride — 15 ug/m³, 24 hour average,

- (xi) Total reduced sulfur — 10 ug/m³, 1 hour average,
- (xii) Hydrogen sulfide — 0.04 ug/m³, 1 hour average,
- (xiii) 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 or 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(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. If the Department concurs with such demonstration the permit shall not be issued.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468

Hist: DEQ 25-1981, f. & ef. 9-8-81

Exemptions

340-20-250 (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.

NOTE: 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, which would be in operation at a site for less than two years, such as pilot plants and portable facilities, and emissions resulting from the construction phase of a new source or modification must comply with OAR 340-20-240(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

OREGON ADMINISTRATIVE RULES
CHAPTER 340, DIVISION 20 — DEPARTMENT OF ENVIRONMENTAL QUALITY

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 reduction may be used to demonstrate compliance with this section. Those emission increases for which offsets can be found through the best efforts of the applicant 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:

(a) 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.

(b) 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 this rule but are exempt from all other sections of this rule.

(7) Growth Increments: Medford-Ashland Ozone Nonattainment Area:

(a) 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 by year:

(A) 1980 to 1982	185 tons of VOC
(B) 1983	388 tons of VOC
(C) 1984	591 tons of VOC
(D) 1985	794 tons of VOC
(E) 1986	997 tons of VOC
(F) 1987	1200 tons of VOC

(b) 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.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 25-1981, f. & ef. 9-8-81

Requirements for Sources in Attainment or Unclassified Areas (Prevention of Significant Deterioration)

340-20-245 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 (22)). 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:

(a) 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, (including secondary emissions), 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)).

(b) 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.

(c) 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 consider the requirements of section (2) of this rule to have been met.

(3) Exemption for Sources Not Significantly Impacting Designated Nonattainment Areas:

(a) A proposed major source is exempt from OAR 340-20-220 to 340-20-275 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 following categories or less than 250 tons/year for sources not in the following source categories:

(i) Fossil fuel-fired steam electric plants of more than 250 million BTU/hour heat input,

(ii) Coal cleaning plants (with thermal dryers),

(iii) Kraft pulp mills,

(iv) Portland cement plants,

(v) Primary Zinc Smelters,

(vi) Iron and Steel Mill Plants,

(vii) Primary aluminum ore reduction plants,

(viii) Primary copper smelters,

(ix) Municipal Incinerators capable of charging more than 250 tons of refuse per day,

(x) Hydrofluoric acid plants,

(xi) Sulfuric acid plants,

(xii) Nitric acid plants,

(xiii) Petroleum Refineries,

(xiv) Lime plants,

(xv) Phosphate rock processing plants,

(xvi) Coke oven batteries,

(xvii) Sulfur recovery plants,

(xviii) Carbon black plants (furnace process),

(xix) Primary lead smelters,

(xx) Fuel conversion plants,

(xxi) Sintering plants,

(xxii) Secondary metal production plants,

(xxiii) Chemical process plants,

(xxiv) Fossil fuel fired boilers (or combinations thereof) totaling more than 250 million BTU per hour heat input,

(xxv) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.

(xxvi) Taconite ore processing plants,

(xxvii) Glass fiber processing plants,

(xxviii) Charcoal production plants.

Attachment 3
U.S. ENVIRONMENTAL PROTECTION AGENCY

why
W. Young
W. Weathersbee



REGION X
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

REPLY TO
ATTN OF:

M/S 532

NOV 08 1982

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED
NOV 08 1982

AIR QUALITY CONTROL

William H. Young, Director
Department of Environmental Quality
Post Office Box 1760
Portland, Oregon 97207

Dear Mr. Young:

As required by the Clean Air Act (§165(e)(3)(D) and the PSD regulations 52.21(1)(2)), we received from Lloyd Kostow of your staff a request for EPA review and approval of two ambient impact models used in the Air Contaminant Discharge Permit Application for the proposed Alumax Pacific Corporation aluminum reduction plant. EPA review of these models is necessary because the models, BLP and SHORT Z/LONG Z, are not contained in EPA's Guideline on Air Quality Models (EPA-450/2-78-027).

My technical staff concludes that BLP and SHORT Z/LONG Z have been acceptably applied to the Alumax proposal and their use is consistent with the Region's previous and current use of the models.

This letter constitutes formal approval of the use of BLP and SHORT Z/LONG Z as applied to the Alumax application.

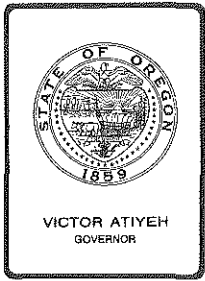
Sincerely,

John R. Spencer
Regional Administrator

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED
NOV 5 1982

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

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. N , December 3, 1982, EQC Meeting

Informational Report: Progress and Status Report on Passenger Car and Light Truck Noise Emissions

Background

Oregon Revised Statutes, Chapter 467, directs the Environmental Quality Commission to establish maximum permissible levels of noise emissions for categories of motor vehicles. On July 19, 1974, noise emission standards were adopted for the sale of new automobiles and light trucks (light-duty vehicles). These standards were initially established at a maximum allowable level of 83 decibels for the 1975 model year, reduced to 80 decibels for 1976 models, with a final limit of 75 decibels for 1979 and subsequent models.

In 1976 and again in 1978, the Commission was petitioned by General Motors Corporation (GMC) to rescind the 75 decibel standard. The 1976 petition resulted in a two-year delay in the 75 decibel standard and the 1978 petition resulted in an additional one-year delay. In 1980, as a result of petitions raised by the Ford Motor Company and GMC, the 75 decibel standard was rescinded leaving the Oregon new car standard at 80 decibels. However, the Commission directed that a progress and status report on passenger car and light truck noise emissions be prepared by July 1982 in order to monitor this noise source and determine need for future regulatory amendments.

It is estimated that in Oregon over 30 percent of the population is exposed to motor vehicle noise in excess of an average day-night noise level (L_{dn}) of 55 decibels. The L_{dn} 55 decibel criteria has been established as a level necessary to adequately protect public health and welfare from the harmful effects of noise pollution. Although the light-duty vehicle is usually quieter than trucks, buses and motorcycles, due to their large numbers, they are responsible for at least one-half of this criteria exceedance.

Regulatory Issues

In 1980, it appeared that the Federal Environmental Protection Agency (EPA) intended to promulgate noise emission regulations for newly manufactured automobiles and light trucks. Once EPA regulations become effective they preempt non-identical state or local regulations. Thus the motor vehicle industry focused efforts toward the development of a reasonable national standard. Both EPA and the industry agreed that the current "wide-open-throttle" noise emission test procedure used to formally certify compliance was deficient in the evaluation of environmental noise in the community. EPA, therefore, pursued the development of a new noise emission test procedure for light-duty vehicles that was generally called the "urban acceleration" test procedure. EPA has not proposed noise emission standards for new autos and light trucks and future noise regulations from EPA are unlikely.

Another major issue in this matter is the question of environmental benefit of the new auto and light truck noise regulation. Although a large segment of the public is exposed to excessive noise generated by light-duty vehicles, some claim the regulation on new cars and light trucks has little, if any, impact on community noise reduction. Part of this issue is tied to the deficient test procedure as discussed above. As the current test procedure does not adequately reflect typical vehicle operations in the community, noise reductions of the certified emission level will not provide an equal reduction in community noise levels. However, most of this argument is based on the claim that vehicles other than new are responsible for excessive noise. Thus, it is suggested that noise control should concentrate efforts toward achieving compliance with vehicle operational standards designed to correct excessive noise caused by defective or highly modified exhaust systems prior to further new product regulation.

Discussion

The pressure on the motor vehicle industry to improve the light-duty vehicle test methodology has virtually been eliminated since it was decided to phase out EPA's noise program activities. Without a test procedure that better evaluates vehicle noise during typical vehicle operations, it is difficult to show significant benefit from stricter new vehicle standards. Therefore, most, if not all, state and local jurisdictions have rescinded new vehicle standards below 80 dBA due to the lack of significant demonstrated benefits.

The industry is now placing emphasis on international harmonization of test procedures and standards to reduce technical barriers to world trade. The European vehicle noise test procedure is slightly different than that currently used by American manufacturers and regulatory agencies. Thus a common procedure would be helpful to the industry; however, it will not necessarily resolve the issue of need for a procedure that correlates better with typical driving modes.

The environmental impact of motor vehicles has always ranked highest among other sources of noise. EPA claims that 96.8 million Americans are adversely impacted by traffic noise. A Portland area opinion survey found that traffic noise, as a "neighborhood problem", ranked fourth behind property taxes, quality of education, and crime. A Salem survey found that the noise source causing the "greatest disturbance" was first "traffic", then "motorcycles", followed by "barking dogs" and "motor vehicles with modified or deteriorated exhaust systems".

The above gives an indication of the magnitude of the impact of traffic noise. It is not clear how much of this problem is divided between vehicles complying with current emission standards and those with defective exhaust systems causing exceedances of standards. A recent study conducted by DEQ staff concluded that over 10 percent of Portland area automobiles exceed exhaust system noise standards. Although this percentage rate may appear small, the problem is significant because the mobile source has the ability to impact a large number of receptors.

Many local jurisdictions are enforcing the DEQ vehicle noise limits at various cities and counties throughout the state. DEQ has assisted this enforcement by loaning sound monitoring equipment and providing training to enforcement agencies. Much more enforcement of the vehicle noise standards will be needed before noise from modified or defective vehicles is controlled to an acceptable level. In fact, much of the motor vehicle manufacturers' argument against stricter noise emission standards for new automobiles is based on the supposition that the problem is caused by modified/defective rather than new/un-modified cars.

With the current 80 decibel new vehicle standards, noise emissions from new autos, under the current test procedure, range between 70 and 80 decibels at 50 feet. This procedure is generally referred to as a "wide-open-throttle" test and, therefore, does not reflect normal modes of operation. The noise measured during this test is primarily generated by the vehicle engine and its components such as the cooling fan, induction system and exhaust. Thus this procedure is generally used to rank or compare various vehicles for maximum noise emission capacity. It may also be used to identify noise emissions under extreme driver conditions where the vehicle is operated in a lower transmission gear and the engine is at a high speed (RPM) because the throttle is at or near a wide-open position.

When cars are operated at speeds above 35 mph and normally driven, the noise generated by the interaction of the tires on the pavement begins to dominate the engine noise. Thus, the vehicle manufacturers are reluctant to decrease engine noise as tire noise dominates at higher speeds. It has also been shown that even at lower speeds, where tire noise is low, the engine noise will also be low when the auto is operated in a prudent manner at low engine speeds (RPM's). Thus, the United States manufacturers still believe the current wide-open-throttle test procedure is not appropriate for describing "community" noise levels. However, without pressure from EPA, they have dropped all efforts to develop a new "urban acceleration" test procedure. The Europeans see no need for the "urban acceleration"

test procedure as they believe the wide-open-throttle procedures adequately describe their worst community problem that occurs during down-shifting with manual transmissions from relatively high speeds.

The National Association of Noise Control Officials (NANCO) has recently embarked on a program to develop a national motor vehicle noise control strategy. NANCO is working with the Motor Vehicle Manufacturers Association and other motor vehicle representatives to develop vehicle control strategies and encourage and assist their implementation. The vehicle industry is supporting this effort with NANCO as they see benefits in having a harmonized approach to noise control in the United States. It is too early to know whether this national strategy will work toward the development of new testing procedures for new car certification. However, it is hoped that NANCO will include an evaluation and recommendations on this issue of new vehicle emission standards.

Summary

The following facts and conclusions are offered:

1. Oregon noise emission limits for the sale of new automobiles and light trucks were scheduled to be reduced from 80 dBA to 75 dBA in 1979. However, this date was amended and then deleted because of petitions by automobile manufacturers showing limited environmental improvement, increased cost and technical problems. Therefore the current 80 dBA standard is scheduled to remain in place.
2. EPA's attempts to develop and approve noise emission standards for new autos has been abandoned. EPA and the vehicle industry have stopped all development of a new "urban acceleration" test procedure to replace the existing "wide-open-throttle" procedure. However, a national organization of noise control officials is working with the vehicle industry to develop a national motor vehicle noise control strategy.
3. Traffic noise caused by new and older vehicles adversely impacts 96.8 million Americans according to EPA and various attitude surveys show that traffic noise rates high on the public's list of neighborhood problems or in identifying the most serious noise problem.
4. DEQ staff estimate that over ten percent of Oregon's vehicles exceed operational noise standards due to modified or defective exhaust systems. These vehicles are responsible for a large portion of the vehicle noise problem.
5. Limited enforcement of operational vehicle noise standards is being accomplished through state and local enforcement agencies with assistance from DEQ to train and equip personnel.

Director's Recommendation

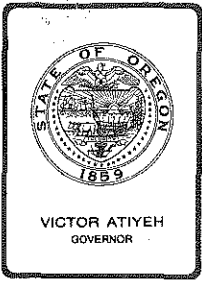
It is recommended that the Commission concur in the following course of action to be pursued by the Department:

1. Continue to monitor the efforts of the automobile industry to develop new noise emission testing procedures.
2. Encourage and assist the development of a national motor vehicle noise control strategy that considers various control methods including new vehicle certification and in-use vehicle enforcement.
3. Continue the Department's efforts to control excessive automobile noise due to exhaust system modification and deterioration by assisting appropriate state and local enforcement agencies.

Bill

William H. Young

J.M. Hector:a
229-5989
November 9, 1982
NA2722



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. 0, December 3, 1982, EQC Meeting

Discussion of Alternative Methods for Securing Loans from the Pollution Control Bond Fund

Background

By letter dated October 25, 1982, Senator Jack Ripper and Representative Tom Throop, Co-Chairmen of the JOINT INTERIM TASK FORCE ON MANAGING AND FINANCING GROWTH, recommended that the Environmental Quality commission consider a proposal of the League of Oregon Cities that:

"The Department of Environmental Quality, with appropriate safeguards, should use proceeds of the Pollution Control Fund to support more creative local financing than just the purchase of general obligation bonds, as in the past."

This request urges consideration of some change in the security required for loans from the Pollution Control Fund without unreasonably increasing the risk of default upon those loans.

The recommendation by the League of Oregon Cities is part of a package of recommendations dealing with the problems cities face in managing and financing growth. This document, entitled "MANAGING AND FINANCING GROWTH, A Survey of Issues, August 1982," is attached as Attachment I. The document was prepared during a time when it appeared that Ballot Measure 3 would pass and effectively remove from local governments their primary method for financing local improvements--the General Obligation Bond.

Although Ballot Measure 3 did not pass, the discontent with property taxes remains. Forward-looking local governments will continue to seek ways of financing public facilities that do not rely on the ad valorem tax.

As a result, a review and discussion of the overall management policies of the Pollution Control Fund and how it may relate to local government financing options seems appropriate and timely.

Management of the Bond Fund

The EQC and the Department have managed the Pollution Control Fund since it was created by the voters in 1970 in a fiscally conservative manner, based on the statutes and a continuously evolving interpretation of legislative intent.

Attachment II contains a chronology of events as gleaned from a quick review of Department files that suggests a clear intent on the part of the Legislature that management of the Bond Fund be conservative and essentially RISK FREE--even though the language of the Constitutional Amendment and the enabling legislation may grant substantial flexibility and imply more latitude.

The Department is attempting to search archive records for a better documentation of legislative intent. Hopefully, this effort to locate more complete documentation of the intent will be complete and available before the December 3, 1982, EQC meeting.

The following summarizes significant factors relative to the Department's approach to Bond Fund management:

The initial motivation for the Bond Fund Constitutional Amendment was to provide State funds for sewage treatment plant construction and to qualify local governments for Federal Matching Grants.

The language of the Constitutional Amendment was written to allow uses of the Bond Fund beyond the apparent original intent--probably in recognition of the difficulty of enacting such amendments and the rapidly increasing public demand for environmental quality improvements.

Initial implementing legislation placed significant restrictions on the use of the Bond Fund.

Prior to the first bond sale, legislative review of rules and procedures was required to assure that adequate safeguards were in place to insure repayment of loans made from the fund.

The record seems to suggest an intent that Pollution Control Fund proceeds be used only for grants as specifically authorized by the Legislature, or for purchase of bonds, notes or other obligations of municipal corporations that are similar to those regularly marketed in normal municipal bond channels.

Use of Pollution Control Fund proceeds to purchase Local Government General Obligation Bonds was from the beginning considered to be the preferred method of operation. This offered the State the best available security and thus the least RISK of default.

Revenue bonds were considered to be an acceptable security as long as normal market-required safeguards were provided. To date, only a few revenue bond issues have been purchased with Pollution Control Funds.

1971 legislation authorized the Department to make grants and loans for construction of sewage treatment facilities within appropriation bill limits. Use of the funds for planning or for solid waste facilities required Emergency Board approval for each proposed use.

A 1971 EQC policy statement limited loans not backed by purchase of bonds to a maximum of \$50,000. This decision resulted from the understanding that the costs for authorization and sale of a bond issue of a size less than \$50,000 were prohibitive and unreasonable.

As a matter of practice that has evolved over the years, Legislative Emergency Board approval has been sought and obtained for use of the Bond Fund for any purpose other than the purchase of General Obligation Bonds or solidly backed Revenue Bond issues. For example, Emergency Board Concurrence has been obtained for purchase of Bancroft Bonds, for purchase of METRO Revenue Bonds, and for a special loan to Gresham and Multnomah County through its Central County Service District to finance construction of sewers in the East Burnside Street Light Rail Corridor Project.

More recently, the 1981 Legislature began the process of modifying the Pollution Control Fund implementing legislation to disconnect it from the diminishing Federal Grant program for sewerage works construction. Such changes were proposed by the Department to make it possible to assist those communities that are not likely to receive federal grants in the future. The main change was to permit the Department to purchase local obligations for up to 100 percent of the eligible project cost rather than the former limit of 70 percent.

In a further effort to aid local governments, the Department is implementing several changes to streamline processes and reduce costs and paperwork associated with bond purchases as follows:

The Department now accepts a single typewritten bond rather than requiring the printing and exchange of the traditional Coupon Bonds provided that the local government agrees to print and deliver bonds upon request of the Department to allow resale.

The Department now uses its authority to waive the statutory requirement for the local government to prepare an official statement. Local governments are advised, however, that lack of an official statement will preclude the potential of receiving other potentially lower bids.

The Department is proposing revised and simplified rules for administration of the Pollution Control Fund for financial aid to water pollution control projects.

The Department is preparing revisions to application forms and basic loan agreement forms to reduce paperwork.

Discussion of Alternative Security for Loans

Any consideration of alternative or "creative" uses of the Bond Fund requires careful consideration of the underlying issues of the authority of public agencies to incur debt and the methods for securing such debt.

Authority for Public Agencies to Incur Debt

Authority for public agencies to incur debt is limited by the State Constitution, State Statute, and Local Charter. With few exceptions, the Constitution and statutes appear to impose limitations on bonded and floating debt of cities and counties unless otherwise approved by the voters. The voter approval may be in the form of a favorable vote on a bond issue, or it may be in the form of a charter provision which authorizes issuance of bonds within specified limitations. Local governments can also issue short-term notes in anticipation of tax revenues yet to be collected or, in the case of public facility construction, in anticipation of assessments yet to be paid.

The most significant apparent exception to these limitations on indebtedness appears in Article XI-H of the Constitution which establishes the Pollution Control Fund. Section 1 of this article authorizes Pollution Control Funds "... to be advanced, by contract, grant, loan or otherwise, to any municipal corporation, city, county ..." It further provides "... for the acquisition, by purchase, loan or otherwise, of bonds, notes or other obligations of any municipal corporation, city, county..."

Section 3 authorizes local governments to receive funds "... by contract, grant, loan or otherwise and may also receive such funds through disposition to the state, by sale, loan or otherwise, of bonds, notes, or other obligations..." and exempts counties from the constitutional debt limit Article XI, Section 10.

Section 6 provides "...This article shall supersede all conflicting constitutional provisions and shall supersede any conflicting provision of a county or city charter or act of incorporation."

In the opinion of the Department of Justice, Sections 1, 3 and 6 allow the Department to make loans and allow public agencies to incur the corresponding indebtedness notwithstanding the fact that in the absence of Article XI-H, the funds probably would have to be obtained through a bond issue which would usually require voter approval. As stated earlier, the Department has relied on the purchase of locally authorized bonds. However, this opinion was the basis for the recent loans for the light rail corridor sewer project which was first approved by the Emergency Board.

Another important exception is that pursuant to ORS 468.263 to 468.272, counties may issue revenue bonds for pollution control facilities without local vote. (In practice, this has been used primarily to finance industrial pollution control facilities. The Pollution Control Fund has purchased revenue bonds issued pursuant to this law to finance one solid waste disposal facility.)

As a practical matter, local share costs of most sewerage facilities have been financed with General Obligation (G.O.) Bonds. Relatively few local governments have charter provisions which allow issuance of bonds without voter approval. Some charters specifically require voter approval for each bond issue. Since interest costs of a G.O. Bond are lower than for a revenue bond, the G.O. Bond is used even if the intent is to repay it with revenues from the system rather than ad valorem taxes.

In order to respond more rapidly to the need to construct sewerage facilities that are identified in the local land use plan and which are required by the Department, local governments are looking for a simpler process that does not require voter approval for each project.

The League of Oregon Cities, in their report, has recommended that "Local governments should be authorized to issue revenue bonds without local vote. However, public notice provisions should be allowed that could trigger referendum efforts." Pacific Economica, in a study done for the Department, recommended that "all local governments which are legally designated through the comprehensive planing process as the "logical provider of services" for an urban area should, upon Department certification of need and design-acceptability of the proposed facility, be authorized to sell revenue bonds without voter approval, when these funds will be used to finance facilities construction and can be amortized from proceeds generated by operation of the facility."

If legislation were enacted authorizing revenue bond issuance without vote under specified circumstances, existing charter provisions requiring vote would not necessarily be invalidated. Therefore, an unknown number of entities might still have to seek voter approval pursuant to their charter until such time as the charter is amended.

The questions which seem to warrant further discussion are:

1. Will the installation of pollution control facilities be unreasonably hindered in the future by the necessity of most local governments obtaining voter approval for bonds to construct such facilities?
2. Should the Department support legislation to authorize issuance of revenue bonds without voter approval? If so, under what circumstances?

3. Should the Department make greater use of the provision of Article XI-H which allows advancing of funds "by contract, loan or otherwise?" If so, under what circumstances?

Security for Debt

Discussion of alternative forms of security for loans from the Pollution Control Fund carries with it the need to discuss the issue of defining an acceptable level of RISK of default.

The Department has relied on General Obligation Bonds as the preferred security. General Obligation Bonds have a good track record with virtually no default. Thus, they carry the lowest market interest rate--evidence of low risk.

The Department has also relied on revenue bonds as security in a few cases. Revenue bonds are considered slightly less secure than the G.O. bonds. The market generally looks at the ratio of net revenues to annual bond debt service. The net revenues are those surplus to the operating needs of the system. A net coverage ratio of 1.3 is considered minimum for a sewerage system. The market also looks at the amount of money set aside in a bond reserve to make debt service payments if unforeseeable factors reduce net revenues below the necessary level. A bond reserve containing at least enough to make the maximum year's principal and interest payments is the minimum acceptable.

With the economy continuing in a depressed state, there is an increased level of concern over the ability of sewerage utilities to increase user rates and charges as necessary to assure proper operation, maintenance, and replacement of facilities as well as payment of debt service on any revenue bonds. The recent successful initiative action in Seaside to roll back sewer rates to 1977 levels increases this concern. Fortunately, that initiative has now been removed after an effort to display the adverse impacts on system operation to the public.

The Department has also relied on the authority granted by statute to withhold state-shared revenues (cigarette taxes, liquor taxes, etc.) if necessary to make debt service payments. This was the underlying security for the light rail corridor sewer line loans. Since the legislature could change the laws that provide for the state-shared revenues, it is difficult for the Department to rely on this for long-term debt repayment.

If greater use is made by local governments of revenue bonds, whether as a result of the ability to issue them without voter approval or otherwise, the Commission and the Department will have to be prepared to deal with the following issues:

1. Consideration should be given to changing local budget administration and Oregon local budget law to ensure that sewerage facilities operate on a self-sufficient basis, relying predominantly on user fees and charges on an enterprise-fund basis.
2. Revenue bonds are more expensive to issue and administer than General Obligation Bonds, e.g., normal practice is to require establishment of a Debt Service Reserve out of bond proceeds; legal and financial review is more intensive; appointment of an independent trustee for the bondholders is usual for industrial development type bonds but not necessarily for cities.
3. A large shift by the Department towards buying revenue bonds would require disclosure by the State in the sale of its General Obligation Bonds and probably would require the services of outside consultants to prepare forecasts of revenues for inclusion in the official statement.
4. In recognition of increased risk, use of bond insurance for the growing use of revenue bonds should be explored.
5. Revenue bonds can be the subject of a negotiated sale between the public agency and DEQ unlike General Obligation Bonds which are bid at public sale.

If the Department is to rely on the extraordinary authority of the Constitution and Statute to advance funds by means other than the purchase of local bonds, i.e., on a "straight loan" or "contract" basis, added staff expertise will be needed to analyze individual proposals for security.

Unfortunately, it appears that the legal and administrative costs of processing a long-term "loan" may be greater than the costs associated with sale of a General Obligation Bond issue. In view of the lesser security, the loan instrument should contain covenants and pledges similar to a revenue bond and be subjected to the same financial scrutiny. The same kind of legal review and opinions on the authority for and propriety of the indebtedness would be required for the loan as for a bond issue.

The loan instrument would resemble a bond in everything but name. (It should be remembered that the Department already accepts a single typewritten bond and waives the preparation of the official statements for bond issues.) To put this in perspective, the Department estimates that the legal and administrative costs incurred by a local government on a typical \$1 to \$3 million G.O. Bond issue should be no more than \$10,000 when purchased by the Department. The question is whether this can be reduced without unacceptable increase in risk to the State.

If the Department is to routinely accept other than a bond as security for funds advanced from the Pollution Control Fund, the Commission and the Department must deal with the following issues:

1. What are the standards for judging a proposed repayment program to be adequate security for the "loan"?
2. Is some legislation necessary to clarify the procedures and security for such "loans"?
3. Under what conditions should the Department use a "loan" rather than a bond purchase?
4. How does the Department adequately consider the impact of its administration of the bond fund upon the overall bond rating of the State?

