

5/24/1974

**OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS**



**State of Oregon
Department of
Environmental
Quality**

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A G E N D A

ENVIRONMENTAL QUALITY COMMISSION

meeting of

May 24, 1974

Second Floor Auditorium, Public Service Building
920 Southwest Sixth Avenue, Portland, Oregon 97205

9 a.m.

- A. Minutes of the April 19, 1974 Commission Meeting
- B. April 1974 Program Activity Report
- C. Public Hearing to Consider Adoption of Permanent Rules Pertaining to Administrative Procedures

NORTHWEST REGION

- D. PGE Harborton, Portland - Status Report; Authorization for Public Hearing to Consider Permit Modification
- E. PGE Bethel, Marion County - Status Report; Authorization for Joint Department of Environmental Quality/Mid-Willamette Valley Air Pollution Authority Public Hearing to Consider Modifications of Noise or Operating Limitations
- F. Boise Cascade, Salem - Proposed Permit Modification; Authorization for Public Hearing to Consider Proposed Expansion
- G. Cargill, Inc., Portland - Proposed Permit Modification
- H. Western Foundry, Tigard - Status Report; Proposed Compliance Schedule
- I. Reynolds Aluminum, Troutdale - Status Report; Proposed Permit Issuance
- J. Labish Village, Marion County - Proposed Moratorium on Subsurface Sewage Systems

WATER QUALITY

- K. Public Hearing on Proposed Amendments to National Pollution Discharge Elimination System (NPDES) Permit Procedures

AIR QUALITY

- L. Martin Marietta Aluminum, Inc., The Dalles - Issuance of Air Contaminant Discharge Permit
- M. Ambient Air Standard for Lead - Status Report

- N. Complex Source Rule Revision - Status Report
- O. Sulfur Content of Fuels - Informational Report
- P. Proposed Noise Rules - Status Report; Authorization for Public Hearing to Consider Adoption
- Q. Portland Community College, Rock Creek Campus - Proposed Parking Facility for 449 Spaces

LAND QUALITY

- R. Statewide Solid Waste Management Action Plan - Status Report
- S. Authorization for Public Hearing to Consider Proposed Regulations for State Financial Assistance to Public Agencies for Pollution Control Facilities for the Disposal of Solid Waste

The Environmental Quality Commission will meet for breakfast on Friday, May 24, 1974, at 7:30 a.m. in the dining room of the Congress Hotel, 1024 S. W. 6th Avenue, Portland.

A no-host luncheon is scheduled for noon at the Congress Hotel, Chart Room.

The Commission meeting will reconvene at 1:30 p.m.

H B Carter

Boise Cascade

~~W. J. ...~~
Arthur R. Bethe

Martin Marshall & Co.
CH2M HILL, INC.

Len Garrison

OHI of Oregon

Merlyn Hough

DEQ Penning

Stephen A. Orsini

Sierra Club

MINUTES OF THE FIFTY-SIXTH MEETING
of the
OREGON ENVIRONMENTAL QUALITY COMMISSION
April 19, 1974

Public notice having been given to the news media, other interested persons and the Commission members as required by law, the fifty-sixth meeting of the Oregon Environmental Quality Commission was called to order by the Chairman at 9 a.m. on Friday, April 19, 1974, in Room 310, Hoke College Center, Eastern Oregon State College, La Grande, Oregon.

The Chairman introduced Ronald M. Somers of The Dalles as a new member of the Commission, succeeding Arnold Cogan who had recently resigned. Other Commission members present were B. A. McPhillips, Chairman, Dr. Morris K. Crothers, Dr. Grace S. Phinney, and Jacklyn L. Hallock.

The Department was represented by Director Kessler R. Cannon; Deputy Director Ronald L. Myles; Assistant Directors Frederick M. Bolton, Wayne Hanson, and Kenneth H. Spies; staff members Thomas Guilbert, Ernest A. Schmidt, Barbara J. Seymour, Shirley G. Shay, Dr. Warren C. Westgarth and James Van Domelen, Pendleton Branch (Eastern Region) Engineer.

MINUTES OF THE MARCH 22, 1974 COMMISSION MEETING

It was MOVED by Dr. Crothers, seconded by Mr. Somers and carried that the minutes of the fifty-fifth meeting of the Commission, held in Salem on March 22, 1974, be approved as prepared and distributed.