Director's Recommendation

It is recommended that the Commission discuss these and related issues during the Work Session at this meeting.

Bill

William H. Young

Attachments: 4

Attachment I	Report entitled "Managing and Financing Growth"
Attachment II	Chronology of Bond Fund
Attachment III	Article XI-H, Oregon Constitution
Attachment IV	Letter from Senator Ripper, Representative Throop

Harold L. Sawyer:l
WL2150
229-5324
November 23, 1982

MANAGING AND FINANCING GROWTH

A Survey of Issues

DRAFT

Prepared by:
LEAGUE OF OREGON CITIES
P.O. Box 928
Salem, Oregon

August 1982

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INTRODUCTION

One of the major challenges facing Oregonians in the coming decades will be how to pay for urban growth. Hardly any other issue is as critical to the long term economic health and quality of urban living for the vast majority of Oregonians. In recent years, declining state and federal assistance, taxpayer resistance to paying for growth-related costs, higher service and treatment standards necessitated by both public choice and increasing population pressures, and a state land use policy that has placed additional service demands on urban infrastructures have moved us near the edge of crisis. Cities, torn between meeting daily operating costs, and planning and funding both optional and mandated capital facilities have acted like other corporations when faced with declining profits, increasing costs and uncertain market conditions--they've generally put dollars into continuing service delivery and deferred capital maintenance and new capital investment.

This issue first became apparent to cities in the mid-seventies as a result of Oregon's land use program, which serves to preserve resource lands and reduce sprawl by concentrating future growth around existing population centers, i.e., cities. While this concept holds great promise for the future of Oregon, its Achilles Heel may be the ability (or inability) to provide the infrastructure and other services necessary to support urban density development. City officials realized that it isn't enough to plan for growth, the capacity to support that growth must exist at both the state and local levels. Accordingly, the League was instrumental in the creation, under Governor Straub, of the Oregon 2000 Commission in 1978 to study the problems of accommodating Oregon's future growth.

Preliminary discussions began with state and legislative leaders following the conclusion of the 2000 Report. This was followed by creation by the League of its Council on Growth in 1980, specifically to study and document the nature of the problem and suggest possible solutions. This document provides background to the council and re-

ports on its preliminary review of options available for improvements in capital facilities financing.

The League of Oregon Cities identified the issue as its top priority in the 1981 legislative session and offered several legislative proposals aimed at providing short term solutions. Seeking a long term solution, the League, in 1982, urged the legislature and the Governor to undertake a careful examination of both state and local government's capacity to finance growth in the coming decades. Senate President Fred Heard and House Speaker Hardy Myers responded to the League's request by forming the Joint Interim Task Force on Managing and Financing Growth, which is scheduled to complete its recommendations in time for the 1983 legislative session. The task force will investigate the costs of basic public facilities needed to support growth and economic development and ways to pay for those costs. The Governor's Task Force on Land Use will also study public facilities financing.

This report seeks to evaluate if the state, by revising its policies and/or structure, can make improvements in the growth management process or in available financing mechanisms that would aid local governments to better manage and finance their growth and development. Growth financing issues will include existing state financial assistance programs, taxation policies and practices, and new state financial assistance mechanisms. Growth management issues will deal with existing land use and urban policy, local government coordination and structure, and state government coordination and structure.

Two reports have been especially helpful to the League in preparing this report. The report of the Oregon 2000 Commission, "The Challenges and Costs of Rapid Population Growth", has provided information and major conclusions for growth management issues. Growth financing issues have also been addressed by Michael Buckley in his master's thesis, "Assessing the Issues and Trends in Public Facilities Financing: Planning and

Policy Considerations for State and Local Governments in Oregon." The League also acknowledges the assistance of Rebecca Marshall, private financial counsel, in identifying bond market issues and recommendations for improved bond practices.

The National Issue

The capital improvement financing issue promises to be the major concern of the next U.S. Congress. The October 26, 1981 issue of Business Week and, more recently, the August 2, 1982 issue of Newsweek carried the subject as their lead articles. So serious is the problem of the nation's decaying infrastructure and so poor the prospects for its improvement, that Business Week reported "many sophisticated businessmen and economists believe the U.S. is entering a period of severe crisis for state and local governments."

The crisis is summarized in the Newsweek article, "The Decaying of America," which estimates the national repair bill at \$3 trillion over the next decade. Almost half of the nation's 248,500 bridges are structurally deficient or obsolete. The still-unfinished interstate highway system needs \$33 billion in maintenance and reconstruction. A survey of 9,000 dams in highly populated areas found 3,000 unsafe and 130 in danger of imminent collapse. Half of all American communities cannot expand because their water-treatment systems are at or near capacity.

Although the deterioration is great, the repair bill is coming due at a time when there is little money to spare. The Reagan Administration has sought to cut federal aid for highways, streets, bridges, and pollution-control projects. It also plans to phase out mass-transit operating subsidies by 1985, leaving state and local governments to pick up the slack. Taxpayer resistance in most states have forced the allocation of scarce revenues to operating costs and away from maintenance and repair projects. As one city official observed in the Newsweek article, if there is a choice between laying off a policeman or maintaining the sewers, the sewers lose.

Traditional means of raising capital funds by issuing municipal bonds has become very expensive due to record high interest rates. Inflation, as well as state and federal mandates, have also driven up the costs of new construction and repairs beyond most governments' ability to produce local revenues. Property tax limitation measures often eliminate or seriously reduce the ability of local governments to use traditional bond financing techniques for capital improvements.

The Situation in Oregon

Oregon's concern with public facilities financing was documented several years ago when the Oregon 2000 Commission report projected a population increase of 1.4 million between 1975 and the year 2000, with a need for \$450 million worth of capital outlays to support this growth from 1978 to 1983. Although the ongoing recession has slowed Oregon's growth since the publication of this report, the situation has not necessarily been improved. Even if our borders were closed tomorrow and there were no population increases, there would still be thousands of people moving from one place in the state to another. Consequently, some cities would be growing, while others did not.

Population decline, as well as population growth, can have adverse effects on public facilities. An unexpected surge in population can quickly overload a city's street, sewer, and water systems, creating health and safety hazards and shortening the systems' useful life. Declining population, on the other hand, can deprive a local government of the revenue required to complete necessary maintenance, make mandated improvements, or meet fixed costs, such as long-term debt service payments.

National problems are magnified in Oregon by the sharp decline of its major wood products industry and the acknowledged need to develop and diversify our industrial and business base. Although land is available and zoned for industrial and commercial development, a large portion will require major capital investment for basic services, such as sewers, water, and roads. Reduced income from taxes and federal funds, leave the state with few

resources to allocate for facilities' construction and improvements.

The decline of federal assistance and increasing costs due to inflation and high interest rates have brought the most recent estimates to finance the maintenance and construction of statewide public facilities in Oregon over the next 10-20 years to over \$6 billion. Just to maintain what is currently in place for roads and bridges, water systems (to assure both water quality and supply), and sewage is estimated at \$2.4 billion (in 1980 dollars). Another \$3.9 billion is estimated to be needed for new construction and improvements necessary to support new growth. The chart below, taken from a January 20, 1982, memo from Allan Green, Legislative Research Office, highlights these figures.

COST ESTIMATES FOR FINANCING THE MAINTENANCE
AND CONSTRUCTION OF PUBLIC FACILITIES IN OREGON

	<u>Maintenance of Current Infra- structure</u>	<u>New Construction and Improvements to Current Infrastructure</u>
Roadways and bridges (Dept. of Transportation, 1981) (TRIP, 1981)*	\$1.2 billion .7 billion	\$1.8 billion (10 years) .8 billion (10 years)
Water quality & supply (IRD, 1980)*	.3 billion	.6 billion (20 years)
Sewage (EPA, 1981 and DEQ, 1981)**	<u>.2 billion</u>	<u>.7 billion (20 years)</u>
	\$2.4 billion	\$3.9 billion

* 1980 dollars

** 1981 dollars

GROWTH FINANCING ISSUES

Existing State Financial Assistance Programs

Purpose

The state currently operates a range of agency programs designed to aid the development of the state's urban infrastructure. This section will examine recent trends and possible improvements in those programs.

Description and Analysis

State spending on local capital improvements in the past was largely a result of direct pressure from population growth in the 1960's and 1970's and from federal aid targeted to specific facility development (i.e., sewer and water quality projects). Today there are a total of 23 state programs operated by 7 state agencies that provide some funds for local public facilities. Some programs are federally funded and state-administered, while others are operated and funded solely by the state. Many programs provide targeted aid and are not available to every locality. The chart below compares city revenues between 1977-78 and 1980-81 from federal and state sources.

Selected City Revenues by Source (millions)

<u>Federal Revenue</u>	<u>1977-78*</u>	<u>% of Total City Revenues</u>	<u>1980-81**</u>	<u>% of Total City Revenues</u>
Revenue Sharing	\$ 28.934	6.2 %	\$ 22.611	5.4 %
All Other	<u>115.382</u>	<u>24.5</u>	<u>47.979</u>	<u>11.4</u>
	\$ 144.316	30.7 %	\$ 70.590	16.8 %
<u>State Revenue</u>				
Revenue Sharing	\$ 6.585	1.4 %	\$ 6.247	1.5 %
Street and Highways	16.995	3.6	15.010	3.6
All Other	<u>17.834</u>	<u>3.8</u>	<u>18.217</u>	<u>4.3</u>
	\$ 41.414	8.8 %	\$ 39.474	9.4 %
Total City General Revenue	\$ 469.928	100%	\$ 419.680	100%

* Source: Financing Oregon Cities during 1977-78 and the 1979-81 Biennium (for 183 Oregon cities) Bureau of Governmental Research and Service and League of Oregon Cities, July 1979.

**Source: Financial data for 132 Oregon Cities over 1,000 Population (Excluding Portland) Fiscal 1981; Bureau of Governmental Research and Service, June, 1982.

Because the number of cities reporting is different for each fiscal year, the percentage of revenues received will be most meaningful. The percentages show that federal payments as a percentage of total local revenues have decreased significantly; while state payments have remained approximately the same small percentage of total city revenues from 1977 to 1981.

The continuing trend of limited state assistance to local governments presents some pessimistic implications for financing of local public facilities. State payments to cities have declined from 12.0 percent of total city general revenues in 1973-74 to approximately 9.4 percent in 1980-81. The state water quality grants that were available to cities over a decade ago are, virtually, no longer available. Nearly 90 percent of all state payments to cities come from highway, liquor, and cigarette tax sharing. Both the liquor and cigarette tax payments may be used for general city purposes, but because of budget constraints, few cities are able to use much of these funds for capital improvements. State gas tax revenues, earmarked for road construction and improvements, have also decreased because the use of more fuel-efficient cars has lowered statewide gas consumption.

Trends in federal assistance for local public facilities financing is no more encouraging. Since 1957, federal grants have been available to assist cities with sewerage works construction. Since 1975, these funds have been steadily reduced. Recently, President Reagan proposed rescinding \$1 billion of the FY 1981 national appropriation, which reduced available program funds in Oregon from approximately \$41 million to \$28 million. The President's FY 1982 national budget proposed zero funding pending substantial program reform. That reform is now accomplished with the result that the federal government has substantially reduced its support for this critical portion of the urban infrastructure so vital to economic development. Water systems, despite heavy federal regulation, have never had the same federal funding support as that given to sewers in the past.

Oregon's revised budget of 1979-81 reported estimated expenditures of \$2.9 billion. By comparison, maintenance of the state's current infrastructure (roads, water, sewer) has been estimated at \$2.4 billion while future new construction and improvements are estimated at \$3.9 billion. According to the figures presented on page 5, Oregon needs \$450 million per year for maintenance and construction of roadways and bridges. The 1980 edition of the Handbook of State Programs for Local Governments reported that approximately only \$17 million annually was available to cities and counties from the Department of Transportation for these facilities. Water and sewer needs have been estimated at \$90 million per year for the next 20 years, with no state grants available. Clearly, Roger Vaughan of the Council of State Planning Agencies was correct when he testified at the July 14 hearing of the Joint Interim Task Force on Managing and Financing Growth that Oregon would have to substantially increase its infrastructure investment just to keep what it has intact.

Summary of Issues

1. With substantial reduction in federal assistance for infrastructure development already a fact, and the future of continuing federal support in serious doubt, should local and state governments develop their own resources to provide for public facilities financing?
2. How can existing financial assistance programs be improved?
3. Since the federal government is backing out of the sewer program, should the state increase its level of participation? Should the Pollution Control Bond fund be increased?

Alternative Recommendations -- *Existing State Financial Assistance Programs*

1. The scope of the Pollution Control Bond funds should be expanded by one or more of the following options if the state is to provide more than nominal assistance to local governments in achieving facility development requirements during the 1980's:

- a. Increase the statutory debt ceiling of the Pollution Control Bond fund from \$260 million to the maximum allowed (1% of TCV of taxable property in the state - over 600 million capacity).
 - b. The state should provide greater assistance to cities in dealing with health hazards. Such assistance should range from priority for available federal funds to state grants.
 - c. Insure that loans from the Pollution Control Bond Fund are available to finance sewer construction in areas that would promote economic development.
 - d. Restore state grants for sewer construction, provided that new funding sources are made available. The earlier rationale for reducing state grants was the decision by the federal government to increase its share of sewer construction costs. Now that the federal government has reduced its percentage share of construction costs, it is appropriate for the state to re-evaluate its role.
2. Statutory provisions which affect the financing for sewage treatment and solid waste disposal facilities of local governments are fragmented, contradictory, and confusing and should be simplified and streamlined by Legislative revision.
 3. The Department of Environmental Quality, with appropriate safeguards, should use proceeds of the Pollution Control Fund to support more creative local financing than just purchase of general obligation bonds, as in the past.
 4. The Departments of Environmental Quality and Economic Development should be given sufficient funds to provide targeted aid for facilities construction to those communities that are in compliance with state land use planning requirements and are realistic sites of industrial location.

5. The legislature should consider enactment at the next special session of the 1¢-1¢-1¢ gas tax increase.

6. The Oregon Department of Transportation should explore alternative vehicle registration fees based on horsepower, weight, or value.

Taxation

Purpose

Traditional taxation tools and policy for financing infrastructure have been jeopardized by a series of factors--taxpayer resistance, a depressed economy, and increased costs. This section examines proposals for changes in existing tax mechanisms as well as possible new mechanisms.

Description and Analysis

The Oregon Constitution provides that no taxing unit may levy a property tax without voter approval. Local governments with approved tax bases may not increase the amount of the levy within that tax base more than 6 percent without voter approval.

Because actual inflation has increased costs far above the 6 percent inflation rate built into tax bases, and because voters are resisting increased taxation, local governments are having a hard time financing the goods and services they are expected to produce. According to a report by the League of Oregon Cities, only 39 out of Oregon's 241 cities were able to operate within their tax base in 1979-80. In the 1980 elections, voters approved only 28 percent of proposed new tax base increase measures.

If the property tax limitation measure passes this coming November, true cash value of property will be reduced to 7/1/79 values, with not more than a 2 percent increase allowed per year after 1983. With some exceptions, the property tax levy would not be allowed to exceed 1-1/2 percent of the true cash value. Issuing general obligation bonds (including Bancroft bonds), the traditional method of financing public infrastructure, would be virtually impossible under this measure.

Traditionally, the capital budget has been the safety valve for the operating budget when revenues have been tight. Rather than raise taxes or cut services, elected

officials have chosen to defer maintenance and investment in public infrastructure. The result of such actions has been to shift the burdens of repair and replacement to future taxpayers.

Because local governments face such stiff resistance from local taxpayers to finance capital improvements through the traditional methods of increasing property taxes or selling general obligation bonds, they need to look towards alternative types and methods of taxation. Necessary capital improvements costs may be financed directly, and unnecessary costs avoided by taxation. Using a different method of taxation may become an incentive for development. For example, site value taxation increases the tax on land and decreases taxes on buildings or improvements. This is believed to encourage the maximum development of valuable land and to prevent urban sprawl, thus reducing infrastructure costs.

One of the most controversial alternative taxation proposals for Oregon is the sales tax. Several groups within the state have already endorsed the sales tax concept. Roger Vaughan, consultant from the Council on State Planning Agencies, testified at the July 14 Joint Interim Task Force hearing that the lack of a sales tax could cause investors to shy away from Oregon municipal bonds, especially if the 1-1/2 percent tax limitation measure is approved. Investors are more concerned with the stability of the tax situation than they are with the property tax rates. Voter resistance to property tax increases and the vulnerability of income tax revenues to swings in the economy have resulted in Oregon's current unstable tax revenue situation.

The state could assist local governments' efforts to implement alternative taxation methods by eliminating existing obstacles to such mechanisms. Ballot Measure #1, for example was passed in the 1981 legislative session. The measure allows growth in the tax base of a local government taxing unit if there is new construction within its jurisdiction. Under the proposed constitutional amendment, an increase in the base

beyond the 6 percent limitation would be determined by the value of new construction multiplied by the prior year's tax rate inside the base, or 15 percent of the prior year's base, whichever is the lesser.

Summary of the Issues

1. How can the state eliminate obstacles to local taxation mechanisms?
2. What new types of taxation may the state implement?
3. What alternative taxation methods may the state implement or suggest to local governments?
4. What is the impact of tax limitation measures (the current 6 percent and the proposed 1-1/2 percent) on public infrastructure maintenance and improvements?
5. Can the state shift a portion of the local tax burden to statewide revenue-raising mechanisms?

Alternative Recommendations *-Taxation*

1. Examine existing property tax exemptions and develop clear criteria for granting exemptions in the future.
2. The state should adopt a "Tax Expenditure Budget" which would identify the cost in lost tax revenues to state and local governments of tax exemptions and tax credits.
3. The state should, at a minimum, either repeal property tax exemptions, pay local governments for the lost revenues caused by such exemptions, or require in lieu payments to local governments from all exempt properties.
4. Examine current assessing practices of serviced and zoned but vacant land to insure that the market value of such land is accurately determined. This might

discourage needed industrial lands from being held off the market for speculative purposes.

5. The legislature should study the concept of site value taxation within urban growth boundaries. This is a property tax modification where all or a portion of the tax burden is shifted to the land, at its highest and best use, and away from the buildings or improvements on the site. It is believed to have a more positive impact upon rehabilitation, and prevention of urban sprawl and land speculation than the present tax and valuation approach.
6. The state legislature should study the concept of a regional tax-base sharing plan for local option use in large metropolitan areas and in special non-metropolitan situations. This is a method of sharing the increased tax valuation from new development among those local governments and districts that will be burdened with servicing the new development and the people it attracts.
7. If the legislature is unwilling or unable to provide new revenues to assist in financing of capital improvements, one alternative is to take the current burden off the property tax by limiting access to it by local government units. For example, one alternative might dedicate the property tax to cities, counties and special districts, with the state assuming the responsibility for total funding of basic education. Such a change would probably require serious consideration of a constitutional sales tax, earmarked for schools, with appropriate exemptions to reduce the regressive nature of a sales tax. Related options include placing cities on a sales tax while allowing continued access to the property tax for local bonds.
8. Implement a state lottery to fund growth-related capital improvements.

9. Expand the use of tax increment financing for "economic development" purposes.

10. One option is to expand local taxing authority on a local basis. While cities currently have the ability to adopt local sales and income taxes, the practical fact is that such attempts have been aggressively opposed in the past by local voters for a variety of reasons. One solution might be state legislation requiring each city to propose a local sales or income tax as an alternative to the current mandated tax base elections. Another approach might involve a statewide, local option sales or income tax to be voted on in each city at the same primary or general election.

State and Local Bonding

Purpose

This section describes the major types of municipal bonds that both the state and local governments may issue, critical elements of the bond process, and the importance of bond financing in Oregon. Several real and proposed changes in Oregon's bond market will affect the state's potential for financing growth. Recommendations will focus on how the state can improve this potential by increasing the marketability and decreasing the cost of local bond issues.

Description and Analysis

Bonding has traditionally been the major source of financing for public sector facilities and capital improvements. Despite their lower-than-market interest rates, municipal bonds have been especially marketable in Oregon because individual investors receive a double personal income tax exemption on interest earned (for both federal and state returns). Commercial and corporate investors receive the usual federal income tax exemption.

Following is a short summary of the various types of municipal bonds, the process that assigns an interest rate to each issue, and critical elements of the state's bonding practice.

1. General Obligation ("G.O.") Bonds = The "general obligation" is the pledge of "full faith and credit," which means all unrestricted resources of the Issuer (usually refers to General Fund). Usually includes the "full taxing power" which consists of a pledge to tax up to the entire "True Cash Value" of the municipality.

True Cash Value ("TCV"). Full market value of all taxable property within the Issuer's boundaries (not "assessed valuation," which is now an artificially limited valuation).

* TAX-SUPPORTED G.O. BONDS = Bonds paid entirely from property or other tax levies.

e.g. State Department of Higher Education Facilities Bonds; School District Bonds

* LIMITED-TAX G.O. BONDS = The taxing power is limited by statute or charter.

e.g. Oregon Veterans Welfare Bonds: limited by Constitution to \$2.00 per \$1,000 TCV; limited by Statute to \$0.25 per \$1,000 TCV

* MINI-BONDS = Low denomination bonds paid entirely from property or other tax levies and sold by commercial banks and cities directly to citizen investors.

* G.O. REVENUE BONDS ("DOUBLE BARRELLED") = G.O. bonds which are paid either partly or totally from revenues generated by the project being financed, such as G.O. bonds paid by water system fees and charges, with property taxes available if revenues are insufficient to retire the bonds.

If only revenues are used to retire the bonds, the bonds are then referred to as: "self-supporting" or "self-liquidating."

e.g. Department of Veterans Bonds: paid entirely from mortgage payments by veterans; Portland Water Bonds: paid entirely from water system fees and charges

* G.O. IMPROVEMENT BONDS ("BANCROFT BONDS") = Issued primarily by cities and counties to finance special improvements within "LIDs" (Local Improvement Districts). Individuals who benefit from the improvement are assessed by the city or county for their share of the cost of the project. These assessment payments are then used to pay off the bonds.

2. REVENUE BONDS = Bond payments are made from revenues, such as service fees and charges, generated by the project being financed. No taxes are levied or pledged as a back-up. NOTE: Straight revenue bonds, except for housing, university or dormitory purposes, cannot be purchased by commercial banks.

e.g. Electric Utility Revenue Bonds such as issued by Eugene Water and Electric Board, P.U.D.s (Public Utility Districts), etc.

* MORTGAGE REVENUE BONDS ("HOUSING BONDS") = Revenue bonds paid from mortgage payments or rental payments from housing projects financed by bonds.

e.g. State Housing Division Low-Income Housing Bonds (note: State bonds issued for the elderly are G.O. Revenue Bonds)

* LEASE OR LEASE-PURCHASE REVENUE BONDS = Revenue bonds paid from lease payments made on projects financed by bonds.

* TAX-INCREMENT REVENUE BONDS ("URBAN RENEWAL BONDS") = Revenue bonds paid from monies derived from "tax increment financing," a special application of a portion of taxes levied in urban renewal districts.

* INDUSTRIAL DEVELOPMENT REVENUE BONDS ("IDBs" or "IDRBs" or "IDRs") = Revenue bonds issued by a municipality "on behalf of" a private taxable corporation or individual. Bonds are paid from lease payments which the private corporation makes on the facility financed by the bonds (the facility is owned by the municipal issuers throughout the term of the bonds and then sold to the private corporation for a small sum after the bonds are paid off).

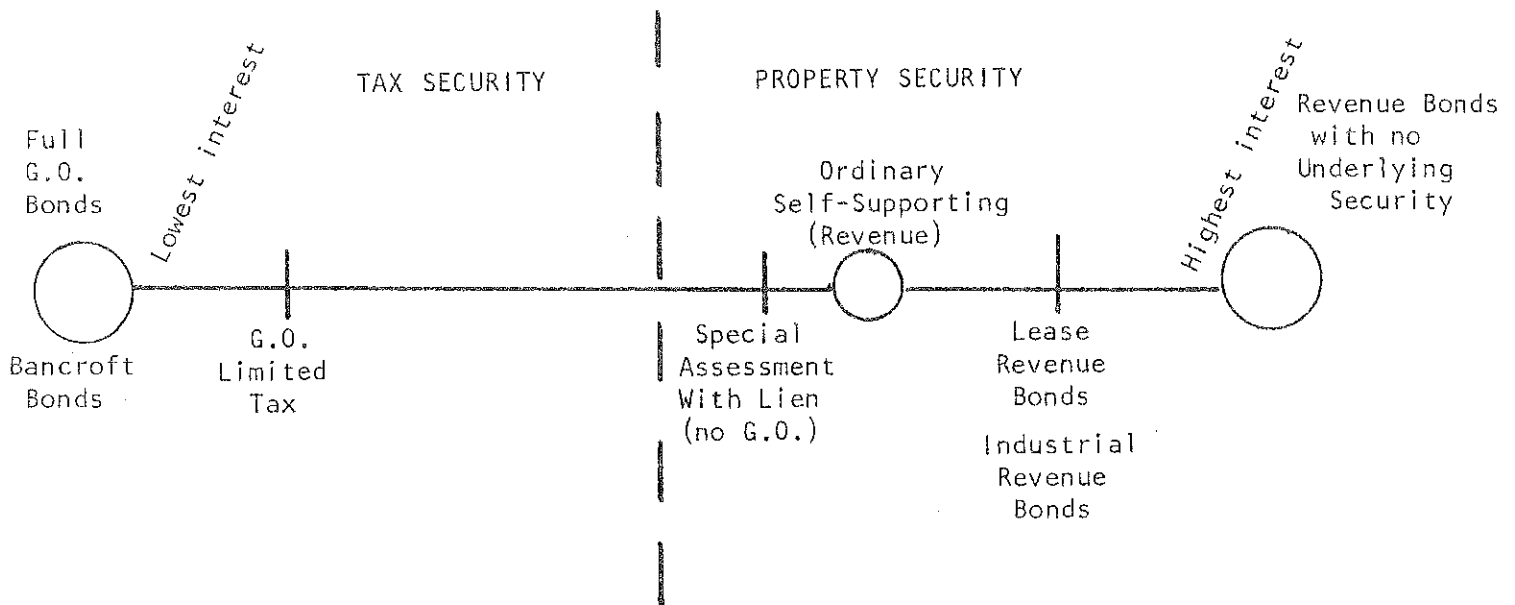
e.g. State Economic Development Revenue Bonds; Port of Portland Industrial Development Revenue Bonds

(Note: IDBs may also be backed by a G.O. pledge, such as the State Water Resources Bonds.)

3. REFUNDING BONDS = Bonds issued to refinance bonds which have not yet matured ("outstanding"). "Advance Refunding Bonds" are a special type of refunding bonds which are issued prior to the call date. Refunding bonds may be issued to refinance either G.O. or Revenue Bonds.

e.g. State Department of Higher Education Advance Refunding Bonds (1978)

Rating agencies rate the credit worthiness of states or municipalities according to security provided for the debt, their assessed ability to pay back the debt, their overall credit status, and their economic vitality. Based on the rating assigned and current market interest rates, underwriters bid a purchase price for each bond issue which reflects their market risk. The greater the risk, the higher the interest rate to be paid by the state or municipality. Bonds whose underlying security is an unlimited taxing power are more secure than those backed only by system revenues or by a lien on the project itself. These relationships are graphically illustrated below:



Source: Rebecca Marshall
Financial Counsel

In recent years both Oregon's state and local governments have participated heavily in the public credit market. The amount of state and local debt outstanding increased from \$1.343 billion in 1969-70 to \$7.026 billion in 1979-80. The extensive borrowing quadrupled the amount of per capita debt outstanding, making Oregon the sixth most indebted state in the country.

Contrary to national trends, the bulk of Oregon's public borrowing has been undertaken at the state level. While the state share of public borrowing across the country was 36.3 percent in 1979-80, the state government accounted for nearly 70 percent of all public borrowing in Oregon. The most rapid rise has occurred in state issuance of general obligation debt, which is secured ultimately by the state's full faith and credit. The annual sale of general obligation bonds by the State of Oregon went from \$119.5 million in 1970 to \$1,290.6 million in 1980. As of January, 1981, DVA bonds accounted for 91.8 percent of all general obligation revenue bonds (usually called self-supporting GO debt).

A report issued by the Bonded Debt Advisory Panel in March 1981 recommended that all state agencies coordinate their sales through the Department of Treasury and that an Oregon Investment Council within the Treasury monitor the state's borrowing practices.

Other 1981 legislative changes sought to offset the disruptive effects of the large state bond sales on local issues. These changes included increasing disclosure requirements for the local issues, lifting the 10 percent yield ceiling on municipal bonds, allowing the sale of bond anticipation notes, and permitting the sale of small denomination "mini-bonds."

The long-run success of Oregon's land use planning program is ultimately bound up in the integration of the comprehensive plan with adequately financed capital projects to accommodate current improvement needs and the timing and location of future growth. Until recently, municipal bonds, primarily general obligation bonds, have been the

main source of financing for these capital projects. There are several indications that this source will be either less available or more expensive in the future.

Because recently enacted changes in the federal income tax laws will reduce taxes in the upper brackets by 25 percent over the next three years, investing in municipal bonds appears less attractive than in the past. In other words, investors may not be as eager to shelter their income in tax-exempt municipal bonds. With decreased demand, bonds will have to appear more attractive and this means that cities may have to pay higher and higher interest rates.

The tax-exempt status of municipal bonds is also under attack from the federal government. In response to criticism over abuses of the public purpose in issuing certain bonds, Congress passed legislation in 1981 severely restructuring the use of bonds for single-family housing and the current administration is proposing limiting projects eligible for tax-free industrial development bonds. In July 1982, the Senate Finance Committee proposed legislation that would require all taxpayers to pay a federal levy on interest earned from municipal bonds. A separate measure sought to reduce the deduction banks take for their interest costs to purchase and carry tax-exempt bonds. Although neither proposal remained in final legislation, the attempt can only add to current uncertainties surrounding municipal bonds.

If the proposed $1\frac{1}{2}$ percent property tax limitation measure passes in Oregon this November, the state and cities will not be able to issue any general obligation bonds that are secured by property tax revenues, including Bancroft bonds. Other bonds may still be available, but as described in the previous section, they will be viewed as less secure by investors and will carry a higher interest rate. Ultimately, this means Oregon taxpayers will have to pay more for any future capital improvements.

Even without the property tax limitation measure, Oregon voters are resisting any tax increases as long as depressed economic conditions and high unemployment continue in

the state. Although most Oregon cities have unused debt capacity, bonds to finance capital improvements will probably not be approved if it means any increase in property taxes. Compared to 100 percent approval of all local bond measures in 1979, only 72 percent were successful in 1980 and only 49 percent in 1981 (League of Oregon Cities statistics).

Voter resistance, heavy state investment in the DVA program, the state's poor economy, high interest rates, attacks on bond tax-exempt status, and the property tax limitation measure have all succeeded in increasing the uncertainty surrounding Oregon's bond market. On July 30, 1982, Moody's Investor Service, Inc. reduced Oregon's bond rating from AA to A1. Citing Oregon's poor economy and state government money problems, the bond rating firm concluded that Oregon does not currently fit into a high-quality credit rating.

Summary of Issues

1. Should the state help improve the marketability of local bond issues?
2. How can the state assist local governments in bond financing?
3. What statutory changes could the state make that would help reduce interest rates on local bond issues (especially if GO bonds are eliminated)?

Alternative Recommendations -- *State and Local Bonding*

1. Coordinate state and local bond sales so that the large state offerings do not undercut the market for local sales. (State agencies are currently coordinating sales through the Department of Treasury.)
2. Continue to support the activities of the Municipal Bond Division of the Treasury, which tracks all municipal bond issues in the state, offers courses to public planners and officials on the bond market and the process of issuing municipal bonds, and publishes The Oregon Bond Advisor newsletter. The newsletter could

be a vehicle for sharing information on state bond sales with local governments so they could improve the marketing of local issues.

3. Resolve constitutional issues involved in the following recommendations and offer as options in the event the 1-1/2 percent property tax limitation measure passes and the local governments can no longer sell "G.O." bonds.
 - a. Offer a state guarantee for local debt obligations whereby the state makes an explicit promise to automatically pick up any shortfall in local resources. Types of state guarantees include bond insurance or backing by the state's full faith and credit. This has the effect of reducing costs to local governments because of the enhanced marketability of their bonds. The major drawback is that the state could be (and probably should be) selective in how they guarantee local debt.
 - b. An alternative to a 100 percent state guarantee would be legislation that would allow the state to back a portion of a revenue bond, with the other portion coming from rate or service charges.
 - c. Establish a State Bond Bank which, by consolidating a number of smaller local debt issues into a larger bond issue, would reduce transaction costs of marketing the bonds. The drawback is that it also tends to increase the level of "systematic" risk because all issues could be simultaneously exposed to the same regional economic cycles. Some state bond banks have attempted to lessen this risk by backing up the local debt with a state guarantee, a pledge of state taxes, or a moral obligation of the state.
4. The following recommendations propose to improve the marketability of local bond issues; particularly if the 1-1/2 percent property tax limitation measure passes and bond options decrease:

*add on
to 3. a. b. c.*

- a. Support legislation to permit and facilitate establishing a debt service reserve fund for special assessment revenue bonds either by requiring down payments (now prohibited by law) or by commitment of other funds including interest earnings from bond sales. In addition, the ratio of improvement assessment to property value for such bonds might be reduced from the current maximum of 200 percent to a lower ratio in order to make such bonds more attractive.
 - b. Support Federal legislation to allow revenue and "special assessment" bonds to be underwritten by commercial banks. If the property tax limitation measure passes, all bonds will have to be underwritten by investment bankers. Borrowing costs could be higher because of the smaller market availability.
 - c. Review statutes on general obligation bonds. If statutes were changed, a "G.O. Limited Tax Bond" may still qualify under the property tax limitation measure and also be eligible for underwriting by commercial banks. While it would not necessarily reduce higher bonding costs, it might broaden the available market if the property tax limitation measure passes.
5. The state should continue to monitor its entire bond sales activity in order to minimize the impact on local bond issues. Local governments are concerned that this impact results in increased costs (higher interest rates) for their bond issues.
6. Local governments should be authorized to issue revenue bonds without a local vote. However, public notice provisions should be allowed that could trigger public referendum efforts.
7. Consider tax credits for those who buy Oregon bonds specifically dedicated to infrastructure purposes such as sewer, water and roads.

New Forms of State Assistance

Purpose

In addition to the taxation and bonding proposals discussed in the previous sections, experts have described other ways that the state might aid in the financing of needed facilities. This section looks at those proposals and their possible application in Oregon.

Description and Analysis

Two types of new state assistance are possible: financial and technical. Although there are no really "new" financial mechanisms available to rescue state and local governments from the public facilities crisis, there are existing "tools" that can be used more effectively by the public sector. The state is also in a good position to provide technical assistance to local governments.

Mark Ferber, Public Finance Specialist from Kidder Peabody and Company, identified the financing possibilities of "municipal leasing" arrangements at the Joint Interim Task Force hearing on July 14, 1982. Recent federal tax changes make possible the sale and leasing back of existing government facilities. The government entity as the lessee, or renter, would lease a public facility or asset to a lessor, often a vendor or a leasing corporation. The main advantage of such an agreement is that the interest portion of payments made to the lessor may be tax-exempt and the resulting interest rate to the government entity may be less than the going market rate.

There are several types of leasing arrangements:

- * Operating lease arrangements--the lessee has use of the facility or asset in return for regularly scheduled rental payments to the lessor.
- * Lease-purchase agreement--a contract that is called a lease, but in substance is a purchase or conditional sale. The lessee makes payments that include both an interest and principal component, and the contract establishes the terms

under which transfer of ownership to the lessor will take place. The agreements typically contain a fiscal funding or non-appropriation clause which allows the government entity to terminate, without penalty, a lease for which funds are not appropriated beyond the current annual budget. Lessors protect themselves from non-appropriation by charging a higher interest rate than for a guaranteed contract term and by including in the contract a non-substitution clause that states the lessee cannot lease or purchase a replacement facility or equipment within a specified time.

- * Sale--leaseback--an arrangement by which a public entity sells property it owns and simultaneously executes an agreement to lease all or part of the property back from the buyer. Using this method, the seller-lessee obtains the full purchase price and still retains use of the property.
- * Leveraged lease arrangements--involves a long-term lender, in addition to a lessor and lessee. The long-term lender provides substantial financing (leverage) to the lessor in return for both repayment of the loan and a security interest in the asset being leased out. Certificates of participation in the loan can then be sold to individual investors who may benefit from tax exemption.

Mark Ferber suggested that if the state or cities become lessees, they should earmark any savings realized on leasing arrangements for public facilities' financing and improvements. Establishing an adequate public facilities fund would avoid current problems of deferred maintenance. Other financial and technical assistance that could be offered by the state are described as recommendations.

Summary of Issues

1. What other financial assistance may the state provide local governments for the financing of public facilities?

2. What technical assistance may the state provide that would make local government investment more secure and effective?

Alternative Recommendations ~ ~ *New Forms of State Assistance*

1. The state should study the financing mechanism of municipal leasing, including the following considerations:
 - a. If leasing arrangements are cost effective, the state should investigate their use for state facilities and use savings for state or local capital improvement projects.
 - b. Establish a state Land and Building Management Authority that is funded by G.O. bonds and that buys municipal leases.
 - c. Offer a state guarantee for municipal lease payments, which might reduce their interest rates.
 - d. Establish a State Reconstruction Bank that would loan funds for local capital improvements and investments, provide subsidies, and/or provide G.O. credit or guarantee. Cities would have to agree to repayment using dedicated user fees or facility revenues.
2. Establish a state "Growth Fund" to be allocated to local governments for the implementation of their acknowledged comprehensive plans. The fund could be composed of additional borrowing capacity, direct appropriations, or some combination.
3. The state should encourage greater private investment in public facilities by providing incentives, credits, loan subsidies, or seed money. The City of Eugene, for example, is using community development funds to leverage private loans for downtown rehabilitation and development. When a loan is approved by a private lending institution, the city makes an additional interest-free loan that

effectively reduces the principal and the monthly payments of the first loan. This plan encourages the business person to improve property and facilities and provides the incentive and additional security that encourages a private lender to fund the project.

GROWTH MANAGEMENT ISSUES

Existing Land Use and Urban Policy

Purpose

The state currently operates a range of agency programs designed to aid the development of the state's urban infrastructure. This section will examine recent trends and possible improvements in the programs.

Description and Analysis

Concern over possible problems stemming from uncoordinated growth led to the adoption of Oregon's ambitious land use planning program in 1973. This legislation called for the creation of a statewide planning agency, LCDC, to prescribe planning goals, required cities and counties adopt comprehensive plans consistent with the goals, and theoretically established the means for coordinating the related activities of special districts and state and federal agencies.

In many respects, Oregon's land use legislation and the statewide planning goals represent at least the foundation of a state policy on growth management and urban development. Through the establishment of urban growth boundaries, the state seeks to concentrate future population growth in and around existing urban areas, thereby limiting, or at least controlling, development on resource lands. The goals also seek to control the infrastructure costs of growth by requiring planning for "a timely, orderly and efficient arrangement of public facilities and services."

While Oregon's land use program may represent a sound first step toward a coordinated urban policy, and probably a better one than most states have taken, there remain serious gaps and inconsistencies. The Oregon 2000 Commission report assessed the situation as follows:

Most Oregonians now live in cities. Seventy-five to eighty percent of our population growth between now and 2000 is expected to occur within boundaries of

urban growth centers. Although these urban growth areas vary widely in physical size and population, there are common community responsibilities to provide services which are similar in kind if not in level and intensity. All of these urban areas are now preparing comprehensive plans to guide their physical growth and economic development under broad goals developed through the state's Land Conservation and Development Commission and under locally-formulated community goals. While, collectively, these goals provide major guidance to local planning and growth, we have found gaps, omissions and possible contradictory state policies which thwart or hinder the type and quality of urban growth and development stated or implied in present goals. In short, there is need for a more fully-developed, cohesive and clear state Urban Policy under which gaps and inconsistencies in legislation and program can be identified and remedied.

Among the "gaps, omissions and possible contradictory state policies" noted by the Oregon 2000 Commission is the nearly total lack of any state regional policy. With the possible exception of the "economically lagging areas" program, the report concludes that "no consistent themes in existing policies clearly establish preferred roles, rates of desired growth or priority for receipt of state technical or financial resources among the various regions of the state." (page 65)

Indeed, the entire thrust of current state policy, as reflected in the statewide goals, appears to be to accommodate growth wherever the growth wants to be, rather than to redirect growth in a manner that may be more advantageous environmentally and economically to the state. The process for establishing an urban growth boundary under Goal 14 is essentially one of estimating long-range population requirements and accommodating them, albeit in a more efficient and compact manner. This process may be better than none, but it does tend simply to reinforce existing "boom or bust" population patterns around the state. Some communities, most prominently in the Willamette Valley, are left to struggle with awesome growth rates that outstrip their

financial capacity while others are left with dying economies and under-utilized service capacity.

The concept of redistributing growth is fraught with political and legal questions and practical uncertainties. Yet, circumstances would seem to compel that the concept be explored, particularly if Oregon is serious about avoiding the less than desirable growth patterns of other areas of the country. The Oregon 2000 Commission put it as follows:

While this report has taken the general approach that it is practically and most probably constitutionally not possible to limit growth of the state as a whole, it does hold that it is possible to provide for some direction of that growth among and within regions of the state by state-local plans and strategies.

The concept of limiting urban growth to specific geographic areas--those within urban growth boundaries--is now a state policy under LCDC. It is not clear, however, what happens when population and development pressures build up within specific boundaries. Are they really going to provide permanent open space between cities or forever preserve good farm land around urban areas? Time will tell, but perhaps good growth management plans which attempt to influence numerical growth will become strong components of policy to positively achieve intended development patterns. The alternative may merely be phased urban sprawl. Advantages may accrue during the growth period, but the eventual sprawling connection of every-expanding growth boundaries could produce the same undesirable results of the faster, less controlled variety of development which we have witnessed in many eastern and California urban areas.

In addition to the question of growth control and redistribution, the Oregon 2000 Commission report identified gaps in current state policy with respect to local

government structure, coordination of state agencies, and taxation. Recommendations dealing with these subjects are presented in other chapters of this report.

The LCDC program continues to find itself under attack, and a broad repeal measure is once again on the ballot. Although controversy may be inherent in any new and bold program, there is still a responsibility to analyze criticisms and respond to legitimate ones.

The prevailing criticisms of Oregon's land use program appear to fall within two broad categories--first, that the program is anti-development, or at least an obstacle to development, and secondly that the program has resulted in an overly rigid and legalistic land use decision making process. The opportunity presently exists to respond to both of these criticisms in a manner that keeps faith with the original aims of the program and also addresses the urban infrastructure problems of Oregon's communities.

Oregon's land use act was designed to have both a conservation and a development component, as evidenced by the very name of the responsible agency and commission. Critics have contended that LCDC has given undue emphasis to the conservation component. The appearance of imbalance, in part, stems from the fact that the con-
servation goals are met mainly through the imposition of adequate planning and zoning policies, whereas the development goals are much more a matter of planning implementation. For example, while the agricultural lands goal is largely satisfied through the adoption of EFU zoning, the state's housing, economic development, and urbanization goals hinge upon the orderly expansion of the urban infrastructure, as envisioned by acknowledged plans.

In short, while the conservation element of our land use program may be largely in place, the development challenge lies ahead, and it remains to be seen whether the state will demonstrate an equal commitment to this aspect of the program. Expenditures

for planning grants, which were as high as \$9,149 million in 1977-79, have now dwindled to \$3,552 million for 1981-83.

Furthermore, with respect to development, the state has the opportunity to assume a much more positive and mutually supportive role with local governments. No amount of additional state mandates or regulation can assure orderly development unless the requisite financial and technical resources and legal structure are in place. Thus, rather than making the process more rigid, the state's current challenge is to help local governments overcome obstacles that may stand in the way of implementing the urban component of acknowledged plans. With respect to the issue of rigidity in state policy, the Oregon 2000 Commission assessed the joint responsibility of state and local officials as follows:

In considering such assistance, it is important to emphasize that state involvement should not mean state domination or imposition of inflexible, uniform methods or procedures. The 2000 Commission in its meetings around the state was impressed with the variety of regional differences in growth problems and the number of different approaches being taken to solve them. While there is need for a good statewide effort to provide basic data, information and advice, local and regional officials believe they are in the best position to combine such knowledge with their own intimate knowledge of local situations to produce the most effective growth management answers. State and local governments have long complained about rigid and irrelevant rules within federal programs. Oregon's state government should avoid these same criticisms.

Responsibility for avoiding such criticism is two-way, however. Local officials who feel their region is somehow unique or different should be willing and able to join with other local governments within that region to clearly identify such differences, to show how they affect statewide application of a policy or program, and to specify the changes that should be made to permit a statewide approach to be more easily and logically applied within their region. The state,

through either the legislative or executive branch, must then be willing to evaluate such information objectively and, where reasonable, build flexibility into law and administrative regulation without sacrifice of legitimate statewide goals. This process is more one of attitudes than of formal procedures. However, the general lack of effective institutions to develop, communicate and act upon regional goals and solutions unnecessarily compounds the problem. The process also implies that when problems are identified by the state, the proposed solutions should be drawn clearly enough that the solution is not imposed in areas of the state where the problem does not exist.

Summary of Issues

1. Are existing state laws and programs really consistent with the aim of encouraging orderly and efficient urbanization?
2. What should the state's role be as Oregon's land use program moves from the planning phase to the implementation phase?
3. Should the state institute programs that seek to redistribute growth from areas that are overwhelmed by high population growth to those that have a demonstrated economic need and potential to accommodate growth?

Alternative Recommendations ~ ~ Existing Land Use and Urban Policy

1. The state should demonstrate the same commitment to urban development issues as it has to resource preservation issues. The commitment should generally take the form of positive financial and policy incentives for local governments to implement acknowledged plans rather than the form of additional state mandates and restrictions which hamper local facility development and leave the overriding issue--that of financial resources--unaddressed.
2. The legislature should consider amending state law to allow communities, under limited circumstances, to consciously slow or even halt further population growth. Such restrictions would have to be justified through a showing that further growth would be either inefficient or environmentally unsound. As a

balance, the legislature should institute alternative growth programs that consciously seek to redistribute future growth to new cities or other areas of the state. The satellite towns strategy and alternative regional growth centers program discussed in the Oregon 2000 Commission report are examples of such programs. In all cases, local support should be a precondition to the institution of any growth limits or state growth stimulation program.

3. The state should provide financial and technical assistance for local capital improvement programming. Because of limited experience with such programs and problems in obtaining funding to achieve them, the state should not mandate local capital improvement programs.

Local Government Coordination and Structure

Purpose

The structure of local government affects how effectively growth is managed and financed. Oregon's constitution charges the state with the responsibility of overseeing local government structure. This section will consider ways in which the state might improve the efficiency and coordination of service delivery by local governments.

Description and Analysis

The legal authority and responsibility for determining the boundaries of local government has been summarized by the Bureau of Governmental Research and Service as follows:

In the constitutional system of the United States, the federal government does not prescribe local governmental boundaries. It lacks power to do so, certainly by direct legislative fiat. Its action does, however, influence their location. That influence, always indirect, and sometimes remote, is often a major factor in where such boundaries are located by the operation of state and local law.

Because area both inside and outside a local government unit is affected, the determination of boundaries is basically a state function and does not come within the scope of municipal or county "home rule." In a state such as Oregon, where the power of the initiative is reserved to the voters of the state, the boundary-determining power resides in one sense most basically with those voters. In Oregon, however, they have seldom exercised that power on a statewide basis. Operationally, therefore, the state's boundary-determining power resides basically in the state legislature. In early, simpler days the legislature many times fixed local governmental boundaries by its own direct fiat. Subsequent delegation of the boundary-determining power under general laws to certain local governments and state instrumentalities still leaves that power residing ultimately in the legislature.

In short, although the state has moved away from dictating the boundaries of individual local governments by direct fiat, the ultimate authority over local government structure remains with the legislature.

The structure of local governments is critically important, not only for purposes of planning for growth, but also for purposes of delivering the needed services. Cities, as the traditional and primary provider of urban services, bear the brunt of accomplishing the state's goal of orderly conversion of developable land to urban uses.

Various observers have noted that the state's archaic and convoluted annexation laws stand in direct contradiction to this goal. In essence, Oregon's annexation laws allow residents on the urban fringe to block annexation, even though these residents may represent a small fraction of the total community, and even though the annexation may be totally consistent with state-acknowledged local plans and state goals. Understandably, city officials resent being charged by one state law with a responsibility that another state law prevents them from carrying out.

The League of Oregon Cities has unsuccessfully sought reform of the annexation laws in several legislative sessions during the last decade. In the 1979 session, the League was joined by the Oregon State Home Builders and 1000 Friends of Oregon in a proposal to tie annexation to acknowledged plans, but the proposal never emerged from its first legislative committee.

Cities and special districts are often viewed as competitive, and even warring, governmental entities. From the cities' perspective, this is true only when overlapping single-purpose districts pose an obstacle to the logical extension of the full range of urban services, a function which the city, as a general purpose unit of government, is best equipped to perform. The Oregon 2000 Commission ably assessed the role of special districts as follows:

In examining the role of special districts, it is important to distinguish the type of geographic area they cover. They serve either: (1) rural areas (outside urban growth boundaries); (2) suburban areas within urban growth boundaries; or (3) areas which encompass one or more incorporated cities in a fairly large geographic area.

First, those special districts which exist in rural areas may offer the best, and sometimes the only, way to provide area residents and property with needed facilities or services. Rural fire protection districts and irrigation districts are examples. They serve an important role in maintaining and improving the quality of life in rural Oregon.

Second are those districts within developing areas around cities and within established urban growth boundaries. Such entities many times overlap in serving the same area as increasing densities of population demand a greater variety of urban services or facilities. At some point, then, it may prove better for the area and people being served to consider replacement of a number of single-purpose districts--each with its own governing board and taxing authority--with one government offering a full range of urban services. This can be accomplished by incorporation--forming a new city, or annexation--becoming part of an existing adjacent city.

Third is the situation where solution to multi-jurisdictional problems, which may extend over a large geographic area, may best be provided by special service districts--like the Lane (Eugene-Springfield) Transit District, the Tri-Met Public Transit District or the Metropolitan Service District in the greater Portland area. In addition to extending over jurisdictions of several cities to address broad-based problems, this type of special district may also be particularly well suited to providing high-cost facilities (e.g. sewage treatment plants) which may require

a larger financial base than that provided by any one city. They also have a special role in providing high-cost facilities at a regional scale to ensure uniformity in the quality of services in the region, and through economies of scale, providing them at lower cost.

Under current law, counties, except in the Portland metropolitan area, have the responsibility to coordinate local land use planning. In this role, counties are expected to provide the necessary regional perspective in Oregon's land use program. Many smaller cities have also found county coordinators to be a valuable source of technical assistance in completing plans and ordinances.

There are, however, some obvious conflicts in the assignment of the coordination responsibility. Since many of the important land use conflicts are between cities and counties, counties are hardly in a position to be a neutral arbiter. As the Oregon 2000 Commission observed, "this is like having one of the players in a baseball game also acting as umpire."

Furthermore, there is the problem, for many counties, of matching responsibility and geographic territory. The location of county boundaries are more a result of historical and political factors than logical geographic and economic regions of the state. Thus, they are often ill-suited to perform either a regional planning or a service delivery function.

While problems with the current structure may be obvious, the alternatives are controversial and, in some cases, equally problematic. The Oregon 2000 Commission cited the alternatives of using councils of government, expanding the functions of boundary commissions, transferring local coordination responsibility to LCDC, and permitting establishment of multi-county or regional service districts, but did not fully endorse any particular reform.

Issues

1. What are the proper roles for cities, counties, and special districts in planning and delivering services for growth?
2. Do present annexation laws hinder orderly development within urban growth boundaries?
3. Is the proliferation of special districts and new cities consistent with the state's land use and urban policy objectives?
4. Are counties the best governmental entity to perform local planning coordination responsibilities?