ACTIVITY REPORT FOR THE MONTH OF MARCH 1974

It was MOVED by Mrs. Hallock, seconded by Dr. Phinney and carried that the actions taken by the Department during the month of March 1974, as reported by Mr. Myles, regarding the 64 domestic sewerage, 6 industrial waste, 29 air quality control, and 2 solid waste management projects be approved:

Water Quality Control - Northwest Region (12)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-7-74	Gresham	N. E. Everett Sewer	Prov. app.
3-11-74	Woodburn	Hawley Street Sewer	Prov. app.
3-11-74	Portland	N. Fairhaven Ave. between N. Fessenden St. & Smith St.	Prov. app.
3-11-74	West Linn	Hidden Springs #13 Subdn Sewer	Prov. app.

Water Quality Control - Northwest Region (cont)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-11-74	Gresham	195th/Milstun Park Sewer	Prov. app.
3-15-74	Lake Oswego	LID-154-Main Street Sewer	Prov. app.
3-21-74	Forest Grove	USA-Forest Grove Milton Lee Sewer	Prov. app.
3-25-74	Scappoose	O'Neil Second Add. Sewer	Prov. app.
3-27-74	Multnomah County	Victor Seven Sewer	Prov. app.
3-27-74	St. Helens	Pittsburg St., St. Helens Rd. & Tamarack Dr. Sewers	Prov. app.

Water Quality Control - Water Quality Division (52)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-5-74	USA (Aloha)	Hartwood Hylands Connecting Sewer	Prov. app.
3-5-74	Woodburn	C.O. #1, F.M. Contr & C.O. 1-7 STP, Contr	Approved
3-6-74	Klamath Falls	Pump Sta. Telemetering System	Prov. app.
3-6-74	Medford	Hilton Hts Sewer	Prov. app.
3-6-74	Springfield	East Moor Subdn Sewers	Prov. app.
3-6-74	North Bend	Street Imp. Dist. #3-73 Sewers	Prov. app.
3-6-74	Ashland	Lawson Prop. Sewer (Wimer St.)	Prov. app.
3-6-74	Ashland	Westwood St. Sewer & Grandview Dr. P.S.	Prov. app.
3-6-74	Umatilla	McNary Townsite Subdns #1, 2 & 3 Sewers	Prov. app.
3-11-74	USA (Durham)	Addenda 1-8, STP Contr	Approved
3-18-74	Astoria	C.O. #7-10, Interc. Contr	Approved
3-18-74	Klamath Falls	Americana Trunk Sewer	Prov. app.
3-18-74	Springfield	4th Addn. to Beau-Mont Subdn Sewers & Easton PUD Sewers	Prov. app.
3-19-74	Portland	C.O. #1 Lab & C.O. #7 STP Columbia Blvd.	Approved
3-20-74	Florence	North Florence Sewers	Prov. app.
3-20-74	USA (Fanno)	Ridgewood Ltd. #13 Sewers	Prov. app.
3-20-74	USA (Beaverton)	Channing Hts. Sewers & Chantrey Village Sewers	Prov. app.
3-20-74	USA (Metzger)	Greenburg Rd. Mini-Warehouse Sewer	Prov. app.
3-20-74	USA (Aloha)	Shalimar Subdn Sewer	Prov. app.
3-21-74	Springfield	Kelley Industrial Subdn Sewers	Prov. app.
3-25-74	USA (Beaverton- Fanno)	Bevest Ind. Park Sewers	Prov. app.
3-26-74	Canyonville	Canyon Creek Acres Subdn Sewers	Prov. app.
3-26-74	Roseburg	Rainbow End Subdn Sewers	Prov. app.
3-27-74	Echo	C.O. #B-1 STP Contract	Approved
3-28-74	Springfield	Springdale Manor Sewers	Prov. app.
3-28-74	Reedsport	Rev. Plans - Park Terrace Townhouse Sewers	Prov. app.
3-28-74	Hillsboro	C.O. #1-5 Hillsboro STP Contract	Approved
3-28-74	Yachats	C.O. #5 - STP Contract	Approved

Water Quality Control - Industrial Projects (6)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-1-74	Willamina	<u>U.S. Plywood, Champion Papers, Inc.</u> --modifications to water pollution abatement program	Prov. app.
3-1-74	Dayton	<u>Gray and Company</u> --waste water control facilities	Prov. app.
3-4-74	Brooks	<u>Terminal Ice and Cold Storage Co.</u> --construction of cold storage warehouse	Prov. app.
3-6-74	Corvallis	<u>Western Pulp Products Company</u> --waste water control facilities	Prov. app.
3-7-74	Boring	<u>Oregon Ready Mix Co., Inc.</u> --modification of water pollution control facilities	Prov. app.
3-14-74	North Plains	<u>Dant and Russell, Inc.</u> --collection and recirculation system	Prov. app.