Alternative Recommendations ~ ~ *Local Government Coordination & Structure*

1. The state should improve the ability of cities to annex land within their urban growth boundaries, consistent with the statewide planning goals and acknowledged comprehensive plans.
2. The state should clarify that creation, annexation and extra-territorial expansion of special districts within the urban growth boundary, and the incorporation of new cities, like annexations to existing cities, must be consistent with the statewide planning goals and acknowledged comprehensive plans.
3. The legislature should statutorily enact the LCDC policy, recently invalidated by the Oregon Supreme Court, that land within existing cities can be automatically considered urban or urbanizable.

State Government Coordination and Structure

Purpose

If there is an advantage in examining local government structure, it is equally important to review the state's organizational relationships. This section will examine possible deficiencies and inconsistencies in the way that state agencies affecting growth presently operate.

Description and Analysis

As is the case for local government, the basic organizational structure of state government may well determine how effective our efforts will be to manage growth. This report has discussed the vast array of state policies and programs that significantly impact growth. What remains to be asked is whether improvements could be made in the coordinative mechanisms for carrying out these policies and programs.

Many forms of coordination, both formal and informal, are currently in place. These range from simple consultation between agency staffs to the budgeting and oversight role of the Executive Department. Oregon's land use laws envision a major coordinative function for LCDC with respect to state agencies affecting growth. The LCDC program has functioned to involve state agencies in local planning and to require that agencies not violate plans once they are acknowledged. It has been far less successful, however, in terms of resolving conflicts between existing state policies and channeling state resources to reinforce state and local planning objectives.

Some have suggested that LCDC's state agency coordination function should be strengthened through additional statutory authority and/or direction from the governor, a proposal which may not be politically viable. Other proposed reforms in organizational structure range from the creation of an Office of State Planning within the Executive Department or Governor's Office to a new Department of Community Affairs. Rather than endorsing any specific structure, the Oregon 2000 Commission recommended the formation of

a coordinating group of department heads to advise the Governor and legislature on revisions to state growth policy and related organizational relationships.

According to many observers of state government in Oregon, the effort to improve coordination of state programs must be linked with major improvements in the state's basic information system. The Oregon 2000 Commission assessed the situation as follows:

Because predicting the future is so difficult, the need for solid up-to-date information is imperative. The 2000 Commission finds state government to be totally unprepared to make effective use of information that is available, to develop new information that is needed, and to even ensure that co-equal state agencies are operating on the same basic assumptions.

Oregon stands alone among West Coast state governments in not preparing and frequently updating demographic and econometric projections of its population and economy. It has no unit of state government with primary responsibility for coordinating, cataloging or disseminating information. It can not even ensure that state agencies are basing important decisions affecting budgets and the state's future growth and development on the same basic information. . . .

Oregon state government is deficient in three information areas; demographics, econometrics, and natural resources. In some cases, the problem is a lack of critical information, e.g., location and limitations of ground water, projections of short- and long-range economic activity. In other cases it is a lack of coordination among the providers of data, e.g., scale, timing, format. A state or local official, businessman, or interested Oregonian should be able to go to one place to either directly obtain necessary information or learn where it can be found. There should not be duplication of information collected, and in a state which prides itself on foresight, there should be a commitment to determining what information is needed and then seeing that it is available.

Improving our capabilities to gather, coordinate, analyze, and communicate information will not be done quickly because we have so far to go. It will require both executive and legislative action and it will cost money. First steps can be taken immediately and at little cost. We do not need a giant integrated, computerized information system capable of answering all questions about everything. On the other hand, new techniques and technologies can and should be used when they are more effective and less costly.

Improvements have been instituted since publication of the Oregon 2000 Commission report, including use of econometric projections for state budgeting purposes. Nonetheless, experts still cite deficiencies. In testimony to the Joint Interim Task Force on Managing and Financing Growth, Dr. Ed Whitelaw called for more reliable and valid information to guide state and local capital investment planning. He suggested that without sound demographic and economic forecasts, a capital improvement program may be no more than a public works "wish list." Whitelaw further pointed out the educational value of more sophisticated information tools that will show voters the true costs of delaying facility maintenance and expansion.

One example of a coordinated information system is being implemented in the state of Massachusetts:

When the system is complete, it will contain local governments' financial transactions for the past year, and budgeted revenue and expenditures for the coming year. In addition, it will hold each community's most recent demographic, social and economic data; and information on the services the local governments provide, including employment and physical facilities. Also to be inserted into the data base is information on the history, legal authority, geography, intergovernmental relationships, internal organization, and other characteristics of the state's communities.

Once the data bank is in place, state officials predict that it will provide an overview of local governments' financial condition, letting legislators anticipate the effect of their bills. Other benefits of the system will include the ability to measure local governments' relative fiscal stress. Cities and counties will not be the only jurisdictions for which information is gathered, however. Plans call for including data on school districts, municipal utilities, municipal and county hospitals, public retirement systems, special districts and independent state authorities. Where feasible, data will be included as well on standard metropolitan statistical areas (SMSAs), New England County Metropolitan Areas, U.S. Congressional districts, state senate districts, and state representative districts.

Summary of the Issues

1. What improvements could be made in the organizational structure of state activities related to growth?
2. Does state government currently have an adequate information system to assess and plan for the impacts of growth?

Alternative Recommendations — *State Government Coordination & Structure*

1. The state should form a Growth Coordinating Council comprised of local elected officials, industry and labor representatives, and state commissioners, whose agencies' activities most closely affect growth and development of the state. This "Growth Coordinating Council" could become the focal point for:

- * exchanging information on growth;
- * developing policies relating to growth problems;
- * using such policies as guides to devising and implementing programs within areas of each state agency's responsibility;
- * continued discussion, evaluation and necessary revision of state policy or practices affecting the way Oregon is growing.

2. The state should examine improvements in coordination and dissemination of existing information and the implementation of new information sources. Emphasis should be given to forecasting and fiscal impact analysis tools that aid state and local growth management planning.

3. The state should support the provision of technical assistance to local governments. Such assistance is especially critical to support officials in small cities, both volunteer elected and paid staff members if they are to uphold their end of a state-local partnership. A specific example is the consistent uncertainty of continued funding of the Bureau of Governmental Research and Services at the University of Oregon. Part of the instructional budget, the Bureau is constantly placed on the budget chopping block, thus threatening a major source of technical assistance about planning, legal issues, public works, fiscal administration and state-local relations.

4. The state should implement a uniform system of formatting and reporting local government revenue expenditure information. This would save the state (and others) money by increasing the efficiency of reporting and the utility of the information.

5. Examine and remove state mandates that unnecessarily contribute to costs of public facilities' financing.

CHRONOLOGY OF EVENTS
Related to the
POLLUTION CONTROL BOND FUND

1967 Oregon Legislature

Legislation was enacted creating a State grant program to supplement Federal Grants and take advantage of the Federal Matching Grant provisions wherein if the state gives a 25% grant, the Federal Grant would be 50% rather than 30%. State General Funds in the amount of \$ 2,688,496 were appropriated to make grants.

Note: Failure of the Federal Government to appropriate sufficient funds resulted in few Oregon communities constructing projects in 1968 and 1969.

August 23, 1968 Sanitary Authority Meeting

Chairman John Mosser announced appoint of a citizen's committee to draft pollution legislation. Herbert C. Hardy was appointed chairman. Among members were Jack G. Collins, Grace B. Angerman, Thomas C. Donaca, Dr. Ronald A. Findley, Irvin H. Luiten, F. F. (Monte) Montgomery, Glen E. Randall, James A Redden, Michael H. Schmeer, Mrs. Joseph E. Spang, and Palmer S Torvend.

1969 Oregon Legislature

House Joint Resolution 14 was passed and placed on the ballot as Ballot Measure 4 in the May 1970 primary election. This resolution proposed to amend the Oregon Constitution by adding ARTICLE XI-H titled POLLUTION CONTROL BONDS.

House Bills 1174 and 2060 were enacted to enable implementation of the Constitutional Amendment if approved by the voters, and limit use to \$50 million for sewerage facilities.

The legislature also specified that the state could not participate in the Federal Matching grant program unless there were sufficient Federal and State funds to service all applications. This returned the state to a 30% grant program until 1972 when the Federal Water Pollution Control Act provided funds to reimburse projects that moved forward without full federal funding. \$ 1,500,000 was appropriated for state grants.

October 23, 1969

Draft statement regarding Ballot Measure 4 was prepared by Department staff with assistance from Jack Collins and forwarded to Herb Hardy as for coordination with plans of the citizens committee. The statement was later distributed to Department staff and field offices. Of note is the following quote from the statement: "Loans advanced under the provisions of this amendment would be secured by contracts, bonds, notes or other obligations of the applicant."

May 26, 1970 Primary Election

Voters approved Ballot Measure 4 by a margin of 292,234 to 213,835.

July 13, 1970

Oregon Journal editorial notes that bonds cannot be sold until 1971 legislature meets to correct the problem of the failure of the 1969 Legislature to establish a debt-service fund.

November 19, 1970

The Emergency Board approved transfer of funds to allow the Department to employ a financial consultant to assist in developing the required administrative rules, financing plan, loan agreements, application forms and review procedures. The Department employed Bartle Wells Associates for this work.

The E-Board also specifically PROHIBITED ISSUANCE OF BONDS UNTIL THE 1971 LEGISLATURE COULD REVIEW THE DEPARTMENT'S RULES AND PROCEDUES TO ASSURE THAT ADEQUATE SAFEGUARDS HAVE BEEN PROVIDED TO INSURE REPAYMENT OF THE LOANS MADE BY THE DEPARTMENT TO LOCAL GOVERNMENTS. (From 11/20/70 Memo to EQC Members.)

February 5, 1971

The EQC held a hearing on proposed Administrative Rules for the Bond Fund. Rules were adopted. The First Bond sale was scheduled for April 1971.

The Review by the 1971 Legislative Ways and Means Committee had not yet been scheduled due to slowness in Legislative organization.

February 22, 1971

The Capital Construction Subcommittee of the Ways and Means Committee held a hearing on HJR 18. This resolution authorized the Commission to proceed with the sale of up to \$ 50 million in Bonds and proceed with the authorized distribution of the funds if further legislative directives were not enacted prior to April 1, 1971. The resolution passed the subcommittee that day, and was ultimately filed with the Secretary of State on March 15, 1971.

April 1, 1971

Letter from Bartle Wells Associates to the Department includes the following:

"House Joint Resolution 14 provides that the state may purchase bonds, notes or other obligations of any municipal corporation. Our understanding of that section is that such bonds or notes must be similar to those regularly marketed in normal municipal bond channels. Revenue bonds secured by revenues from the sewerage facilities and other utility facilities are widely traded in the municipal bond market."

1971 Oregon Legislature

Passed HB 1945 (Chapter 50) and HB 1185 (Chapter 662, Oregon Laws 1971). The latter bill in part further amended Chapter 50, which passed earlier in the session.

These bills increased the limit on bonds outstanding from \$ 50 million to \$ 100 million; modified language dealing with uses of the bond funds; and changed language regarding solid waste facilities and the self supporting nature of projects.

July 23, 1971 EQC Policy Statement

"The Environmental Quality Commission at its regular meeting on July 23, 1971 adopted the following policy regarding loans made under the provisions of Article XI-H of the Oregon Constitution to local government entities:

Except for purchase of bonds, the amount of loan shall be limited to \$50,000 with a maximum term of 20 years and a pledge of specific revenue for repayment.

"This means that for loans greater than \$ 50,000 the local entity must issue either general obligation or revenue bonds. It is recognized that this policy may cause some additional expense and inconvenience to those entities which had not planned to issue bonds but it is considered to be in

the best interests of the program."

ARTICLE XI-H

POLLUTION CONTROL

- | | |
|--|---|
| <p>Sec. 1. State empowered to lend credit for financing pollution control facilities</p> <p>2. Only facilities seventy percent self-supporting and self-liquidating authorized</p> <p>3. Authority of public bodies to receive funds</p> | <p>4. Source of revenue</p> <p>5. Bonds</p> <p>6. Legislation to effectuate Article</p> |
|--|---|

Section 1. State empowered to lend credit for financing pollution control facilities. In the manner provided by law and notwithstanding the limitations contained in sections 7 and 8, Article XI, of this Constitution, the credit of the State of Oregon may be loaned and indebtedness incurred in an amount not to exceed, at any one time, one percent of the true cash value of all taxable property in the state:

(1) To provide funds to be advanced, by contract, grant, loan or otherwise, to any municipal corporation, city, county or agency of the State of Oregon, or combinations thereof, for the purpose of planning, acquisition, construction, alteration or improvement of facilities for the collection, treatment, dilution and disposal of all forms of waste in or upon the air, water and lands of this state; and

(2) To provide funds for the acquisition, by purchase, loan or otherwise, of bonds, notes or other obligations of any municipal corporation, city, county or agency of the State of Oregon, or combinations thereof, issued or made for the purposes of subsection (1) of this section.

[Created through H.J.R. No. 14, 1969, and adopted by people May 26, 1970]

Section 2. Only facilities seventy percent self-supporting and self-liquidating authorized. The facilities for which funds are advanced and for which bonds, notes or other obligations are issued or made and acquired pursuant to this Article shall be only such facilities as conservatively appear to the agency designated by law to make the determination to be not less than 70 percent self-supporting and self-liquidating from revenues, gifts, grants from the Federal Government, user charges, assessments and other fees.

[Created through H.J.R. No. 14, 1969, and adopted by people May 26, 1970]

Section 3. Authority of public bodies to receive funds. Notwithstanding the

limitations contained in section 10, Article XI of this Constitution, municipal corporations, cities, counties, and agencies of the State of Oregon, or combinations thereof, may receive funds referred to in section 1 of this Article, by contract, grant, loan or otherwise and may also receive such funds through disposition to the state, by sale, loan or otherwise, of bonds, notes or other obligations issued or made for the purposes set forth in section 1 of this Article.

[Created through H.J.R. No. 14, 1969, and adopted by people May 26, 1970]

Section 4. Sources of revenue. Ad valorem taxes shall be levied annually upon all taxable property within the State of Oregon in sufficient amount to provide, together with the revenues, gifts, grants from the Federal Government, user charges, assessments and other fees referred to in section 2 of this Article for the payment of indebtedness incurred by the state and the interest thereon. The Legislative Assembly may provide other revenues to supplement or replace such tax levies.

[Created through H.J.R. No. 14, 1969, and adopted by people May 26, 1970]

Section 5. Bonds. Bonds issued pursuant to section 1 of this Article shall be the direct obligations of the state and shall be in such form, run for such periods of time, and bear such rates of interest, as shall be provided by law. Such bonds may be refunded with bonds of like obligation.

[Created through H.J.R. No. 14, 1969, and adopted by people May 26, 1970]

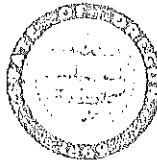
Section 6. Legislation to effectuate Article. The Legislative Assembly shall enact legislation to carry out the provisions of this Article. This Article shall supersede all conflicting constitutional provisions and shall supersede any conflicting provision of a county or city charter or act of incorporation.

[Created through H.J.R. No. 14, 1969, and adopted by people May 26, 1970]

Co-Chairmen:
 Sen. Jack Ripper
 Rep. Tom Throop

Staff:
 Allan Green,
 Director
 Legislative Research

Margie Sherman,
 Committee Assistant



Bill Young
Downs
O'Donnell
Biles
Sawyer

SIXTY-FIRST LEGISLATIVE ASSEMBLY

JOINT INTERIM TASK FORCE ON
 MANAGING AND FINANCING GROWTH

S 420 State Capitol
 Salem, Oregon 97310
 (503) 378-8871

Members:
 Sen. Charles Hanlon
 Sen. Ken Jernstedt
 Sen. Frank Roberts
 Rep. Bill Bradbury
 Rep. Vera Katz
 Rep. Vern Meyer
 Rep. Norm Smith

October 25, 1982

Mr. Joe Richards, Chairman
 Environmental Quality Commission
 PO Box 1760
 Portland, OR 97207

Dear Mr. Richards:

The League of Oregon Cities recently proposed that the Department of Environment Quality use proceeds from the Pollution Control Fund "to support more creative local financing than just purchase of general obligation bonds, as in the past." The League offered the example of DEQ offering straight loans, with appropriate safeguards.

The Task Force on Managing and Financing Growth is interested in methods by which the state can encourage local governments to develop infrastructure, and recommends that the Environmental Quality Commission consider this proposal of the League.

Very truly yours,

Jack Ripper
Tom Throop
 Rep Tom Throop
 Sen. Jack Ripper
 Co-Chairmen

AG:gi
 cc:Bill Young

State of Oregon
 DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
 OCT 28 1982
 OFFICE OF THE DIRECTOR



STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY
INTEROFFICE MEMO

TO: Downs/O'Donnell/Biles/Sawyer

DATE: November 1, 1982

FROM: Jan Shaw

SUBJECT: Pollution Control Bond Fund

WHY would like to meet with you to discuss the above matter as mentioned in the attached letter.

Would Wednesday, November 10, at 10:00 a.m. be convenient? Please let me know if it is not. Thanks.

JAS
Attachment (over)

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
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WATER QUALITY CONTROL

Item 0

Transcript
Environmental Quality Commission
Discussion of Potential Alternative Uses for
Pollution Control Bond Fund
December 3, 1982

Chairman Richards: We'll go to
The work session on Agenda Item 0. The Potential Alternative Uses for
Pollution Control Bond Fund to Encourage Construction of Sewage
Facilities - - Mr. Young

Bill Young:

Yes, Mr. Chairman, I don't know whether you want to take a break and redo the chairs to get into a work session setting better than this, or deal with the item now. You are aware of the background of this. We had a letter that was dated October 25 from the joint chairpersons of the Interim Task Force on Managing and Financing Growth - - Senator Jack Ripper, Representative Tom Throop. They were responding to what I thought was an excellent document that the League of Oregon Cities had put together and forwarded to them on alternatives for financing. The letter that we got requested specifically that the Department, with appropriate safe guards, should use the proceeds of the Pollution Control Bond Fund to support more creative local financing than just the purchase of General Obligation Bonds as in the past. We have put together as much of a staff report as we were able to manage in that period of time. We got some interest that has been expressed on this item. The Mayor's office from Portland was over and picked up a copy last evening and I don't know whether they are represented or not. We distributed copies of the staff report to League of Cities and the Association of Counties and we caught them at kind of a bad time because they are in the midst of some national meetings and so on, and they may not have had an opportunity to respond as of this date. Fergus O'Donnell is here from our Business Office, Mike Downs (is here). Hal Sawyer was involved and was in fact principle author of the document you have in front of you. Howard Rankin was here at our request, if you have any questions about the bonding market generally.

The only other piece of information, I think, Mr. Chairman that we have other than the staff report that we forwarded to you and the copy of the City's document that went to the Legislative Committee; we do have a collection of information that we gathered as a result of having a couple of people review some of the information in the archivist's files, and we can make that available to you. I don't know if we have copies run yet, but they are on the way up. We apologize for not having had an opportunity to do more than simply get that stuff and kind of get it in chronological order but it's a packet that you may want to take a look at or we may want to reference things when it gets here in your discussion.

Chairman Richards

I think Bill, of course the reason staff and the Commission members showed a lot of interest in that letter, was the fact that we wanted to know if we had some "crack" in the philosophy that we had generally followed--that we

needed to totally protect those funds and we needed to be guaranteed or insured or whatever words you want to use to make sure that there was essentially no risk. And so I think one of the things that isn't specifically mentioned in this report but that you have mentioned and from Linda's research, a little look at legislative history, let's just discuss for a minute your understanding of whether there is anything in those House or Senate Committee minutes that would suggest that we would be taking a risk.

Bill Young

Alright, Harold can correct me on this because he is our resident historian on this matter. The reason I think that the League focused its attention on this business was perhaps being more creative, more free with the use of bond fund money, is that as the staff report indicates, the constitutional amendment is certainly worded very broadly. Grant, loan-- commit in almost any fashion, monies out of the bond fund to a using agency. The reason for the look into the Archives was to see whether or not there was a clear indication of the level of conservatism that the legislature was contemplating, and in fact, as I think is indicated in the chronology of events that is attached to the staff report, even after rules were adopted there was some sense on the part of the Emergency Board that they wanted to wait--they wanted to see all those rules together before they made a judgment about how the money was to be used and so on. There was a further discussion and we will get a copy of that when those copies come up, that to me at least, seemed important. There apparently was an issue that came before I think a session of the Emergency Board as to whether or not we ought to be buying revenue bonds, and I think it was a particular issue that the City of Portland had. There was a motion made and an explanation made, I think by then Senator Newbry, that said we want to make it clear to the Department that we are expecting them to use these funds for the purchase of any kind of an instrument which is authorized by local charters or ordinances and so on. While that statement may have been made in an effort to broaden its use at that time, may in fact, function as a limiting feature--that is, most local communities, I think, if they are going to incur long-term debt, do it by some kind of an instrument like the general obligation bond--like a revenue bond, and while the language of the Constitutional amendment suggests that we might go beyond that, it seems to me the language of that legislative discussion indicated that the purpose of the bond fund was not to circumvent the local interest in having a vote, for instance on a general obligation bond, but it was to try and be ready to respond to any use that the local government would authorize.

The Department, I think, supports generally the idea of being able to purchase revenue bonds and the early report that was done for the Department and Commission by Pacific Economica indicated that one thing that might be done to free up the use of that would be to clarify statutorily the authority of local governments to issue revenue bonds without a vote--to the extent that it continues to be a cloud on their interest and ability to do that.

Beyond that, we get into the discussion that Fergus was really responsible for and that is just a question you've raised Joe--how much risk should the Commission or should the Department be taking; to what extent should we be putting to General Fund in the State of Oregon at risk because if monies are lost out of that, presumably the state is going to pay off its bills and we are going to do it out of gathering the money from some other place and that is the real issue I think, finally that the Commission needs to talk about and we ultimately need to get back to the task force and talk about is just what their sense now is--whether or not the interpretation we are putting on it is appropriate--whether they now envision perhaps even something as casual as just a loan, the city comes in and says we want to take out a loan from you and we say OK and we loan the money to them and if we were to do that, what kind of instrument do you do that with; what kind of securities do you expect, all of the sorts of things that are part of the trappings of a normal bond issue. How many of those should we be expecting.

Chairman Richards

Well Bill, this is just my personal opinion, but I think what is before us in response to Senator Ripper's letter is in effect, that we have tried to discern legislative intent. If that committee feels that we have been inaccurate about that, I think the best thing to do would be to give us additional legislative intent in the form of--best of all, a bill--an amendment of the legislative wording that is as broad for example as the constitutional amendment if that is what they want to do. But, I would be very reluctant, no matter what kind of positions were expressed when you meet with them next week, any urging of that committee, I would still be reluctant I think unless other members of the Commission feel differently, I think the tracks here are so strong that we require repayment and not put the funds of the State of Oregon at risk. That is what I am kind of hoping for today is that we get some consensus among Commission members that we wouldn't necessarily respond to that committee's urging--just the committee's urging that we reevaluate our position and loosen up.

Bill Young

The committee members, I presume, all either have or will have copies of the staff report that went forward to you, we sent copies to the committee staff; there are sufficient copies for them to distribute to the membership, so I would assume that Friday next that we are having a meeting with them at their request, they will have had an opportunity to review the information you have in front of you and we are certainly prepared to convey whatever message back to them that you would direct us to take down.

Chairman Richards

Howard, do you have any guidance for the Commission, I mean is there another way to look at the problem to be even more sensitive than I think maybe I am being, to Mr. Ripper's concerns?

Commissioner Petersen

In that regard, Mr. Chairman, I would ask Howard maybe some specific questions. Maybe a quick review of the area of municipal finance we are talking about risk and risk management, what kind of debt instruments are we talking about and from your experience, where does that risk--on the spectrum of risk, where do these debt instruments fall. And secondly, maybe some comments by you on a program that I have had some experience with, that is the Department of Energy, Small Energy Loan Program. The SELP program which represents a direct loan by the Department of Energy to people who are contemplating constructing an energy project. It seems to me there are a lot of analogies there. Maybe there aren't, you are the expert but maybe that would be something that we could look at as a program already in existence in this state where, you know, the state has done the best it can from risk management point of view but still there is a lot of flexibility short of the bond route for financing.

Howard Rankin

Mr. Chairman and Jim, responding to your questions, let me very briefly summarize the usual financing procedures that might be available in the State of Oregon. The most secure, with the least risk, I am sure is well known to all of you, and that is the purchase of general obligation bonds. These are bonds or obligations of a political subdivision that have been authorized by a vote of the people. They are considered in the market place to be very secure, therefore the interest rate usually payable on those instruments is the lowest. They are secured as we all know, by the unlimited taxing power of the political subdivision who is the issuer, which means, without further legislative authority, the issuer is obligated by law to levy a tax upon all taxable property within the area of the issue, without limit as to rate or amount, sufficient to provide the funds to pay the debt service. So that once the election is completed, this is an automatic obligation and even if the issuer through its budget procedures should fail to levy an adequate tax, the law requires the county assessor to levy the tax, and the county treasurer to collect the tax. So it's just about as secure as you can become as far as debt instruments are concerned, municipally speaking.

The second general form is the revenue bond, and of course we know that a revenue bond is payable generally from either the gross receipts of the source of the revenue such as a sewer user tax or water charge; and it may be secured by the gross receipts from that facility or system. It may be secured by the net receipts which obviously is the gross receipts less the cost of the operation and maintenance. Gross receipts is a preferred form of revenue bond because of course the top dollar, the first dollar that comes in, is pledged to the obligation. The statutes of Oregon are varied as to the authority of a political subdivision to issue revenue bonds. Some are required to have elections and an affirmative vote of the people. Others, very few of them, are permitted to issue revenue bonds without a vote. So moving into the area of a revenue bond without a vote is nothing new, it is not a great new thrust into an untested field--it's presently available in certain kinds of issues today.

There are two problems in the market place with the revenue bonds. First the uncertainty of forecasting revenues into the future; and so as we consider the acquisition of revenue bonds, we have to first, of course, carefully examine the historical ability of the issuer to produce gross or net revenues. But in addition to that, we require an independent objective forecasting of revenues into the future, for the past simply tells us something but not enough, and we need to have a more clear understanding of the forecasting of future revenues which will then be obligated to pay the debt. This means studies by consultants. Usually the in-house staff reports of the issuer are considered in the market place to be inadequate, so we must have independent studies of feasibility experts who will forecast revenues, and in these matters of course, they consider such things obviously as the increasing costs of operation of the facility which, if it is a net pledge, then thereby reduces the net available for debt service. In a gross pledge they are interested in the users--are the users expanding, can we reasonably anticipate more users, therefore more gross revenues or conversely, and at more risk, are the users depleting--are they decreasing, can we forecast population trends, industrial user trends. These things come into the forecasting of future revenues. So we have the need for feasibility forecasting in revenue bonds. And the market place would generally require some degree of that kind of forecasting.

Secondly, the new feature in revenue bonds is the so-called rate covenant. Now this is an obligation that tracks revenue bond issuing whereby the political subdivision says we covenant and agree with the bond holders that we will at all times maintain rates sufficient to provide gross or net, as the case may be, to service the debt. This is the so-called special fund doctrine that has been generally recognized in Oregon for 40 or 45 years.

Some of you, perhaps Joe and Jim, are familiar with the litigation involving the Washington Public Power Supply System presently occurring in Lane County. The recent decisions of the Circuit Bench in Lane County have completely destroyed the special fund doctrine as we have known it for 45 years and in effect has held that the rate covenant which is the very basis for the repayment of the projects 4 and 5 for the Washington Public Power Supply System--the very basis for the repayment of that \$2 and 1/4 billion is the rate covenant on the part of the participants to maintain rates adequate to provide funds sufficient to service the debt. So, certainly that key issue, the unconditional obligation to maintain rates, is in great suspect in Oregon today, and in my judgment, in the public marketing of revenue bonds containing rate covenants would be probably almost disastrous until such time as that decision is affirmed or reversed. So, as we look towards the immediate future, we are faced with the destruction of the rate covenant and the special fund doctrine from a legal standpoint.

Moving lastly Jim, perhaps to other methods in the small energy procedures, certainly Article XI-H creating this Pollution Control Fund contemplates the use of notes; and a note, whether it be a note or bond, there is very

little legal distinction. Both are obligations to repay in accordance with the terms of the instrument. I think it is possible to acquire notes from municipalities. My real question today is the authority of the municipality to incur a note obligation. It is perhaps clear that this Commission has the authority to lend funds secured by a note but the question raises from the other side, the authority of a municipality to borrow under a note obligation; for traditionally as we all know, long-term indebtedness is created only by the issuance of bonds. Notes generally from a technical definition are an obligation of less than three years. Anything beyond that for the market place is known as a bond. Otherwise, not a great deal of difference in the obligation of the instrument, Jim.

Commissioner Petersen

Excuse me, could you comment on the security aspects though of the note in other words, under the SELP program, the State of Oregon, Department of Energy actually takes a security interest in the small energy project. Is it feasible for us to do the same thing and if so--technically legally feasible--is that something that would be attractive in the market place as far as risk management is concerned. Do you understand?

Howard Rankin

The security of course, in going back over my prior comments very quickly--general obligation; absolutely secured--the unlimited tax. Revenue bonds; secured by a pledge of the revenues and the rate covenant. Traditionally in revenue bond we do not take a security in the facility. The note issuance provisions of the small energy department, because the project being financed is an integral project whereby you have what we might call a foreclosable interest --an absolute foreclosable interest--you can go in and foreclose your interest in this small generation project. You know where it is located. It has geographical intactness and you can say OK I am going to take that over and operate on behalf of the bond holder or the note holder, so that is a foreclosable project. As you move into loans to municipal systems in which the system may include not only a sewage treatment facility or water intake plant, but includes a very important part and that is the collection system or the distribution system--the line that is under the ground. Generally speaking the market place has real reservation about the collateral of pipes in the ground in the ability to foreclose on a municipality. So I think Mr. Petersen, as you may be considering taking a collateral interest in a sewer system and plant that from the market standpoint it has little value.

Chairman Richards

Howard, when you mentioned the security of a note, the note is really not the security in the standard sense, you mean just taking the note. Are you saying that.

Howard Rankin

I would agree with you Mr. Chairman, it is secure only in accordance with its terms. It's simply a written obligation to pay from whatever sources are set forth in the note as the sources of repayment.

Chairman Richards

Going back to the general question. Have you yourself, either from looking at the opinion or from any other source formed any kind of opinion about whether we would have the latitude within existing legislation to be more creative with the kind of instruments we would accept in exchange for Pollution Control Bond Funds.

Howard Rankin

I think, Mr. Chairman, that if you are interested in proceeding in the area of revenue bonds, the number two, perhaps, source of instrument available to you, you would need legislation. I think to make these viable instruments in the market place, certainly you would need the express authority on the part of the municipality without a vote of its people to issue a gross pledge or a net pledge. You would need the authority to require an adequate forecasting of future revenue; and lastly, and most importantly, Mr. Chairman, the authority to impose a rate covenant which obviously is at risk today. So I think you do need those kinds of things for a revenue bond. If you moved into the note area, there is no question that you need a rather substantial legislative revision first in the local budget provisions so that you may incur indebtedness outside the local budget for a longer term than may presently exist. You would need to have some, perhaps Mr. Petersen, some secureable interest, foreclosable interest, authorization on the part of the Commission to take that collateral and have the right to foreclose it but also on the part of the municipality to pledge it. So, if you move into the area of revenue or note financing, I think you need legislation.

Chairman Richards

Speaking of security, your remarks gave me a lot of security that our position is fairly sound, up to the present, in the restrictions that we've placed and I still have the feeling that if the Legislature would like to somehow loosen that and make these funds more available on different kinds of instruments and less secure arrangements, I am perfectly willing to oblige as a Commission member, but I do not think for one minute that we have overlooked creative financing opportunities that have come before us.

Howard Rankin

Mr. Chairman, since you and Mr. Petersen have been historical, may I take just a second of the Commission's time to go back in history that I can recall in this particular area. I was around and participated in the

drafting of the constitutional amendment in 1968-69 and certainly took a very active part legislatively in explaining to the various committees this process and working with the then Director of the staff who were trying to resolve, and attorney by the name of Bob Silverthorne. Do you recall? Silver (Arnold). Mr. Silver and I spent considerable time discussing the mechanics of this and certainly we were instructed, and I had the clear feeling that our task was to adopt a conservative approach. There was some criticism from the then Director, rather firm criticism that we were being too conservative, that staying with general obligation bonds was not the best way to approach the problem, but finally that is what was accomplished and we did this intentionally. This was a conservative approach to the method of securing the risk of the State in the use of those funds. I clearly am aware of those proceedings.

Chairman Richards

Thank you very much. Any other questions of Mr. Rankin?

Commissioner Petersen

Could you comment on the use of bond insurance, how prevalent is that and what cost does that add to the project.

Howard Rankin

This is a fairly new technique that has arisen in the municipal bond market where certain very large firms--of five or six of the major life insurance and casualty insurance firms--have formed companies known as the AmBac Municipal Debt Insurance Corporation and things of that nature, where, for a premium, they will insure the payment of the debt service. Of course, the one first major advantage to that is because of the very large credit of the company, the issue immediately attains a AAA rating so that reduces the interest cost. There are two of these firms presently operating in the United States. I don't have their figures Mr. Petersen, but I would be surprised if it exceeded 5% of the issue--of the total number of issues that come out as insured issues. The premium, of course is the drawback and the premium is up front. It comes out as a cost of the issue out of the bond proceeds, and it is quite substantial.

Commissioner Petersen

Does it exceed the difference in bond rating that you might gain a point or two, basis point going from A to AAA for example. Does it exceed that benefit.

Howard Rankin

No, I think the converse. Those who use this kind of financing must conclude in forecast that the up-front cost of the premiums are less than the savings contemplated from the AAA rating to make it a feasible transaction.

Chairman Richards

Further questions? Thank you very much. Are there questions from staff?

Bill Young

Joe, we might distribute to members of the Commission this packet of information that we gathered and if you would like, we can surely go through and try and do some further analysis of this information.

Chairman Richards

No, I don't think so, what I was worried about was that lurking in those House or Committee minutes, particularly, even more than Emergency (Board) - I am not sure what Emergency Board actions have to do with legislative intent anyway. I don't think it is expressive of the body. It is not used by the courts ordinarily, but had there been something buried in those minutes that said regardless of the language we want the Department to use every effort to use creative financing and don't worry too much about the kind of security or the risk to the fund, something like that, well we would have had to stand up and take notice.

Bill Young

We certainly have not seen that. I might just draw your attention and I might say that I don't know that my interpretation as I read this stuff is necessarily shared entirely by everybody on the staff and we really haven't had time to really staff the thing out. But the particular thing that was most persuasive thing to me, I suppose, Joe, is about 2/3 of the way back through this packet. This, by the way, this doesn't read from page one on though, it's a collection of different pieces of information from different times. The one I'm looking at is page 73, Ways & Means, March 26, 1971. Six or eight pages from the back of your packet, I would guess. In the discussion that's listed there dealing with House Bill 1945 which was an amendment made in the '71 session as I understand it, to the law that existed, there is some discussion about mid-point through that first paragraph where they're referencing the presentation that was made by Senator Newbry. It says a new Section C reads: "to acquire by purchase or otherwise, other obligations of any city that are authorized by its charter". That is language that was added to the statute and it is still there as I understand it. I would read that to be fairly clear legislative intent that we were to be guided in the use of the fund by what the Charter of the City permitted as opposed to what I think is the broader language that can be read out of the constitution. Now, the following language in there indicates that, by George, the reason we did this is that we want to make it clear to the Department that they should be buying whatever kind of special authorities may exist and they recite Portland and North Bend and the charter ability to enter into long-term contracts. But, I think with that language in the statute, I would read that to say that if a local jurisdiction, for instance, in authorizing

long-term debt, required a vote for instance, to issue a revenue bond, that we might very well participate in that but we couldn't circumvent that requirement. So, my interpretation of the collection of information that is here is that there was a contemplation that the operation be essentially run as debt-free or risk-free as possible and that where there was to be money granted out, for instance, the Legislature reserved that for themselves. They wanted to be the ones that dealt with that potential impact on state general funds.

Chairman Richards

Further comments or questions of staff? Thanks very much, a lot of effort went into that. I think we are well prepared to discuss that with the Committee on the 10th of December. Is there anything further that Commission members think that we should do or do you think that there is enough consensus that we're where we should be.

Chairman Petersen

Well, there was a comment in the staff report about us proposing or sponsoring legislation and I wonder whether we need to discuss that at all?

Bill Young

I think that is, Commissioner Petersen, a fair question as to what our role should be. If, for instance, we believe that there would be some greater opportunities for the use of revenue bonds with some modification in state statute, perhaps clarifying that where a city's charter did not prohibit it, that revenue bonds could be issued without a vote of the people, if that were an adequate approach, our role could be anything from not resisting that kind of legislation all the way up to proposing it, forwarding it, using whatever resources we've got in our legislative effort to urge that piece of legislation as opposed to something else we've got. I think my recommendation, presently, would be to suggest to you that we go down and indicate that the Commission is certainly not resistant to any sense of legislative direction that's provided and you would be standing ready to respond to that with as active a use of the bond fund as was authorized by that legislation. I am reluctant to exhaust our legislative efforts which are relatively meager, I think, on that issue. I am not sure that there aren't others that can better carry that discussion of how you modify the municipal debt law and so on. It is pretty much out of our bailiwick.

Commissioner Petersen

Well, I would agree with that but I am just wondering and maybe Mr. Sawyer could comment on would it be helpful in encouraging these municipalities to make these improvements. I mean, it is certainly one of our legitimate and important functions. Now, how far do we need to go in terms of

indicating our encouragement and support. I mean, would this merely be indicating, as Mr. Young points out that we won't resist. Is that enough encouragement or do we need to sponsor.

Chairman Richards

Jim, isn't the problem, it really gets down to, are we ready to promote risking general fund money?

Commissioner Petersen

I'm not so sure, I think that is an over-simplification.

Chairman Richards

It is an over-simplification. I made it on purpose. I'm over-simplified in my thinking on everything. But if there is something within our---, if we're financial experts in this, I'm not so sure that the financial expertise and defining various ways to deal with this and get more help out to the cities really comes from the environmental sector or the financial sector, the bond counsel kind of thinking. I just don't know what we could lend to it. If this had a peculiarly environmental problem in working out the proposal, then I would say we should take a philosophical stand as to whether we would do that. Now, that is really over-simplified, but I'm hesitant. . . .

Commissioner Bishop

I like Joe's over-simplification

Excuse me....

Commissioner Petersen

I'm certainly not in favor of risking the general funds of the State of Oregon but I just wanted to make sure we were as responsive as we should be in carrying out our function of encouraging this type of development and I think we should do that.

Bill Young

One of the things, Mr. Chairman, we've not had time to do yet is to sit down with the League of Oregon Cities and Association of Counties and talk through with them any legislative concepts that they may be persuading that fit particularly well with the funds that are available to them. We made a contact there, I think just last week, were involved in their National League of Cities meeting and so those folks who we might have been able to meet with were otherwise occupied. We'd certainly be proposing some time between now and the time the Legislature convenes to sit down with them like we will with a lot of other groups to try and understand where the common interests are. They may very well be forwarding something that we could support.

As I say, I really think that from a personal perception, the opportunities that may be there for using revenue bonds, not only to free up that ability to fund that but will actually focus municipal attention on the idea that if you are running something like a sewer system, that it makes sense to start talking about what kind of fees do you have to charge to make that a self-supporting kind of enterprise, that there is lots of value in that and I think frankly that one can put that sort of thing together without incurring great risk. I think there are ways that you can overcome that. Some of the rate covenant approaches or the requirements for a years annual debt service as the Commission required from the City of Portland. There are ways one can address that. My greater concern might be that as we get into those kinds of issues, I may have some concerns about whether or not we have the staff to address that and whether our budget devotes enough attention to that. We have historically been coupon clippers. That's essentially been our job, we bought general obligation bonds and we did not have to worry about questions of security. We didn't have to devote ourselves to looking at financial statements in particular because we had the very substantial underlying security that Howard referenced. If we were to get into more and more of a revenue (bond) purchasing kind of arrangement, I'm not sure that we wouldn't be talking to the Commission and to the Legislature about whatever kind of staff capabilities that we would need to do that. And I don't know that they would be great, but I suspect that they would go beyond what we have now.

Commissioner Petersen

All right.

Chairman Richards

Now don't feel beat down just because . . .

Commissioner Petersen

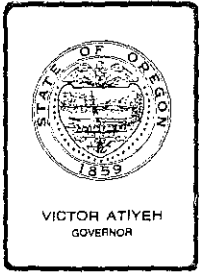
I can take a hint.

Chairman Richards

That was a hint. Well, as Chairman of the Coupon Clippers, if there is nothing further on the matter, we will go to Agenda Item P.

Bill Young

We will Joe, report back to you, by memo or certainly at your next meeting as to any results we have or any further direction or points of inquiry that we get from the legislative committee.

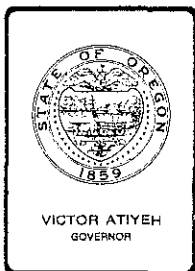


Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207

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

Agenda Item No. P, December 3, 1982, EQC Meeting



Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207

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

November 17, 1982

Joe B. Richards, Chairman
Environmental Quality Commission
777 High Street
P. O. Box 10747
Eugene, OR 97401

Wallace B. Brill
Environmental Quality Commission
75 Lozier Lane
Medford, OR 97501

Fred J. Burgess, Vice Chairman
Environmental Quality Commission
Dean's Office, Engineering
Oregon State University
Corvallis, OR 97331

James E. Petersen
Environmental Quality Commission
835 N. W. Bond Street
Bend, OR 97701

Mary V. Bishop
Environmental Quality Commission
01520 S. W. Mary Failing Drive
Portland, OR 97219

Re: Petition to Amend OAR 340-14-025(5)

Dear Commissioners:

Enclosed is a letter from James L. Johnson of Friends of the Earth commenting on the proposed final order recently mailed to you for your review in anticipation of action at the December 3, 1982 Commission meeting.

For your convenience I have enclosed a copy of the proposed form of order and its cover letter.

Very truly yours,

Linda K. Zucker
Hearings Officer

RH:k

HK1457

cc: William H. Young, Director, DEQ
Robert L. Haskins, Assistant Attorney General

NOV 16 1982



FRIENDS OF THE EARTH / Oregon Branch

P.O. Box 1251 - Portland, OR 97207 - (503) 243-2806

November 16, 1982

Environmental Quality Commission
DEPARTMENT OF ENVIRONMENTAL QUALITY
522 Southwest 5th Ave.
Portland, Oregon

HAND DELIVERED

Dear Commissioners:

Friends of the Earth (FOE/O) submits the following regarding the proposed FINAL ORDER in the matter of our petition to amend OAR 340-14-025(5).

1. The first finding of the proposed final order is in error in that the petitioners do not propose "to grant the right to every person including individuals without even any remote interest in the permit, to require a contested case hearing."

FOE/O never intended such a proposal. Our proposed amendment asks that any person be given equal opportunity to "request a hearing before the Environmental Quality Commission". A specious or meritless request from a party would not be considered if the Commission determined that the person objecting to some part of the permit was not an affected party.

We believe that the definition of an affected party has been determined in other state agency procedures.

2. Oregon law provides a permit applicant the right to a contested case hearing. DEQ administrative rules pertaining to the applicant's ability to request a hearing before the EQC to protest conditions and limitations of a permit serve only one purpose—to limit appeals to the EQC to the permit applicant.


FOE/O maintains that this permit rule is prejudicial to the interests of the public, and that our proposed rule is reasonable.

In that the proposed rule amendment would not cause undue delay in any application by parties with a remote interest as claimed by the final order, and in that the findings of the final order misrepresent our proposal,

we request that the Commission give more adequate consideration of our proposal and begin formal rulemaking proceedings.

In the event that the Commission proceeds to formally deny our petition, FOE/O would hope to participate in input into further study and analysis of the adequacy of the present rule.

Respectfully submitted,


James L. Johnson, Jr.
STATE CHAIRPERSON



Department of Environmental Quality

522 SOUTHWEST 5TH AVE. PORTLAND, OREGON

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

November 9, 1982

Joe B. Richards, Chairman
Environmental Quality Commission
777 High Street
P. O. Box 10747
Eugene, OR 97401

Wallace B. Brill
Environmental Quality Commission
75 Lozier Lane
Medford, OR 97501

Fred J. Burgess, Vice Chairman
Environmental Quality Commission
Dean's Office, Engineering
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Bend, OR 97701

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Environmental Quality Commission
01520 S. W. Mary Failing Drive
Portland, OR 97219

Re: Petition of Friends of the
Earth/Oregon Branch to Amend
OAR 340-14-025(5); (Contested
Case Hearing Regarding Permit
Conditions.)

Dear Commissioners:

At your October 15, 1982 meeting you orally denied the subject petition.

Your rule, OAR 340-11-047(4) requires that you follow up your oral ruling with a written "order setting forth...[your] reasons in detail for denying the petition."

According to counsel, it is not necessary for you to have actually made any particular findings at your previous meeting; your subsequent written order can contain any findings which you now are of the opinion are appropriate in the matter. The findings need not be based on any particular "evidence" offered at the hearing, as would be required in a contested case. This is not a contested case. The findings may be based on anything which you now perceive to be relevant to dispose of the petition.

With that in mind, and in light of the tenor of the discussion you held at the hearing, I have prepared a proposed final order to deny the petition and order the staff to further study and analyze the matter.

Environmental Quality Commission
November 9, 1982
Page 2

Please review the enclosed proposed order and if I have not captured what you now perceive as the will of the Commission, please jot down your proposed revisions and return them to me. I will revise it as necessary and intend to have an appropriate final order prepared for your signature at your December 3, 1982 meeting.

To help us define the scope of the requested study and analysis of the permit review process, Linda Zucker will be sending you each a list of study questions formulated by Chairman Richards and will ask that you supplement the list by any questions you believe should be addressed.

Please call me or Robb Haskins (229-5725) if you have any questions.

Sincerely,



William H. Young
Director

RH:k

HK1433

cc: Robert L. Haskins, w/enc.
James Johnson, Friends of the Earth, Oregon Branch, w/enc.
Tom Donaca, Associated Oregon Industries, w/enc.
Llewellyn Mathews, Northwest Pulp & Paper Association, w/enc.
John Charles, Oregon Environmental Council, w/enc.
Linda K. Zucker, EQC, w/enc.

1 BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
2 OF THE STATE OF OREGON

3 In the matter of FRIENDS OF THE)
4 EARTH/OREGON BRANCH)
5 Petition to Amend OAR 340-14-025(5)) FINAL ORDER
6 (Contested Case Hearings)
7 Regarding Permit Conditions))

8 This matter came before the Commission on October 15,
9 1982 pursuant to a petition by the Oregon Branch of Friends
10 of the Earth (petitioner) seeking an amendment of OAR 340-
11 14-025(5) regarding contested case hearings in permit matters.

12 Petitioner waived the statutory 30 day limit and submitted
13 written and oral argument in favor of its petition. Oregon
14 Environmental Council presented written and oral argument in
15 favor of amending the rule in another respect. The Department,
16 Associated Oregon Industries and Northwest Pulp and Paper
17 Association, Seattle, Washington, submitted written and oral
18 arguments in opposition to the petition.

19 Having read, heard and considered the arguments for and
20 against the petition, the Commission orally denied the petition
21 and now finds:

22 1. Petitioner proposes to grant the right to every person
23 including individuals without even any remote interest in the
24 permit, to require a contested case hearing (i.e. including the
25 right to written notice, sworn testimony, cross-examination,
26 and written findings of fact, conclusions of law and final order)
27 regarding the conditions or limitations of any permit with which
28 the person is dissatisfied. Such hearing procedures would

1 pose a serious potential of substantially extending and delay-
2 ing the final issuance of permits even though applicants might
3 find them acceptable and might be eager to promptly operate
4 under them. Such delays would not appear to be in the public
5 interest at this time. Consequently the Commission should not
6 commence a rulemaking proceeding proposing to amend the rule
7 as petitioned by petitioner.

8 2. The extent, if any, to which the Commission and
9 sufficiently interested members of the public should be able
10 to participate in the formation of the conditions and limi-
11 tations of permits, and in the review of conditions and limi-
12 tations of issued permits and the proceedings therefor needs
13 further study and analysis. Until such study and analysis has
14 been completed it would be premature to commence a rulemaking
15 proceeding proposing to adopt any particular rule. Consequently,
16 the staff should conduct the study and analysis and report to
17 the Commission.

18 Therefore it is hereby

19 ORDERED that:

20 1. The petition is denied; and

21 2. The staff shall study and analyze the issue of the
22 extent, if any, to which the Commission and sufficiently
23 interested members of the public should be able to participate
24 in the formation of permit conditions and limitations, the

25 ///

26 ///

1 review thereof in issued permits, and the procedures therefor;
2 and report its findings to the Commission.

3 Dated this 3rd day of December, 1982.

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Joe B. Richards, Chairman
Environmental Quality Commission

Mary V. Bishop
Environmental Quality Commission

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Fred J. Burgess, Vice Chairman
Environmental Quality Commission

Wallace B. Brill
Environmental Quality Commission

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James E. Petersen
Environmental Quality Commission

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NOTICE: Review of this order is pursuant to ORS 183.484.

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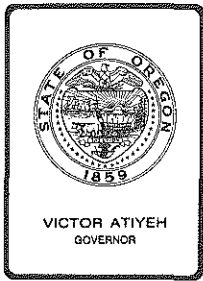
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Environmental Quality Commission

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November 18, 1982

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Re: Permit Development and
Review Process

Dear Commissioners:

Prompted by the recent petition to modify the agency's permit review process, the Commission has directed staff to undertake a study and analysis of the extent to which the Commission and public should be able to participate in the development and review of permit terms.

At the conclusion of the last Commission meeting, Chairman Richards attempted to focus the study by noting some questions he believed needed consideration. They are:

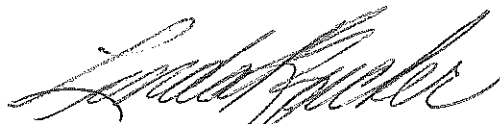
- 1) Do other agencies permit appeals by third parties from the Director's actions on permits or licenses?
- 2) What is the meaning of the term "person adversely affected" under ORS 541.627, and is it as broad as "interested" person under ORS 183.310(5)?
- 3) Is it possible and appropriate to preserve discretion to the Commission as to whether to accept a permit appeal? If so, how should this be effected?

EQC Members
November 18, 1982
Page 2

- 4) What extension of permit appeal participation necessitates a review by transcript? Could the Commission exercise its discretion on the basis of a report from the Director?
- 5) If an appeal is accepted, could the record be limited? Would it be necessary to accept new testimony on appeal?
- 6) Could the Commission provide for an expeditious method of appeal including the time for hearing and decision?

It will be useful to know of any other issues you see as needing examination. My telephone number is 229-5383.

Very truly yours,



Linda K. Zucker
Hearings Officer

RH:k

HK1460

cc: William H. Young, Director, DEQ
Robert L. Haskins, Assistant Attorney General

LANE REGIONAL

AIR POLLUTION AUTHORITY

EQC
My Young
McCue
Weatherhead
Neff



(503) 686-7618
1244 Walnut Street, Eugene, Oregon 97403

Donald R. Arkell, Director

Item I

November 29, 1982

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
R E C E I V E D
DEC 1 1982

OFFICE OF THE DIRECTOR

Mr. Joe Richards, Chairman
Oregon Environmental
Quality Commission
P. O. Box 1760
Portland, OR 97207

Re: 12/03/82 EQC Meeting
Agenda Item No. I
Request for Variance,
Mount Mazama Plywood Co.

Dear Mr. Richards;

A little less than a year ago, December of 1981, companies operating veneer dryers in Lane County were required by the Authority's rules to comply with visible emissions limits identical to those imposed by the Commission on all similar operations statewide. This compliance has been achieved through expenditure of several million dollars of initial capital cost and hundreds of thousands of dollars per year of operation and maintenance costs.