Air Quality Control - Northwest Region (6)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-7-74	Multnomah County	<u>Publishers Paper</u> --control of veneer drier emissions utilizing water scrubber	Approved
3-12-74	Multnomah County	<u>Mayflower Farms</u> --control of feed and grain processing emissions by replacing cyclones with baghouses	Approved
3-14-74	Clackamas County	<u>Hall Process Co., Inc.</u> --control of coal tar emissions through use of fiberglass filtration	Approved
3-14-74	Multnomah County	<u>Linnton Plywood Corporation</u> --control of veneer drier emissions utilizing lower operating temperatures and combustion of emissions prior to discharge	Approved
3-21-74	Washington County	<u>Forest Fiber Products Co.</u> --control of wood dust from transfer cyclones by the addition of baghouses	Approved
3-28-74	Multnomah County	<u>Beall Pipe & Tank Co.</u> --control of shot blast emissions by use of a baghouse	Approved

Air Quality Control - Air Quality Division (23)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-5-74	Multnomah County	<u>Sheri-Lynn Apartments</u> --105-space parking facility	Cond. app.
3-5-74	Multnomah County	<u>Lynch Terrace School</u> --73-space parking facility	Req. add. info.
3-6-74	Washington County	<u>Davies Office Building</u> --66-space parking facility	Cond. app.

Air Quality Control - Air Quality Division (continued)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-8-74	Washington County	<u>The Snack Shop</u> --restaurant and commissary 180-space parking facility	Delayed
3-11-74	Washington County	<u>Randall Construction Co.</u> --Apartment, 343-space parking facility	Cond. app.
3-12-74	Multnomah County	<u>Oregon Steel Mills</u> --69-space office workers parking facility and 101-space production workers parking facility	Cond. app.
3-12-74	Washington County	<u>Deleco Corp. of Oregon</u> --81-space parking facility	Cond. app.
3-12-74	Douglas County	<u>Robert Dollar Company</u> --variance to operate bark drier @ 0.2 gr/scf at 25% opacity until 3-1-75	EQC approved
3-13-74	Multnomah County	<u>Lincoln Property Co.</u> --dock high warehouse 194-space parking facility	Req. add. info.
3-13-74	Multnomah County	<u>McDonald's Restaurant</u> --63-space parking facility	Req. add. info.
3-14-74	Multnomah County	<u>Fred Meyer</u> --484-space parking facility	Req. add. info.
3-15-74	Harney County	<u>Hines Lumber Company</u> --evaluation of source test report for hog fuel boiler	Req. add. info.
3-21-74	Douglas County	<u>Roseburg Lumber Company</u> --N/C #228, installation of 5 Hammerquist Baghouse Filters	Approved
3-22-74	Multnomah County	<u>Colonial Office Park</u> --71-space parking facility	Cond. app.
3-25-74	Morrow County	<u>Kinzua Corporation</u> --N/C #223, installation of Moore-Oregon "Lo-Em" control for 2 veneer driers	Cond. app.
3-26-74	Washington County	<u>Electro Scientific Industries</u> --251-space parking facility	Req. add. info.
3-26-74	Multnomah County	<u>U. S. National Bank of Oregon</u> --47-space parking facility	No action required
3-26-74	Lane County	<u>Pay Less Shopping Center</u> --650-space parking facility	Cond. app.
3-26-74	Tillamook County	<u>Oregon-Washington Plywood</u> --N/C #232, installation of 3 Hammerquist Baghouse Filters	Approved
3-27-74	Washington County	<u>Rock Creek Center</u> --Portland Community College 449-space parking facility	Req. add. info.
3-27-74	Klamath County	<u>Hudson Lumber Company</u> --N/C #233, Worden Division, installation of wood waste processing facility	Approved
3-29-74	Multnomah County	<u>Fairlawn Nursing Home</u> --60-space parking facility	Req. add. info.
3-29-74	Clackamas County	<u>Lincoln Properties Industrial Park</u> --1136-space parking facility	Req. EIS

Solid Waste Management (2)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-1-74	Columbia County	<u>Crown Zellerbach Corp., Vernonia Mill</u> --existing industrial site, operational plan	Approved
3-2-74	Columbia County	<u>Vernonia Disposal Site</u> --existing domestic site, operational plan	Approved

Attached to the activity report was a summary of work projects pending, as requested by the Commission. Mr. Myles said it was the Department's intent to update the summary periodically.