The Regional Air Pollution Authority considered requests from several companies for variances from the rules, based on assertions that the general difficult economic circumstances presented risk of closing or curtailing operations if the LRAPA requirements were enforced on schedule. For each request, the possibility of plant closure had to be weighed against the economic penalties for those companies who had made the capital expenditures and were operating control systems needed to meet the requirements. As the depressed wood products economy persisted, the issue of equal treatment under the rule became dominant, outweighing air quality issues.

It is this same question which now, in our view, should be weighed by the Commission as it considers the Mount Mazama request to extend its variance.

The Authority has done its best to apply the veneer dryer rules in an even-handed fashion so that there is minimal influence on existing competitive market pressures. Presently, all veneer dryers in Lane County are in compliance with LRAPA's rules. Those firms who had to install control systems to achieve compliance have done so. Several have since shut down or sharply curtailed their operations.

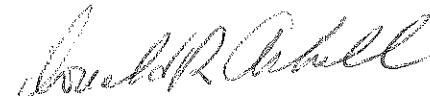
It is my understanding that Mount Mazama Plywood competes heavily in the same national markets as other plywood manufacturers in Oregon. Although it is difficult to assess the full impact of the proposed action, a number of veneer plant operators in Lane County indicate that the succession of variances issued to Mount Mazama has, in their opinion, placed them at a competitive disadvantage.

Mr. Joe Richards
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Page 2

The Authority is, of course, sensitive to the implications of mill closures, and we are certainly not advocating action which would cause a shut-down. By the same token, we do not wish for additional curtailment of veneer production in Lane County as an indirect result of a variance issued by the State. We hope that any action which provides relief to the applicant includes conditions to mitigate the economic disadvantage to veneer drying operators in Lane County.

Thank you for your consideration of this concern.

Sincerely,



Donald R. Arke11
Director

DRA/mjd

Item 0

PROPOSED AMENDMENTS TO HOUSE BILL 1945
JOINT COMMITTEE ON WAYS AND MEANS

On page 2, line 9, of the printed bill, after "following" insert a colon, and delete line 10.

On page 2, delete lines 11 through 16 and insert:

"(a) To advance funds by contract, grant, loan or otherwise, [for eligible projects as defined in ORS 449.455;] to any municipal corporation, city, county or agency of the State of Oregon, or combinations thereof, for the purpose of planning, acquisition, construction, alteration or improvement of facilities for the collection, treatment, dilution and disposal of all forms of ^{sewage} waste in or upon the air, water and lands of this state."

On page 2, delete lines 17 through 22 and insert:

"(b) To acquire, by purchase, loan or otherwise, general obligation ^{bonds,} revenue bonds, notes or other legally incurred obligations of any municipal corporation, city, county or agency of the State of Oregon, or combinations thereof; issued or made for the purpose of paragraph (a) of subsection (1) of this section."

On page 3, line 2, after "1954", delete the period and insert a comma and insert "and amendments thereto in effect on March 1, 1971."

On page 3, after line 8, insert:

"Section 6. Any funds advanced by the Environmental Quality Commission by grant shall not exceed 30 percent of the total facility costs for eligible facilities, and any general obligation or revenue bonds, notes or other legally incurred obligations acquired by the Environmental Quality Commission by purchase, contract, loan, or otherwise, shall not exceed 70 percent of the total facility costs for eligible facilities."

BUDGET REPORT

Joint Ways and Means Committee

55TH Legislative Assembly

L.F.O. 42-1

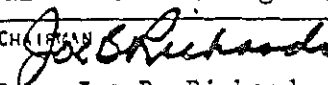
AGENCY Department of Environmental Quality	BUDGET PAGE(S) 154-155	BILL NO. 2060	BIENNIAL PERIOD 1969-71	SUBCOMMITTEE NO. 3	
APPROPRIATION TYPE: (CHECK APPROPRIATE BOXES)					
<input checked="" type="checkbox"/> BIENNIAL GENERAL FUND	<input type="checkbox"/> OTHER GENERAL FUND	<input checked="" type="checkbox"/> FEDERAL FUNDS LIMITATION	<input checked="" type="checkbox"/> OTHER FUNDS LIMITATION	<input type="checkbox"/> NON-LIMITED	<input type="checkbox"/> OTHER
BUDGET APPROPRIATION DESCRIPTION	RECOMMENDED BY GOVERNOR McCALL	SUBCOMMITTEE RECOMMENDATION	DIFFERENCES	JOINT COMMITTEE RECOMMENDATION	
GENERAL FUNDS:					
Administrative and related expenses	\$1,554,982	\$1,564,188	\$ +9,206	1,564,188	
Sewage treatment construction acct.	1,500,000	1,500,000	--	1,500,000	
Salary adjustment	80,550	48,161	-32,389	48,161	
TOTALS	\$ 3,135,532	\$3,112,349	\$ -23,183	\$ 3,112,349	
OTHER FUNDS:					
Federal Air & Water Pollution Control	261,737	261,737	--	261,737	
Salary adjustment	16,102	11,513	-4,589	11,513	
Misc. Receipts	--	--	--	--	
TOTALS	\$ 277,839	\$ 273,250	\$ -4,589	\$ 273,250	
GRAND TOTAL - ALL FUNDS	\$ 3,413,371	\$3,385,599	\$ -27,772	\$ 3,385,599	

SUMMARY OF SUBCOMMITTEE ACTION: (SEE NOTE BELOW)

The Governor's original printed budget for this new agency totaled \$3,678,715 prior to salary adjustment. Subsequent to the preparation of the Governor's budget, it was decided by the Governor working with the Board of Health that some of the positions which were budgeted in the Environmental Quality Commission should remain responsible to the Board of Health. As a result, moneys are appropriated in HB 1754 for those expenses; and this appropriation act is reduced by a similar amount.

The subcommittee approved the Governor's recommended budget for this agency except for an 8% reduction in auditing costs and the addition of a microbiologist for the second year in the Water Pollution Control Program. The subcommittee recommended that this agency not become involved in extensive research efforts related to air and water pollution. It was the feeling of the subcommittee that this function could be more advantageously performed within the State System of Higher Education or at the federal level.

The subcommittee recognized that if HJR 14 and HB 1174 authorizing bonding for the pollution control activities was approved by the Legislature and the vote of the people certain additional staff would be required to administer this program. The subcommittee decided that approval of the funding for this staff should be by the Emergency Board.

PREPARED FOR SUBCOMMITTEE BY: (DEPARTMENT OF FINANCE) A. L. Wilkinson	CHAIRMAN  Rep. Joe B. Richards, Chrm.	Sen. Berkeley Lent Sen. John D. Burns
REVIEWED BY: (LEGISLATIVE FISCAL OFFICE) Jerry Brown	Rep. L. B. Day	DATE May 17, 1969

NOTE: BE SPECIFIC AND INCLUDE ALL PERTINENT DATA. THIS REPORT WILL SERVE AS SUMMARY MINUTES OF THE SUBCOMMITTEE MEETING. USE EXTRA PAGES IF NEEDED.

The subcommittee recommends that the Environmental Quality Commission obtain the approval of the Emergency Board prior to allocation of

- (1) the moneys appropriated for sewage treatment works construction;
- (2) any moneys in the Pollution Control Fund if the Constitution is amended to provide for the sale of bonds for such purposes.

9-a. DEPARTMENT OF ENVIRONMENTAL QUALITY

Request: Transfer of \$53,260 from the Sewage Treatment Works Construction Account to the General Fund appropriation of the Environmental Quality Commission to cover the cost of bond sale.

Analysis: At the May primary election a constitutional amendment (HJR 14) was submitted to and approved by the people, authorizing the state to sell bonds for the purpose of providing funds to be granted or advanced to municipal corporations for planning construction or improvement of facilities for the treatment or collection of wastes. House Bill 2060, chapter 656, Oregon Laws 1969, authorizes the Environmental Quality Commission to make grants or advance funds for eligible projects up to a total project cost not exceeding \$50 million providing that the project is at least 70 percent self-supporting.

The 1969 Legislature appropriated \$1.5 million to the Sewage Treatment Works Construction Account for state grants at a 70 percent local, 30 percent state matching ratio. One of the provisions of the 1969 Act was that the federal money made available on a 30 percent matching basis for localities should be allocated prior to the allocation of state moneys. During the 1969-70 year, the Environmental Quality Commission allocated \$2,510,920 of Federal Water Pollution Control 30 percent grants to local districts. In addition, \$1,255,080 of state moneys were allocated for 30 percent grants. During the 1970-71 year, the State of Oregon will receive an allocation of \$8,134,100 of federal moneys for allocation as 30 percent grants to local districts. If no further funds are provided for grants to the local units of government for the construction of sewage treatment works, a total of \$12,145,020 will be available during the biennium for allocation on a 70-30 basis (federal money is allocated at a 33 percent rate if the local units of government have adequate planning). This equates to approximately \$36 million of sewage treatment works construction which will receive 30 percent matching grants during the biennium.

The Environmental Quality Commission had applications for grants for the 1970-71 year on file with a total eligible project cost of \$71,241,000. If no further moneys are made available for grants, the Environmental Quality Commission will be able to provide grants to approximately one-third of these projects, or approximately \$25 million in eligible project costs.

The Environmental Quality Commission requests authority to transfer funds to cover the administrative costs related to the sale of bonds early in January of 1971. It is the intent of the Commission to sell approximately \$41.2 million of bonds on that date. Current plans call for \$9.5 million of this money to be granted as 30 percent matching grants, with the remaining \$31.7 million to be loaned to applicants who will receive some portion of the federal money made available during this biennium. [Such loans will be made to cover the 70 percent local share of the cost and in those cases where the local unit of government has encountered or anticipates it will encounter some difficulty in the sale of bonds.]

1,612,349 Adm
1,500,000 Sewage Treatment

The State General Fund will be required to pick up the servicing for the portion of the bonds which will be utilized for state grants. This office assumes without knowing that the portion of the bond proceeds used to make loans to local units of government will be fully serviced by those local units of government through the repayment of the loans. The biennial cost to service 6.5 percent, 20-year bonds in the amount of \$9.5 million would equal \$1.6 million for the 1971-73 biennium. This compares to an appropriation provided for sewage treatment works construction of \$1.5 million during 1969-71.

The Emergency Board may wish to deny this request and refer the policy decision to the 1971 Legislature for its disposition. This would enable the 1971 Legislature to determine the proper level of state grants to be authorized to the approximately \$50 million of eligible projects which will not receive a grant, and provide the General Fund appropriation for servicing such amount. In addition, the Legislature would have an opportunity to set up statutory authority and protection for the state relative to the proposed loan program. Present statutes do not contain any guidelines or safeguards in this latter area. Although the constitutional amendment provides for an ad valorem tax to pay the interest and indebtedness, the absence of specific statutory safeguards and guidelines covering the loan of the bond sale proceeds to local units of government might possibly affect the rating of these bonds.

9. DEPARTMENT OF ENVIRONMENTAL QUALITY

- a. Transfer between appropriations made to the Department for the purpose of covering the costs of the sale of bonds and to implement the State Financing Program for sewage works construction.

Request:

For a transfer of \$53,260 between appropriations made to the Department by section 1 and limited as to purpose by section 1(1) and (2), chapter 656, Oregon Laws 1969, for the biennium beginning July 1, 1969 as follows:

Transfer from:

Sewage Treatment Works Construction Account, section 1 and section 1(2), chapter 656, Oregon Laws 1969

\$-53,260

Transfer to:

Administrative and related expenses, section 1 and section 1(1), chapter 656, Oregon Laws 1969

\$+53,260

(1,500,000)

(1,612,349)

Recommendation:

The Executive Department recommends approval of a transfer between appropriations of \$51,375.

Reasons:

1. The sale of bonds to implement a state grant program for sewage treatment facility construction was approved by the voters at the May 1970 Primary Election.
2. Approval of this request is necessary to implement the construction program in time to take advantage of the 1971 construction season.
3. Sufficient financing is available.

Discussion:

At the May 1970 Primary Election, the voters approved the issuance of bonds to be utilized for pollution control. Enabling legislation was passed by the 1969 Session to utilize these bonds for the construction of sewage treatment facilities. Approval of this request will allow the initial start-up costs so that the program can be operational for the 1971 construction season.

9. a. Department of Environmental Quality - cont.

The proposal will finance the development of an assistance program, including establishing detailed procedures for paperwork processing and rules and regulations for applying for and receiving grants-in-aid and loans from the bond revenues. It is proposed that the first bond issue will be let during the early months of 1971.

The recommended budget for this request will provide \$25,000 for a consultant to be engaged during December and January to develop the program and establish detailed regulations. \$12,175 is recommended for an engineer position and a secretary, beginning January 1, 1970, to provide processing and follow-up on the grant and loan applications. The remaining \$14,200 will provide for issuance costs of the bonds. The difference between the amount recommended and that requested by the Department results from a delay of one month in the implementation schedule from that proposed in the original request letter. The costs of this request will be covered from unallocated balances in the sewage treatment works construction account.

JOINT MEETING OF
SENATE AIR AND WATER QUALITY CONTROL
HOUSE NATURAL RESOURCES

February 24, 1969

1:00 P.M.

#106-B State Capitol

Senators Present: Senator Fadeley, Vice Chairman (til 2 P.M.)

Senators Absent: Senator Bateson
Senator Ouderkirk
Senator Willner
Senator Atiyeh, Chairman

Representatives Present: Representative Bradley, Vice Chrm.
Representative Browne
Representative Carson
Representative Johnson
Representative Macpherson
Representative McKenzie
Representative Ripper
Representative Statios
Representative Hanneman, Chairman

HJR#14 To authorize pollution control bonds up to one percent of true cash value of all taxable property of state to provide funds to municipal corporations, cities, counties and agencies of state, or combinations thereof, for pollution facilities.

Representative Hanneman called the meeting together. Asked Senator Fadeley for any comments before starting agenda.

Senator Fadeley - Apologized for absence of rest of Senate Committee, explaining that Senator Atiyeh was in Washington, D. C. representing the state and Governor McCall on state business; and that the other members had at least one place to be and some two regarding their standing committees in the Senate.

Representative Hanneman reported this to be the second hearing on the bill. Introduced Mr. Herb Hardy, Chairman of Citizens Committee on Pollution Legislation who in turn introduced witnesses. Representative Hanneman announced that others present in audience wishing to testify, and not on Mr. Hardy's list, would be given opportunity to do so.

Mr. Herb Hardy explained that the regular format would be departed from, in that state officials would not appear before the meeting first, due to the complexities. That the statements of the pollutors had more significance with Mr. Collins and Mr. Mosser speaking first. They both consented to have it done this way.

Mr. Jack Collins - Lawyer in Portland and member of Citizens Committee-
Read attachment #1.

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Air and Water Quality Control and
House Natural Resources

Mr. John Mosser - State Sanitary Authority - Inherited problem that all have. Legislature mandated that water quality and standards of the State of Oregon be established to preserve the waters of the state. In order to get job done, it is necessary - to enforce. So have issued regulations to business requiring industry to clean up, and it is a very substantial expense for them. On Willamette River all major industry have primary treatment - most well ahead of 1972 deadline for establishing chemical recovery and secondary treatment. Problems now lie with municipalities, - and smaller industry; including canneries which service from municipal plants.

Distributed statement prepared by Mr. Kenneth Spies but did not read same (attachment #2). Mentioned from that text that \$180,000,000 had been spent over past twenty-three years on this project; and that another \$180,000,000 would be needed in the next five years. All figures in statement not comparable, and some figures not in it that Mr. Mosser knows exist. Example of Tualatin Basin Project given - might only require \$30,000,000 during this five to ten years but will require larger sum over fifteen years. Many of the other projects will undoubtedly prove to be larger than shown. Some not on statement that Mr. Mosser knows do exist. One is City of Medford - voting next week on a \$450,000,000 bond issue to build a new treatment plant.

Needs are very large and at present time enforcing standards difficult where such things as 250 homes and apartment in Tualatin Basin which cannot be occupied because of an over loaded plant. Industries have been turned away from Eastern Washington County. Development being held up in Medford. In Astoria, Albany and Medford no new extensions of major new loads can be added without approval of Sanitary Authority which is hard to get. Last summer there were several small towns in the valley where canneries wanted to expand, also - Eastern Oregon - but answer was no, until new sewage plants are installed because present ones could not take on additional sewage waste. Hearings held in Central Oregon last fall, and now about to issue regulations which will prohibit the further construction of wells for injection of sewage waste into the ground water unless there is some master plan and progress towards it by 1980 to have sewage systems in Central Oregon.

This is a statewide project. Question whether small towns and suburban towns are going to be able to expand to accommodate the new industry they are already attracting; and to work for more depends upon whether or not there is going to be an adequate sewage construction sewage program.

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House Natural Resources

Problem in financing is simply this: Federal government adopted the Clean Waters Act and in the schedules (page 4) figures are quoted of amounts to be given. Fact is those funds have not been appropriated so we haven't had federal matching money for the projects. To compound the problem we started a state program in the last session of using 25% state grants only if 50% state grants were available. What this meant, in past two years, is that about \$5,000,000 worth of projects got 75% state and federal aid, in some cases 80%, with only 20% paid locally. Anyone else had to spend 100% local money. This creates incentive to hold back, and not build projects that otherwise would be built because of the hope that next year they would be in on the 75% to 80% jackpot!

Mr. Mosser thinks that if this program is not passed, it would pay us to abandon state aid and spread 30% federal grants to quite a number of projects - to be fairer to everybody. Citizens Committee program would be an excellent solution, but certainly not the only solution. Some state have a state agency that has taken over all sewer plants and went into wholesale sewage treatment business. Took effluent from industry, towns, and everybody as a state agent. Don't want to be in business of building and operating sewage plants, much better left to local government. Leaves Sanitary Authority with much more independence of judgment as to whether they are doing a good or bad job, than if in the business themselves.

7
This proposal provides low state farm rate that would come from large issues as opposed to state credit. Provides a means of keeping on with the 25% state grant program spread out over a reasonable period, instead of trying to concentrate large appropriations into a short period. By the use of the revenue approach at the local level it would keep sewers from being a major issue with property tax bill, and will provide that they can be paid for reasonably through user charges. The extent that federal grants are available also can go into local shares as they become available and reduce user charges.

Mr. Mosser urged that some approach be used, if not might as well - recognize that either we are going to hold up the progress of development of this state; or we are going to have to abandon the water quality standards which have been set.

Representative Hanneman thanked Mr. Mosser and said we were privileged to have him here today to give us those view points.

Mr. Herb Hardy introduced Mr. Kessler Cannon.

Mr. Kessler Cannon - Executive Assistant to Governor McCall and present to lend governors full support of HJR#14. Re-emphasized need

Mr. Mosser demonstrated to committee, and urged committee to look upon this measure as a sensible and workable tool by which problems can be attacked. If we are to do this, we must provide money. Governor's office feels this bonding authority will provide the way. Asked committee to look at this as a basic problem as far as whole development of the type of livability we want in Oregon. This is tied in so closely with many other programs such as the Greenway, Recreational Use of our Waters, Fish Enhancement. Tied in with whole concept that basic to your livability is first the quality of our waters.

Treasurer Robert Straub - Stated the action of Citizens Committee in developing legislation needed translated into action. Our hopes for clean water and air in Oregon, is one of most sound and far reaching recommendations presented by this committee. Made following comments on some of the interest savings that will result to the people of Oregon by the adoption of this approach of finance. In effect by allowing the credit of the State of Oregon to be slid under the credit of local municipalities and relying on their superior credit, name familiarity, marked ability of the bonds to capture the best interest we can obtain. Called attention that a marked deterioration in the market for municipal bonds in the last two years caused major buyer of bonds to channel off into other directions so there is very limited supply of bank investment money seeking out the municipal bonds. In a critical situation now, far as municipal bonds are concerned. Bond market as looking into future as it relates to municipal financing, - is going to deteriorate more markedly. It is very important to concern ourselves with problem of pollution, and other needs that people face. To be aware of what's happening to the municipal bond market. - Many of the smaller municipalities today would have hard time marketing bonds.

Representative Sam Johnson asked Treasurer Straub what the difference is between Revenue Bonds mentioned putting General Obligation Bonds of State of Oregon under Revenue Bonds of the City, and the General Obligation Bonds?

Treasurer Straub replied that Revenue Bonds are always higher than the equivalent General Obligation Bonds.

Representative Johnson set example of small town - they would issue Revenue Bonds which would probably go as high as 6%. Would the State General Obligation underneath them save on them?

Treasurer Straub - yes !

Representative Rod McKenzie made it clear he was not in objection with proposal, but felt first question that would arise would be by additional

bonding -- "What will this do to all other bonding in the State of Oregon in regards to the rate of interest?"

Treasurer Straub commented that was a good question and one he was concerned about. So he made some very careful inquiries with the bond rating services in New York with a very profound influence on our G.O. Bonds. Surprised to find that they are not primarily concerned about the total amount of indebtedness that is outstanding, but primarily concerned as to whether an area - as the State of Oregon - is keeping up with its' needs. Whether it is doing the work that needs to be done to keep its' schools in first class shape, to keep its' highways in first class shape, to keep sewage plants up to date. They are more inclined to look at the purpose for which the money is being raised and whether it's being handled in an orderly and business like way.

Representative Bradley stated that this resolution proposes a special election on July 15, 1969; and wanted to know what would be Treasurer Straub's reaction to combining this with the Sales Tax vote?

Treasurer Straub said he didn't think it could be done in a significantly bias or prejudiced or threaten a fair vote on this measure. It would not be wise to consolidate.

- Representative Stathos wanted to know for what length of time bonds would be issued.

Treasurer Straub proposed law allows bonds to be issued up to thirty years. Generally they are issued for twenty to twenty-five.

Representative Stathos then asked, "Historically the bond market rises up and down. Would there be a possibility to issue bonds say for a thirty year period - that the State of Oregon could be caught at the peak of the industry and over the average life of the bonds pay over amounts in interest? Than if the bonds were maybe for a shorter time and attempted to go for more than average rate on them?"

- Treasurer Straub - Did not believe that could happen under this bill because there is a provision of the bill which would allow for refunding. So if there is a significant drop in the interest market for municiple bonds, then the State of Oregon could issue new bonds at this lower rate of interest and pay off the outstanding bonds, so they would in effect slide the lower interest rate in under them.

Representative Stathos asked if the bonds could be paid off anytime?

Treasurer Straub thought this possible.

Representative Stathos wanted to know if the "Call Privilege" cost the state more?

Treasurer Straub felt that it would.

Representative Stathos read Section 4 of this bill to the committee, and wanted to know if this would put the State of Oregon in the property tax business?

Treasurer Straub thought we have that protection now under all of our bonds.

Representative Stathos asked if it is the intention of this bill to levy a tax?

Jack Collins answered with a 'no'.

Dr. Vern W. Miller - Mayor of Salem and President of League of Oregon Cities - proceeded to read attachment #4.

Mr. Herb Hardy explained that the next two witnesses Mr. James Lopp from Eastman-Dillon-Union Securities & Company in New York; and Mr. William Cannon an attorney in New York came out at their own expense. They have been involved in federal legislation with respect to amounts and making the grants to the states; and Mr. Lopp is on the Presidential Committee on Pollution. Both have something material to add to this discussion.

Mr. James Lopp reported that a year ago they submitted to the Congress a study called "Economic Impact of the Capitol Outlays to Meet the Objectives of the Water Quality Act". Thought perhaps the committee would like to know what some of the other states have done in the area of bonding: Connecticut passed a \$150,000,000 bond issue, Maine - \$25,000,000; Maryland - \$150,000,000; Massachusetts - \$150,000,000; Michigan - \$285,000,000; New Hampshire - \$16,000,000 and Pennsylvania - \$100,000,000. New York State where there is a sales tax, city tax, state tax, commuter tax and federal tax, the Governor preferred a billion dollar issue before the people for water pollution and it passed 4 - 1. Thinks that the way this bill is set up, we can have our cake and eat it too! In utilizing the benefit of the state credit and at same time not penalizing the state, and it could be deductible. You are faced with several problems - first the magnitude of the program plus alot of the small communities coming to market, not only in Oregon but nationally; whereby institutional investors, insurance companies and banks will be able to choose for that percentage of the portfolio that they put in sewer bonds with more favorable credits - leaving some of your weaker smaller credits unable to borrow and have to pay extremely high rates. The concept of financing is most progressive of any state in the country. Oregon attacked the

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 Air and Water Quality Control and
 House Natural Resources

problem face on, and haven't gone through agency type operation. Feels it will be very efficient. Last year there was a move by the Bureau of the Budget not to penalize anybody who moves ahead in lieu of federal grants.

Mr. William Cannon felt like he had already been shot down, because much of what he wanted to say had already been said. Thought the idea of pledging the states credit is tremendous. If you do enact the constitutional provision and the supporting legislation, will be able to achieve the lowest level of financing that is possible to do. The act is well prepared, and does what you want it to.

Mrs. William J. Firey - Stage Water Chairman for the League of Women Voters - proceeded to read attachment #5.

Mr. Herb Hardy passed out copies of joint letter (attachment #6). Reported that there will be a working session later and at that time will have two more witnesses.

Representative Bradley asked Mr. Hardy to respond to question asked of Treasurer Straub pertaining to June 3 - election day for Tax Bill - to be used as day for vote on this bill.

Mr. Hardy replied we have a minimum of ninety days. Thinks it only fair to let people of Oregon know what condition we are in. This will have to be an extensive program, so they can then know what they are voting for. Thinks July 15th is too early, much more realistic date would be in September or October. Understands the \$300,000 price for election is costly, but pointed out that if the bill does not pass then Ways and Means will have to find \$5,000,000. If it does pass there will be approximately \$150,000,000 used to fund bonds. Do not see how we can get measure through in time to have voted upon.

Representative Johnson asked of Mr. Hardy if he was going to bring in witness about solid waste, could he also bring someone in familiar with San Francisco problem where they are carrying it out by train?

Representative Hanneman also asked Mr. Hardy to tell at a later date about industrial approach to treating, and domestic use like appliances, etc.

Mr. Hardy replied it would all come to light later and we will need to make some amendments.

Representative Hanneman asked if there were others present in audience wishing to speak - none came forth. He thanked both the committee and audience for their interest and attention given this hearing. A thanks to the news media, too.

Adjourned meeting 2:40 P.M.

Respectfully submitted,

Clara Kinnee
 Clara Kinnee, Clerk

Respectfully submitted,

Glenna Hayden
 Glenna Hayden, Com. Clerk

JOINT WAYS AND MEANS COMMITTEE

May 20, 1969

4:25 p.m.

118 State Capitol

Members Present: Representative Hansell, Presiding Chairman
 Senator Newbry, Co-Chairman
 Senator Huston and Representative Richards, Vice Chairmen
 Senators McKay, Hoyt, Burns, Eivers, Lent
 Representatives Lang, McGilvra, Davis, Day, Stevenson

Non-budget bills for reconsideration:

House Joint Resolution 14--Proposed amendment to Oregon Constitution by creating new Article XI-H to authorize pollution control bonds.

Senator Newbry explained that this is the resolution to authorize pollution control bonds which will be voted on at the May primary.

Senator Newbry moved that House Joint Resolution 14 be further amended by deleting "75" and inserting "70" in line 24, page 2 of the printed bill, and in line 21, page 3. Motion carried unanimously.

Senator Newbry moved that House Joint Resolution 14 be reported out with the recommendation that it "Be adopted as amended." Motion carried unanimously.

House Bill 1174--Relating to pollution control funds; and appropriating money.

Senator Newbry explained that this is the companion measure to HJR 14 and determines how the Sanitary Authority shall carry out the expenditures of these funds. Cities will be required to put up no more than 70 percent of the cost of sewage improvement, with the state or federal government to put up the remaining 30 percent. Federal funds will be applied first, with the state picking up that which cannot be funded with federal moneys. At such time as federal resources are such that they can accommodate a full 50 percent federal match, the state's responsibility shall be 25 percent and local responsibility 25 percent.

Senator Newbry moved that House Bill 1174 be amended by deleting lines 1 through 3, page 2 of the printed House amendments dated March 26; deleting "to any" and inserting "for eligible projects as defined in ORS 449.455;" in line 28, page 4 of the printed bill; deleting lines 29 through 33; deleting "75" and inserting "70" in line 8, page 5; deleting lines 27 through 34, page 6, and lines 1 through 10, page 7; and deleting "13" and inserting "11" in line 11. Motion carried unanimously.

Senator Newbry moved that House Bill 1174 be reported out "Do pass as amended."

Senator Newbry was of the opinion that the proposed program would work, and encouraged cities to begin construction as soon as possible.

Senator Newbry's motion carried unanimously.

Budget bill for reconsideration:

House Bill 2060--Relating to the financial administration of the Environmental Quality Commission; appropriating money; limiting expenditures; and declaring an emergency.

Representative Richards, Chairman of Subcommittee No. 3, asked whether the budget bill for the Environmental Quality Commission had been coordinated with the two bills relating to pollution control funds. Senator Newbry said the budget bill was discussed in the Capital Construction Subcommittee in connection with the related bills and amendments proposed.

Senator Newbry moved that House Bill 2060 be further amended by adding new sections 3 and 4 as submitted.

Representative Richards added these amendments would carry out the intent of House Bill 1174 of 50-25-25 match if sufficient federal moneys became available; otherwise, there would be a 70-30 match.

Senator Newbry's motion to amend carried unanimously.

Senator Newbry moved that House Bill 2060 be reported out "Do pass as amended." Motion carried unanimously.

Senator Newbry moved that the Budget Report for the Environmental Quality Commission include the following language: "The Subcommittee recommends that the Environmental Quality Commission obtain the approval of the Emergency Board prior to allocation of (1) the moneys appropriated for sewage treatment works construction; (2) any moneys in the Pollution Control Fund if the Constitution is amended to provide for the sale of bonds for such purposes."
Motion carried unanimously.

Non-budget bills considered by Subcommittee and now before Full Committee:

Senate Bill 333--Relating to ad valorem taxation; amending ORS 307.350; and prescribing an effective date.

Representative Richards explained that this bill increases the household income requirement for eligibility for senior citizens property tax exemption from \$2,500 to \$3,000. The Capital Construction Subcommittee recommends an appropriation of \$1,380,000 to provide the additional senior citizens property tax relief, including Senate Bill 508 which would give relief to individual senior citizens who are in retirement homes. If House Joint Resolution 8 is adopted, then the appropriation would be reduced to \$710,000 because of the impact of the circuit breaker provision and the general reduction in property taxes. The Tax Commission's figures were used in determining appropriation amounts.



DEPARTMENT OF ENVIRONMENTAL QUALITY

STATE OFFICE BUILDING • 1400 S.W. 5th AVENUE • PORTLAND, OREGON • 97201

October 9, 1970

TOM McCALL
GOVERNOR

KENNETH H. SPIES
Director

ENVIRONMENTAL QUALITY
COMMISSION

B. A. McPHILLIPS
Chairman, McMinnville

EDWARD C. HARMS, JR.
Springfield

STORRS S. WATERMAN
Portland

GEORGE A. McWATH
Portland

ARNOLD M. COGAN
Portland

The Honorable E.D. Potts
Chairman, State Emergency Board
State Capitol Building
Salem, Oregon

Dear Senator Potts:

The Department of Environmental Quality and Environmental Quality Commission respectfully request the transfer of \$53,260 from the present uncommitted balance in the Sewage Treatment Works Construction Account created by Chapter 656, Oregon Laws of 1969, to the general fund account of the Environmental Quality Commission for the purpose of covering the costs necessary to sell the bonds and implement the State Financing Program for sewage works construction which was passed by the 1969 Legislature and authorized by the voters in the May primary election. (Ballot Measure 4)

The Department hopes to sell the first issue of bonds sometime in January, 1971, in order to get many pollution control projects under way at the earliest possible date through assistance to local government. To accomplish this, it will be necessary to employ a financial consultant and additional staff personnel to develop regulations and to process and followup on grant and loan applications.

The staff estimate of costs to be incurred between now and July 1, 1971 are as follows:

Financial Consultant:

\$15,000 for November and December plus \$10,000 contingency \$25,000

PHE-2 (starting 12-1-70):

Salary \$967 x 6 plus \$1,016 = \$6,818
10% for payroll expenses 682 7,500

Secretary 3 (starting 12-1-70):

Salary \$433 x 7 = \$3,031
10% for payroll expenses = 303 3,334

Additional Program Services and Supplies:

2,140

Additional Program Capital Outlay:

1,085

Bond Costs:

Printing, Advertising, etc. 3,850

Bond Attorney's fee 9,000

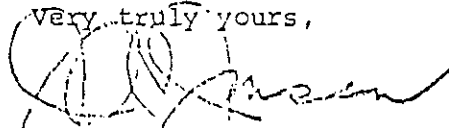
Moody's Rating Service 1,350

Total \$53,260

Ch. 503
1154
2/4-11
2/11

We request your favorable consideration of this transfer of funds so that the construction of water pollution control facilities in Oregon can proceed as rapidly as possible.

Very truly yours,



for Kenneth H. Spies, Director
Department of Environmental
Quality

KHS:vt

Representative Pynn moved that the Emergency Board, acting under authority of ORS 291.326 (1) (b), increase the expenditure limitation established for the Employment Division in section 2, chapter 659, Oregon Laws 1969, by \$1,868,965. Motion carried unanimously on roll call vote.

Board of Health

Representative Lang reported that Subcommittee No. 1 recommends approval of the request of the Board of Health for an increase in expenditure limitation of \$264,896. The Board of Health has been informed that increased federal moneys for family planning and migrant health are available, and this will enable an expansion of the family planning program to 18 counties and increase aid to local governments for the migrant health program by \$191,773. Because of an underexpenditure of federal grant limitations in other areas of \$145,470, the net increase necessary is \$264,896.

Representative Lang moved that the Emergency Board, acting under authority of ORS 291.326 (1) (b), increase the expenditure limitation established for the State Board of Health in section 4 (2)--Federal funds, chapter 39, Oregon Laws 1969, by \$264,896. Motion carried, with Senator Newbry voting "no" on roll call vote.

Representative Lang explained that the Board of Health requests an increase in expenditure limitation on Miscellaneous Receipts of \$30,622 for increased data processing costs for the Game Commission. This function was transferred to the Board of Health on January 1, 1970, at which time the Emergency Board increased their expenditure limitation by \$64,800. After reviewing the request, Subcommittee No. 1 was satisfied that the Executive Department's Data Systems, Budget and Management 70's staff feel the transfer will result in reduced costs to the state and therefore recommends approval.

Representative Lang moved that the Emergency Board, acting under authority of ORS 291.326 (1) (b), increase the expenditure limitation established for the State Board of Health in section 4 (3)--Miscellaneous Receipts, chapter 39, Oregon Laws 1969, by \$30,622. Motion carried unanimously on roll call vote.

Department of Environmental Quality

Senator Newbry said the Department of Environmental Quality, since passage of bonding authority in the Primaries, is in the process of preparing to implement the program. They are in need of some expert advice in setting up regulations and also on how to proceed with the bond elections. Subcommittee No. 1 felt the needs were acute, and that something should be done immediately, but that allowance of \$14,200 requested to accommodate the actual bond sale should be postponed. The reason for deferring decision on this portion of the request is to give the Legislature an opportunity to review the conditions under which loans and grants would be made prior to the program going into effect.)

Mr. Ron Householder distributed informational material (in committee files). HB 1086 -- the difficulty has been in getting citations issued because an officer must fill out a long complaint form to cite for emission, rather than a simple motor vehicle traffic violation. The regulation was adopted by the DEQ, but if it were part of the motor vehicle code they could use the standard citation. ORS 483.448 is the muffler code, and it is difficult for an officer to determine "annoying smoke". (Rep. Pynn entered).

Rep. Gwinn believes the testimony is very pertinent because of the obvious unchallenged emitting by autos, what is the reason for getting a citation to stick and legislation which has not been enforced. Rep. Skelton suggested they invite the head of the state police to testify -- Mr. Householder interjected -- other law enforcement agencies experience similar difficulties. He doesn't believe this subject was discussed with the Task Force.

HB 1069 -- again Mr. Householder read from a copy of his testimony. Clarifying his last statement for Rep. Skelton, he pointed out they are really saying -- since there is no requirement, what amount of compliance can be achieved, and what is actually meant by "tuneup". If talking about 10% to 20% reduction this bill will have an effect, but if this will be sufficient is the question.

Mr. Householder noted they were incorporating 1067 and 1069 to give enforcement capabilities. The Chairman asked if the committee could consider the suggested amendments later.

HB 1185

Chm. Mann introduced Mr. Jerry Brown from the Fiscal Office and asked if he would supply background on this measure to the committee.

Mr. Brown stated the last Legislature authorized the voters the ability to vote on pollution bonds of 1% of true cash value, and the statutory rate authorized sale of bonds up to \$50 M, restricted to sewage treatment and water quality control. The Constitutional amendment is broader and includes air and land quality. There was also appropriated \$1.5 M out of the general fund money to provide matching funds, and it was contemplated utilizing this money the first year of the biennium. There should have been statutory guidelines set. When the DEQ requested authority to sell \$50 M bonds to make grants to the cities, the Emergency Board requested they draft rules and regulations to secure the loans, and authorized sufficient resources to employ a consultant.

The Constitutional language is very broad and allows the DEQ to loan up to 70%, plus grants of 30% so a municipality could receive 100%, and repay 70%. Unfortunately there was no statutory protection specifying how the state's 70% loan was to be secured. It is possible for the city to borrow money without a vote of the people and the committee may wish to reconsider this.

The 70% could be repaid by a variety of sources. Citizens may issue their own bonds to repay, by user charges, sewer connection fees, ad valorem taxation, etc. Answering Chm. Mann, Mr. Brown said there were other options such as a serial levy, but he believes the majority will repay through revenue.

Mr. Dale Nunamaker distributed material, including a draft of their preliminary plans for issuing the bonds as instructed by the Emergency Board in November, when they asked for permission to issue the bonds. They had met two weeks ago with city officials and planning engineers for an advanced previous and a public hearing was scheduled for the following afternoon. There is a sale scheduled for April 6, and it is imperative they have legislative approval to meet this date. There is a 90 day provision by the Treasury Department and if they miss the April date they will have to wait until July, after one half of the construction season is gone. There are some 30 projects being held up. In developing regulations they tried to protect the state's interest by rules for local governments to repay obligations with revenue sources which are acceptable under the statutes.

Legislature authorized DEQ to purchase local bonds, or enter into a loan agreement without bonds. They have included in regulations that local agencies will have the option of requesting a loan without local bonds, or electing a general obligation of revenue bonds and asking DEQ to bid. As to the vote of the people, this will eventually be decided by a city charter and the legal opinion of the local managing body.

DEQ's legal counsel is including a section in the bond purchase and loan agreement covering remedies in case of delinquencies.

Questioned by the Chairman, he stated they intend to buy revenue bonds in rare instances when a city wants to go this route, and he grants there is more risk than a general obligation bond. Under the statutes they have to satisfy themselves that sources of revenue within the area are available to retire obligations. The statutes allow 30 years for a payback, but for practical reasons 20 years would be optimum from the state's standpoint. Rep. Mann ejaculated -- a city council can't bind another city council 10 years from now. Mr. Nunamaker agreed, but cities have been going to the bond market with both revenue and G.O. bond issues up to 30 years.

They would hope to have authorization from the Legislature to issue \$45 M pollution control bonds, under the program they have now developed, then schedule the bond sale by April 6 when the State Treasury Dept. will be selling other bonds. They have been advised the Treasury Dept. needs 50 days to prepare -- issuing notice of sale, advertising, getting bids, etc.

Rep. Skelton asked if the Act doesn't give the DEQ the authority. Mr. N. answered the Chairman of the Emergency Board said to bring back an acceptable program. Rep. Skelton ejaculated, they have the authority under the Act, and Mr. Nunamaker is a state employee bound by certain duties.

Mr. Robert Straub, State Treasurer, speaking from the audience, clarified his position -- he will not now offer them for sale until there is an act on the part of the Legislature saying "OK", because the State Legislature, through the Emergency Board said in November "don't go ahead" until you get further authorization. This puts enough of a cloud on this bond issue to be penalized in interest rates. Another reason for practicality -- they don't want to get at cross purposes with the Legislature. If they will put it in a resolution and get it passed, that is all they want, but he feels it is a valid point and knows it will be a detriment to the bond sale until this barrier is removed.

Rep. Mann asked for guidelines in this resolution. Mr. Straub answered -- there are 2 basic ways to recapture the 70% loan. Local governments can go to the cost and delay of preparing bond sales and getting bids, and if there is no lower bid the State will buy the bond issue. But he thinks it is a wasteful way and duplicating costs with unnecessary delays. A simple, economical way is to allow local unit to enter into a contract of indebtedness with the DEQ, pledging certain revenues and assets -- backing that pledge with a commitment to levy. There is a legal question until there is a court decision to decide if they have the right. He would recommend the DEQ get an opinion from the Attorney General and if this opinion says the City Council governments have the authority to authorize a local government to enter into a contract with the DEQ, which can't be rescinded by future city governments, then a citizen in that district can sue and then get a friendly Supreme Court decision.

Mr. Straub believes this is the policy the Emergency Board wanted them to ponder. A separate issue is the guidelines by which the DEQ will recapture the loan. They could give authorization to the DEQ to proceed with the bond sale, but until the Legislature develops guidelines the money is not to be disbursed. They could move ahead and sell the bonds, but put a hold on the proceeds.

Mr. Nunamaker added, they are advising that even though bonds have already been voted, to forget the bonds and negotiate a loan with them, and this option is open under these statutes. There is additional cost in selling their local issue. The state

would buy but the bond council would still require their issue be advertised on the market. If they have a declining bond market by the time they sell their bonds, some private bond buyer would lower the state's offer.

Mr. Straub explained the local government doesn't have to award the bonds to anyone, if the lowest bid is higher than the last sale of the State, they can reject all bids and borrow from the State, but can't negotiate with one buyer. Except where bonds are already authorized, he thinks the most economical and easiest way is to go the route of the contract of indebtedness.

Chm. Mann asked if they could make an exception between a transaction between a municipality and the State of Oregon, salable on the open market but pledged to the State. Under the letter of the law the bonds have to be negotiable and able to sell on the open market, Mr. Straub answered. The expense to the local government is preparing the bond issue when the State of Oregon is going to buy the bonds in 99 out of 100 cases.

Rep. Pynn suggested at this time formulating a resolution to allow the bonds to be sold, then restrict the bonds from being disbursed. Mr. Nunamaker interjected -- could this dispersion apply to only those agencies who have not voted bonds. Some of the most important projects on the list are with agencies who have voted bonds and have their engineering plans ready.

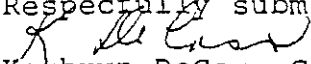
Chm. Mann clarified, between the time the resolution is passed and they have the funds, Legislature will have guidelines to get them out from under the gun.

Rep. Norma Paulus testified -- she has talked a lot about Measure 4 in the last year, and in her opinion is one of the most ingenious and significant pieces of legislation from last session. She would hate to see them tamper with the broad guidelines, and she thinks all the problems they have discussed can be done under the existing legislation.

Chm. Mann answered, he had read it but doesn't understand how it secures the state. Rep. Paulus suggested asking Herb Hardy to explain it before tampering with it.

Mr. Kess Cannon, Assistant to the Governor stated HJR 14 and Measure 4 were passed as tools to protect our environmental needs. There is a big need to open up authority and not restrict only to water controls. The big problem is solid waste and he would like to see the legislation amended to expand and attack other problems.

The meeting was adjourned at 4:40 p.m.

Respectfully submitted,

Kathryn DeCoss, Clerk

Senator Lent pointed out that the effect in Multnomah County under this proposal would be \$600,000 less than was intended under the original bill. Although it could be explained that a vote for this measure would be helping to save the taxpayers in Multnomah County \$600,000, that is not what was intended under the original bill and he would prefer the other alternative, but Senator Lent said he would vote for the motion and would when the bill is referred to the Senate.

Representative Gwinn said he would vote for the motion, but with the reservation that he have an opportunity to see what implications there would be in his county before voting in the House. Senator Newbry said in every case where counties had made levies for welfare, they would be better off with this bill than without.

Representative Lang asked why this approach was taken rather than trying to reconstruct what was originally intended. Senator Newbry said that after hearing from the Department of Revenue attorney, it was concluded that any other language probably would be misinterpreted before the end of the biennium and he understood and agreed to this method. Representative Lang said it was his recollection that the original bill in 1969 was written by the Department of Revenue attorney, and very likely the same attorney after the Session adjourned gave a different opinion. Senator Newbry commented that that was one of the reasons why the Subcommittee was fearful of writing new language.

Mr. Gould explained that the problem in trying to reconstruct the original intent is that counties are not consistent in the manner in which they levy for welfare, some having levied through a separate fund and the entire amount extended on the tax roll, while in others only a portion is extended on the tax roll, and to try to relate by statute what the county levies for welfare is extremely difficult to do.

Senator Fadeley suggested that in the future mathematical examples be included, if not in the statute, at least in accompanying material so legislative intent will be clear.

Representative Hansell felt this bill is of extreme importance to all of the counties in Oregon.

Senator Newbry's motion carried unanimously on roll call vote.

House Joint Resolution 18--Authorizes Environmental Quality Commission to sell pollution bonds up to \$50 million.

Senator Newbry explained that this resolution, which was considered by the Capital Construction Subcommittee, would authorize the Environmental Quality Commission to sell \$50 million of pollution control bonds. It is anticipated that this bond sale will take place the first week in April.

In explanation of the necessity for this resolution, Senator Newbry noted that although the last Legislature clearly authorized the sale of these bonds, it was necessary for the Department of Environmental Quality to request

an increase in expenditure limitation from the Emergency Board. In discussing their activities, it was determined by the Emergency Board that the Department had not yet promulgated rules and regulations regarding dissemination of these funds. Since the state will make loans to local districts up to 70 percent of the total cost of their projects, it was felt that there should be some kind of security for the state's interest in the projects and assurance of repayment. Because of this, the Emergency Board directed the Department not to sell bonds until such time as regulations were promulgated. This placed a cloud on the sale and the bonding attorneys have said the Legislature needs to again authorize the sale of these bonds in order to clear up the cloud and thereby insure the lowest interest rate possible. In addition, the Department has promulgated rules but the Capital Construction Subcommittee was somewhat disappointed in them and Senator Newbry said it is his understanding that Fiscal Office staff is working on regulations which may be considered for inclusion in the statutes.

Senator Newbry moved that House Joint Resolution 18 be reported out to the Senate with the recommendation that the resolution "Be adopted."

Senator Boe asked whether the \$50 million would primarily be for sewage disposal plants, and Senator Newbry replied that it is entirely for that purpose according to his understanding. In response to Senator Boe's further question, Senator Newbry explained that no matter what the federal government does, the state will provide 30 percent and the local district 70 percent. If the federal government decides to increase substantially their share, then that would relieve local communities of a portion of their costs. The communities are now operating with the understanding that their maximum obligation is 70 percent, the program having been designed two years ago to insure that it would go on no matter what actions the federal government takes.

Senator Newbry's motion carried unanimously on roll call vote.

Bills for introduction:

Representative Hansell said the Committee has received three bills from the Executive Department, related to the Governor's budget, which it has been requested to introduce.

Senator Lent moved that the three bills be introduced by the Joint Ways and Means Committee in the House, at the request of the Executive Department. Motion carried unanimously.

Representative McGilvra explained that Subcommittee No. 5 is requesting the introduction of a bill which would continue the six cents forest products harvest tax for the 1971-73 biennium. The statutory rate is five cents. A hearing is scheduled on the Forest Products Laboratory budget, at which time industry will be represented, and it is planned to suggest a seven-cent tax, raising an additional \$183,000. In order to do that, a vehicle will be necessary.

It is now envisioned that the Department of Justice may handle antitrust cases for any public body in the state, and in the event of a recovery such recovery will be placed with the State Treasurer. Upon an accounting by the Attorney General as to amounts advanced or paid in connection with the case producing the recovery, the Treasurer will pay to the Attorney General for deposit in the Antitrust Revolving Account the amount of such advances and payments plus 15 percent as compensation to the General Fund for financing the case. The remainder is to be distributed to the public bodies involved in the case.

Representative Lang moved that House Bill 1334 be amended as set out on the printed agenda, and as explained. Motion carried unanimously.

Representative Lang moved that House Bill 1334 be reported out "Do pass as amended." Motion carried unanimously, with Senator Fadeley not present for roll call vote.

House Bill 1945--Relating to pollution control bonds; creating new provisions; amending ORS 449.685; and declaring an emergency.

Senator Newbry, Chairman of Subcommittee No. 3, noted that at the time the resolution which called for the sale of pollution control bonds was considered, the need for some guidelines for the Department of Environmental Quality to carry out the granting of these funds to local communities was discussed, and this bill was introduced. Subsection (1) (a) of ORS 449.685 is amended to read: "To grant funds not to exceed 30 percent of total project cost for eligible projects as defined in ORS 449.455." Subsection (b) is amended to authorize the Environmental Quality Commission to acquire obligations in an amount not to exceed 70 percent of the total costs of eligible projects. A new subsection (c) reads: "To acquire by purchase, or otherwise, other obligations of any city that are authorized by its charter." This is to clearly tell the Department of Environmental Quality that in the case of Portland and North Bend and other cities where the charter authorizes the Council to enter into long term contracts that this would be a satisfactory arrangement. The addition to section 3 is to define the Internal Revenue Code of 1954, referred to in section 3, as including amendments in effect on March 1, 1971.

New sections 5 to 7 are to more clearly describe what is intended. Section 5 reiterates the policy of 30 percent grant and 70 percent local participation. Section 6 provides that any money remaining after a project is completed is to be returned to the state to retire bonds. Section 7 provides a system whereby federal grants, which the Subcommittee understood would be increased substantially, could be accommodated. The state would be permitted to go to a 30 percent maximum match, but if sufficient federal moneys are available, the state's contribution would be reduced to 25 percent if that amount is sufficient to gain the available federal matching. There is also a requirement that the city apply for federal funds; otherwise, it cannot get state funds.

Section 8 is amended to include \$13.5 million for grants and the rest of the sentence is deleted as this amount represents 30 percent of the total bond issue.

Senator Newbry moved that House Bill 1945 be amended as set out on the printed agenda, and as explained. Motion carried unanimously.

Senator Newbry moved that House Bill 1945 be reported out "Do pass as amended."

Senator Newbry pointed out that in accordance with the resolution which has been adopted authorizing the bond sale, it is essential that this bill be passed and signed by the Governor not later than April 6.

Representative Hansell asked whether it would be necessary for each session to pass a dollar amount authorization. Senator Newbry said it would, and thought it could be easily done as each session would have to consider an additional authorization for bond sales.

Senator Newbry's motion carried unanimously, with Senator Fadeley not present for roll call vote.

House Bill 1189--Relating to divorce fees; amending ORS 21.130; and declaring an emergency.

Senator Eivers said Subcommittee No. 1 considered this bill which increases divorce filing fees from \$10 to \$25. The moneys received by the county clerks from these fees are turned over to the state monthly for credit to the General Fund. It is estimated that passage of this bill will yield \$975,000 of General Fund revenue. The bill was introduced at the request of the Executive Department and the additional revenue is included in the Governor's estimates of revenue for the 1971-73 biennium.

Senator Eivers moved that House Bill 1189 be reported out "Do pass."

Senator Roberts pointed out that the statute reads that the fees are to cover the appearance of the district attorney in the suit or proceeding and questioned the increase in General Fund revenues. Mr. Gould explained that the salaries of the district attorneys are paid from the General Fund.

Senator Eivers' motion carried, with Senators Lent and Roberts voting "no" and Senator Fadeley not present for roll call vote.

House Bill 1465--Relating to the Economic Development Division; creating new provisions; amending ORS 184.105, 184.125, 184.135, 184.137, 184.140, 184.170, 148.190, 184.305 and 184.520; repealing ORS 184.200; and declaring an emergency.

Senator Eivers explained that this bill transfers the Economic Development Division from the Executive Department to the Office of the Governor, and was requested by the Governor. Subcommittee No. 1 believes that the Department can operate more effectively under the direct control of the Governor.

Senator Eivers moved that House Bill 1465 be reported out "Do pass." Motion carried unanimously, with Senator Fadeley not present for roll call vote.

Rep. Fadeley asked if the regions could be more restrictive than the DEQ, referring to Sec. 10, and the power of the DEQ over the regions. Rep. Skelton agreed there is inferential authority for regions to grant permits, but it is not clear. He suggested they vote on the bill, but leaving it in committee until this could be clarified.

Rep. Skelton's motion to send HB 1066 to the floor with a "do pass as amended" recommendation was restated and the motion carried with Rep. Gwinn voting "nay".

HB 1185

Mr. Kenneth Spies, Director of the DEQ, stated since the first hearing another measure had been passed which eliminated the cloud and they have sold \$45 M under the original authorization. Before the next biennium they will need additional bond sale for moneys authorized by the vote for the Constitutional amendment.

He believes they will get a substantial increase in Federal grants -- last 2 years they received \$8 M per year, but are expecting \$16 M now. With 25% state money and 50% federal, if 1185 is passed they will not have to reserve as much money for loans to local communities. He would suggest the enabling legislation be broadened to allow them to use the money for other than sewage treatment -- to help communities financially solve solid waste problems. And provisions should be made for advance planning funds.

Mr. Kessler Cannon, Governor's Assistant, volunteered to draft amendments to include solid waste. Rep. McGilvra believes in the metro area, solid waste is as serious a problem as sewage, and he has a strong feeling this was what the people had in mind when they passed the Constitutional amendment.

Chm. Mann suggested they talk in terms of expansion of dollars for solid waste planning instead of using language as broad as in the Constitutional amendment -- he doesn't believe they should open it up any more than that.

Mr. Lloyd Anderson, City of Portland Commissioner, was there in support of Mr. Spies' statement. Hopefully in this legislation there could be included the authority to handle solid waste. True, in Portland they hope for help in planning on solid waste problem. In Portland area they need \$600,000 for advance planning, and they could borrow from the state and repay from their revenue from the solid waste program.

In the past at the federal level there was a revolving fund for planning, which was a highly productive program in getting facilities constructed -- but it was put out of existence in recent years. It would be very helpful if a portion of this money could be used as a revolving fund for advanced planning for solid waste, etc.

HB 1066

Rep. Skelton had researched the minutes and the statutes and found nothing that says the regional air authorities have authority to grant permits of any kind, and Sec. 10 will cloud the issue.

HOUSE ENVIRONMENT COMMITTEE

May 7, 1971

3:00 p.m.

106B

Members Present: Rep. Mann, Chairman; Aucoin, Fadeley, McGilvra, McKenzie, Pynn, Skelton and Wolfer

Member Excused: Rep. Gwinn

Other: Gary Hill

Witnesses: Kessler Cannon, Governor's Assistant
Clifford E. Shirley
Pete Denevi
John Siracuso

The meeting was called to order by the Chairman, who then presented proposed amendments to HB 1185.

HB 1185

Chm. Mann explained the thrust of the amendments -- in the area of pollution bonding, of the \$100,000,000-\$30,000,000 would be for grants. \$1,500,000 would be devoted to reasonable use in the area of solid waste. The measure was requested by the Executive Department to authorize issuance of an additional \$50,000,000 to that authorized by the '69 Legislature. Both the DEQ and Mr. Cannon had testified they could see enough federal money to justify use of this money, and it could effectively be used in the area of solid waste -- construction, alteration of improvement of facilities, as well as planning.

The committee discussed limiting the funds for solid waste planning, and repayment to the state. Rep. McGilvra believes the Metro Service District would find it acceptable if limited to planning, but Rep. Pynn would have no objection to putting money into grants to get the solid waste programs going.

Rep. Pynn moved to amend Sub D of the proposed amendments, deleting \$300,000, and inserting \$500,000 and the motion carried unanimously. (Rep. Gwinn absent)

Rep. Skelton moved to adopt the proposed amendments to HB 1185, and the motion carried unanimously. (Rep. Gwinn absent)

Rep. Pynn moved to send HB 1185 to the floor of the House with a "do pass as amended" recommendation with prior reference to Ways and Means and the motion carried unanimously. (Rep. Gwinn absent)

Representative Hansell moved that House Bill 2008 be reported out to the Senate with the recommendation that it "Do pass as amended."

Senator Fadeley pointed out that this action does not in any way undermine the brucellosis program when destruction of the animal is for the common good.

Representative Hansell's motion carried unanimously on roll call vote.

Non-budget bills considered by Subcommittee and now before Full Committee:

Senate Bill 299--Relating to licensing of clinical laboratory personnel; Engrossed appropriating money; providing penalties; and prescribing an effective date.

Senator Newbry moved that Senate Bill 299 be rereferred to Subcommittee No. 3. Motion carried unanimously.

House Bill 1185--Relating to pollution control bonds; creating new provisions; amending ORS 449.672 and 499.685, and section 5, chapter 50, Oregon Laws 1971 (Enrolled House Bill 1945); and declaring an emergency.

Senator Roberts noted that the House Environmental Committee raised the bonding authority from \$50 to \$100 million and included solid waste facilities. Subcommittee No. 3 proposes amendments to authorize utilization of the bond proceeds for construction of solid waste facilities on a 75 percent local and 25 percent state matching arrangement. A \$1 limitation is contained in the appropriation for the Department of Environmental Quality for planning and construction of solid waste facilities. When local government decides to use these funds, plans should be presented to the Emergency Board with a request for a grant to the local agency for planning. After the people in the local area have approved bonds for building of solid waste disposal facilities, the local government will then be eligible for the bond money.

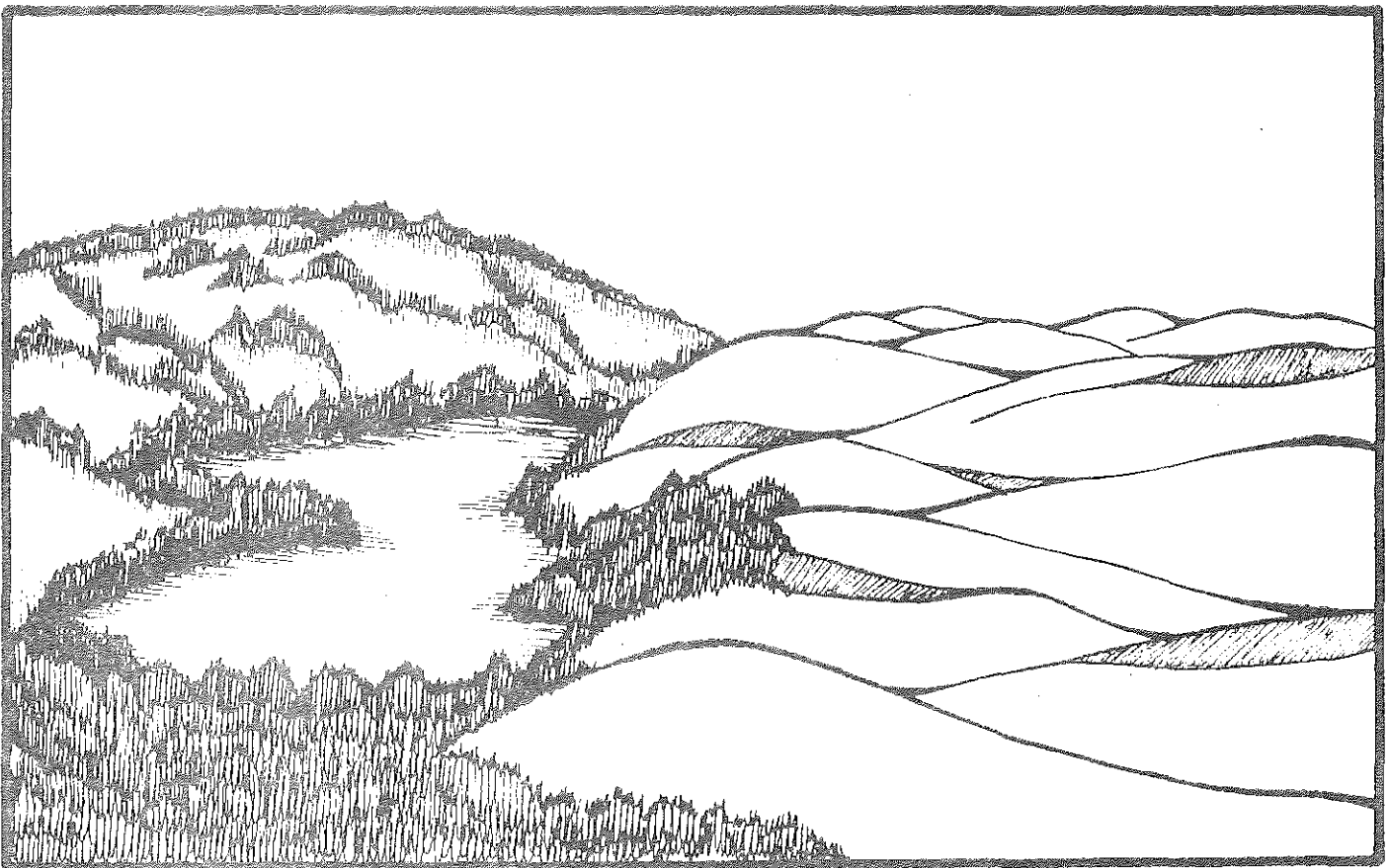
Senator Roberts moved that House Bill 1185 be amended as set out on the printed agenda. Motion carried unanimously.

Senator Roberts moved that House Bill 1185 be reported out "Do pass as amended." Motion carried unanimously on roll call vote.

House Joint Memorial 20--Memorializing Secretary of Transportation to recommend that U. S. Highway 20 be declared a part of the federal interstate transportation system.

Senator Potts explained that this memorial recommends to the Secretary of Transportation that U. S. Highway 20 be declared a part of the federal interstate transportation system. Proponents indicated to Subcommittee

North Florence Dunal Aquifer Study



June 1982



Lane Council of Governments

NORTH IN 420 LEVEL, 1500 FIFTH AVENUE EAST, EUGENE, OREGON 97401 • TELEPHONE (503) 687-4283



CREDIT SHEET

REPORT PREPARED JUNE 1982 BY:

Lane County
and
Lane Council of Governments
125 East 8th Avenue
Eugene, Oregon 97401, (503) 687-4283

STUDY MANAGEMENT BY:

Gerritt Rosenthal, 208 Program Manager
Lane Council of Governments
And
Roy Burns and John Stoner
Lane County

TECHNICAL EXECUTION:

Ralph Christensen, Lane County

TECHNICAL ASSISTANCE BY:

Bruce Mower, Lane County
Micheal Kimball, Lane County
Harry Youngquist, Lane County
Katherine Percy, Lane County Lab
James Ollerenshaw, Lane County Lab
Corliss Costy, private contract
Neil Mullane, DEQ

REPORT PRINTED BY:

Department of Environment Quality, June 1982, Portland Oregon

Preparation of this document was funded in part by Grant #P-000166-0103 from the U.S. Environmental Protection Agency under authority of Section 208 of the Federal Water Pollution Control Act of 1972 (PL-92-500) and 1977 (PL-95-217).

ABSTRACT

A study of the North Florence Dunal Aquifer was conducted to formulate alternatives for the protection of the aquifer from contamination by on-site sewage disposal. Characterization of the aquifer also allows for the possible formulation of remedial procedures to clean-up future spills or leaks, or protect against contaminant migration. In the current study nitrate-nitrogen was the contaminant/nutrient of primary concern.

The study consisted of a seismic survey to define aquifer boundaries and inhomogenities, a monitoring program to determine current water quality and head variations at various sites and settings on the aquifer, and a modeling effort to characterize the hydrogeologic parameters of flow. Through the use of digital modelling, the response of the aquifer to increased pumpage and drought was examined. Analysis of recharge data and loading rates allowed for definition of loading limits for Nitrate-Nitrogen.

Results of the study include the definition of critical areas of the aquifer for protection as well as the definition of Nitrate-Nitrogen loading limits necessary to stay within the 5.0 mg/L planning standard. The study indicates that most of the aquifer is relatively insensitive to nitrate and accommodate that most of the aquifer is relatively insensitive to nitrate and can accommodate up to 2.9 dwelling units per acre. The Clear Lake Watershed is shown to be very sensitive due to the susceptibility of Clear Lake to algae growth and dwelling unit limitations are calculated at 0.010 units per acre.

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Oregonian

features of the *Oregon Journal*

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high, 50; low, 42;
report on Page A2

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E

3 firms seek OK to delay cleanup

By JOHN HAYES
of The Oregonian staff

Three Oregon industrial companies facing enforcement action for missing pollution cleanup deadlines are asking for variances from pollution laws because of the depressed Oregon economy.

And the arguments have fallen on a sympathetic ear. Bill Young, director of the state Department of Environmental Quality, is recommending that the variances be granted.

Two of the companies have told the DEQ that business losses during the past three years have made it impossible to purchase the required air pollution control devices.

One of the companies, Mount Mazama Plywood Co. in Sutherlin, already has received two previous variances from pollution laws, but has failed to correct the problem by the promised deadlines.

Lawyers for Mount Mazama say the mill, the area's largest employer, will be forced to close if it is required to purchase pollution control devices required by the DEQ.

Two other companies asking for relaxations of cleanup deadlines are the Diamond International sawmill on the southwest edge of Bend and the diatomaceous earth processing plant of Oil-Dri Corp. of America at Christmas Valley in south-central Oregon.

The variances must be issued by the state Environmental Quality Commission, which will discuss the issues in a meeting starting 9 a.m. Friday in the DEQ's 14th Floor conference room, 522 S.W. Fifth Ave. in Portland.

The two wood products companies cited a general depression in the industry, with no change likely in the near future.

Lawyers for Mount Mazama Plywood told the DEQ that its parent company, Mazama Timber Products Inc., has suffered a net operating loss of more than \$9 million for the past two years when the balance sheets of all its

subsidiaries are combined.

Oil-Dri, which manufactures cat litter and oil absorbents, currently is logging sales at 32 percent below the break-even point, said Robert E. Messersmith, director of engineering for the company. Messersmith said Oil-Dri lost more than \$1 million during the past three years.

Diamond International has been issued a violation notice by the DEQ for emissions of black soot and fine wood dust, much of it from sanders and hog fuel boilers. The company has missed a July 1, 1982, cleanup deadline it promised to meet the year before.

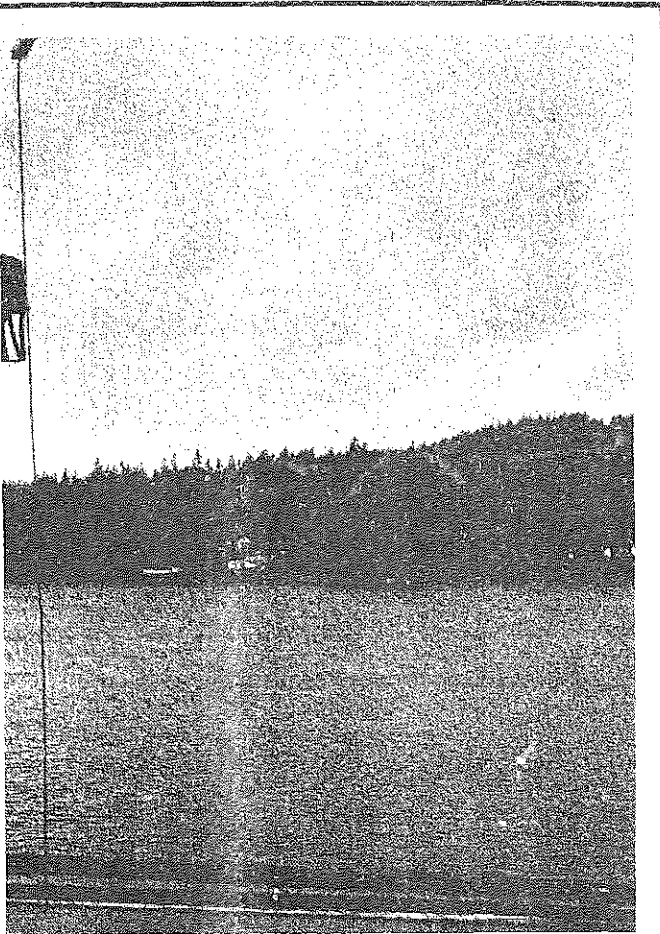
The company has asked for an extension until the end of 1984 in a variance from pollution rules issued by DEQ officials last year, citing "the current economic climate and in particular the depressed markets and prices for our products."

If forced to make the improvements requested by the DEQ, the expense would put the company "in a continuing mode of survival," company officials said.

Dust emissions from the Oil-Dri plant have violated state rules since 1979, stated a report to the state Environmental Quality Commission that was signed by Young. DEQ officials agreed to allow the company to operate until Feb. 1, 1982, while improvements were made to pollution control equipment. The DEQ threatened enforcement action in June, prompting Oil-Dri to apply for a variance from the rules until April 1, 1984.

The Mount Mazama Plywood Co. has violated emission limits from a large veneer dryer since before 1979, receiving a variance from the rules until Nov. 30, 1981, while corrections were made.

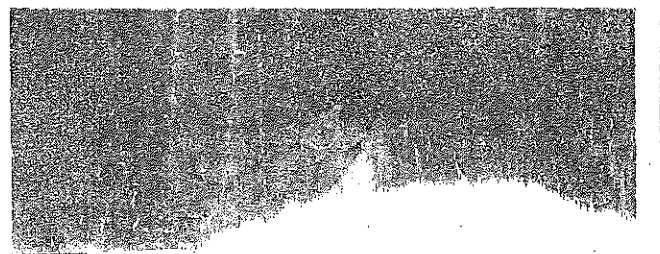
That deadline was missed, and the DEQ gave the company another variance in April requiring total cleanup by July 1, 1983. The company now has asked for an extension of that variance until Aug. 31, 1984.



Staff photos by ROSS HAMILTON and DAVID WEINTRAUB

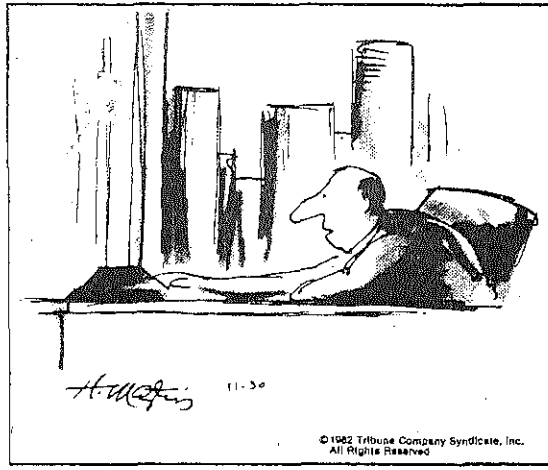
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spinnaker brightening a gray day. Meanwhile, at Clackamette Park at confluence of the Willamette and Clackamas rivers at Oregon City, Patti Cox and children Tara, 7, and Robert, 4, find hungry audience of ducks, pigeons and aggressive seagull. Pleasant time following storm that left half-inch of rain on many Western Oregon sites was expected to be followed by more rain Monday.



File: Oil-Dri 19-0018

JUST MANAGING



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"Miss Millwax, before you leave for the day could you please bring me the Barton report, the Comtex file, the Tellavox figures and a stuffed artichoke Fontecchio? Thank you."

Cat box mine scratches out profit

Christmas Valley all-natural litter the cat's meow

By LEVERETT RICHARDS
of The Oregonian staff

CHRISTMAS VALLEY — Christmas Valley is, indeed, the kitty litter capital of the country. More kitty litter is produced here than anywhere in the United States, spokesmen for Oil Dri, the producing company, say. Oil Dri's plant is the biggest industry in the valley — the only one until recently. About 30 people are employed at the plant year around, representing an annual payroll of about \$500,000.

The country's cats can thank the diatoms, tiny plants that lived in the lake thousands of years ago. When the plants died, their shells settled to the bottom, about 30 feet thick. The shells were made of soft silica, seasoned

with just the right amount of soda alkali to make ideal absorbent material, Danny Yancy, plant superintendent explained.

"We don't have to add anything, the natural soda alkali is ideal for absorbing odors.

The plant operates 24 hours a day in three shifts, turning out about 1,200 tons of finished product every month. The soft diatomaceous earth is scooped out of the ground into trucks that haul it to the mill for rinding and drying. Fine dust is removed leaving particles about the size of shotgun bird shot.

Oil Dri packages, some under its own name — Kitty Diggins, some without a name but most under house labels such as Purrfect for Safeway, Catsworth for Pay Less, and a half dozen others. Cats cry for it under any

name, Yancy said. He confessed he doesn't have a cat, but the trucks rolling throughout Oregon, Washington, Idaho and Nevada with the packaged cat's delight testify to the popularity of the product, which will absorb its own weight in liquids.

Its absorbent qualities make it in demand for cleaning up oil spills in garages and shops and a special Flow Free brand is used to clean up slaughterhouses, Yancy said.

The plant was started in 1973 by the American Fossil Co. A new plant was built on the present site in June 1976.

Oil Dri owns about 320 acres underlaid by the diatomaceous earth and mineral rights on about 1,000 acres of leased land.

Water turns dry alkali lake into verdant meadow

By LEVERETT RICHARDS
of The Oregonian staff

CHRISTMAS VALLEY — One legend claims that Capt. John Fremont, exploring Oregon in 1843, saw the white alkali sands of this ancient dry lake bed and named it Christmas Lake, mistaking the sand for snow.

If so, Fremont wouldn't know Christmas Lake Valley today. The white has turned to rich, verdant green. Where jackrabbits and coyotes once roamed the sagebrush and greasewood, modern, air-conditioned machinery now cuts and windrows lush crops of alfalfa.

Jack Gillette, 20-year veteran of the area, estimates that the alfalfa acreage has doubled in the past five years. The primary reason, of course, is comparatively cheap land and water made available by cheap electricity.

A single well supplies a thousand gallons of water per minute to a "circle" — a sprinkler 725 feet long, mounted on wheels, which slowly circles a 60-acre field. The water, plus fertilizer, makes the desert bloom during the hort but hot summer.

run its course.

Land prices have doubled and redoubled; the cost of electricity has increased 140 percent in the past couple of years; cheap money is no longer available; and the water supply is limited.

Some farm leaders point to the fact that the water table has remained fairly constant, but the Oregon Department of Water Resources is concerned about the future of the water supply. Three years ago the department proposed a survey of irrigation wells in the valley. In the spring of 1981 the department proposed to put meters on all wells to measure the amount of water actually pumped each season.

Valley farmers organized the water association to present a united front in dealing with the state. "The problem is not serious now," said Gillette, who is recognized as one of the valley's most successful farmers. "But there is reason for concern. The time to tackle the problem is now, before it becomes serious.

"History is full of examples of

that the water table has remained static the past few years. But that doesn't mean what it seems to mean.

"Those studies show that the water table is replenished strictly by rain and snow and thus varies from one season to another, allowing for a lag in time. While the water table has remained static, it should have risen. We have actually lowered the water table possibly three feet, when compared to the expected seasonal rise," he explained.

The Water Resources Department has not proposed any regulations as yet and the association has not made any specific proposals yet, Gillette said. But farmers have been alarmed by suggestions that the state, which must issue permits for every well, could cancel the most recent permits if it concludes that the water table is being jeopardized.

While the whole valley was once a

single lake, the water table varies greatly from one spot to another, Gillette said. His family farm, on the site of the town of Lake, one of the early reminders of the boom and bust era of 1909 to 1920, has irrigation wells drilled years ago at depths of 21, 25 and 42 feet. The well for his house is 52 feet deep. But the wells he drilled for new circles run from 300 to 625 feet in depth. Wells near Table Rock have gone down as much as 1,200 feet.

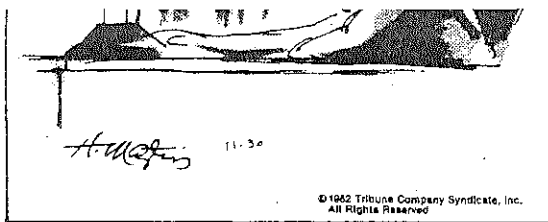
"The valley produces excellent hay, given the right fertilizers and enough water," Gillette summarized. "It meets a real need, but costs have risen and the demand has fallen as feeders lose their shirts. We need more and better markets if we are to break even." He estimates that it now costs about \$180,000 to put a quarter-section field into production.

Insight to Oregon politics

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Gillette, head of the North Lake Water Users Association, reports the number of circles has jumped from about 200 in 1977 to about 400 today. But Gillette, an agronomist who worked for the U.S. Soil Conservation Service for years, believes the Green Revolution has

run its course.

Land prices have doubled and redoubled; the cost of electricity has increased 140 percent in the past couple of years; cheap money is no longer available; and the water supply is limited.

Some farm leaders point to the fact that the water table has remained fairly constant, but the Oregon Department of Water Resources is concerned about the future of the water supply. Three years ago the department proposed a survey of irrigation wells in the valley. In the spring of 1981 the department proposed to put meters on all wells to measure the amount of water actually pumped each season.

Valley farmers organized the water association to present a united front in dealing with the state. "The problem is not serious now," said Gillette, who is recognized as one of the valley's most successful farmers. "But there is reason for concern. The time to tackle the problem is now, before it becomes serious.

"History is full of examples of boom-and-bust farming, where the water table has been drained until the land collapsed, as it did in some places in California," he said.

"We are far from that dilemma," he emphasized. "Our studies and two of the Water Resources Department agree

that the water table has remained static the past few years. But that doesn't mean what it seems to mean.

"Those studies show that the water table is replenished strictly by rain and snow and thus varies from one season to another, allowing for a lag in time. While the water table has remained static, it should have risen. We have actually lowered the water table possibly three feet, when compared to the expected seasonal rise," he explained.


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Insight to Oregon politics



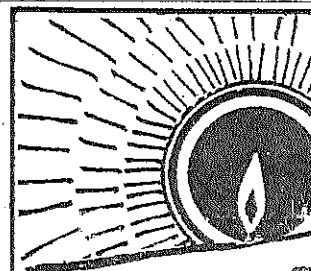
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