OREGON CUP AWARD SCREENING COMMITTEE REPORT

1. Proposed Rule Change

Mrs. Seymour presented the staff memorandum report concerning a rule change recommended by the Committee which would eliminate the position of committee secretary (on page 3, line 6 of the rules, delete the words "and a secretary").

Dr. Phinney suggested deleting lines 21 through 26 on page 2, as follows:

[For initial appointment, names of prospective committee members shall be submitted to the EQC by interested organizations as soon as practicable following adoption of these rules. Four members shall serve until July 1, 1973, and five members shall serve until July 1, 1974, with duration of appointment to be decided by lot among the nine members appointed by the EQC. For all subsequent years,]

and capitalizing the "n" in the word "names" following the comma.

It was MOVED by Dr. Phinney, seconded by Mr. Somers and carried that both rule changes be adopted.

2. Nomination--ESCO Corporation

Mrs. Seymour presented the staff memorandum report regarding the Committee's nomination of the ESCO Corporation (Portland) for an industrial award for its voluntary air pollution control efforts.

It was MOVED by Dr. Phinney, seconded by Mrs. Hallock and carried that the Oregon CUP (Cleaning Up Pollution) be awarded to ESCO Corporation.

3. Nomination--Joint Individual Award

Mrs. Seymour presented the staff memorandum report regarding the Committee's nomination of Rich Chambers (Salem) and Don Waggoner (Portland) for a joint individual award for their outstanding environmental efforts including their work to obtain passage of, and subsequently support, the Oregon bottle bill.

It was MOVED by Dr. Crothers, seconded by Mrs. Hallock and carried that the Oregon CUP be awarded jointly to Rich Chambers and Don Waggoner.

DESIGNATION OF AIR QUALITY MAINTENANCE AREAS

Mr. Guilbert read his report concerning the proposed designation of air quality maintenance areas (AQMA) in Oregon, which included a summary of testimony taken at public hearings held in Portland on April 12 and in Eugene on April 15. He modified the Conclusions and Recommendations portion of his report as follows:

"Aside from the slight anomaly that the DEQ's answer to Lane Regional Air Pollution Authority [regarding designation of photochemical oxidants], that is, that we don't have enough data to designate (it) for photochemical oxidants in Eugene-Springfield is essentially the same argument in a different form that the AOI made [against designation of sulfur dioxide in Portland] that our data isn't accurate enough to designate Portland for sulfur dioxide, and minor questions as to whether contiguous designated areas should be consolidated, there was no substantive testimony received that ran contrary to the staff report's recommendation. Your hearings officer thus recommends adoption of the staff recommendation."

Discussion followed objecting to testimony which proposed the consolidation of the Longview-Kelso Corridor (Washington) AQMA with the Portland-Metropolitan AQMA:

Mr. Hanson commented that "Oregon cannot formally designate Kelso-Longview," but because the problem is an interstate one, Oregon wants the area designated. He said further that the EPA has taken the position that the Longview-Kelso Corridor is a recognized problem area and plans to study it even though the Washington Department of Ecology has not said they would propose its designation as an AQMA.

Mr. Cannon stated that on April 16, he had discussed the issue with Mr. Ed Coate, Acting Administrator for Region X, EPA, and Mr. Coate said that EPA would mediate but not arbitrate the Longview-Kelso impact on the Portland-Metropolitan area. Mr. Cannon further stated that the EPA is the only agency that has interstate jurisdiction.

Mr. Cannon and Mr. Hanson informed the Commission that Oregon and Washington have jointly applied for \$50,000 in federal funds for the purpose of setting up a model of this entire airshed which hopefully will permit the two

states to determine with some certainty the degree of impact of air contaminants and where that impact will come with future development of the area.

Dr. Crothers asked if there was any method by which the State of Oregon could sue an industry in the Longview-Kelso Corridor AQMA for contaminating the Rivergate (Portland) area, assuming that Longview-Kelso is dumping particulates and not being adequately controlled, and the economic growth in the Rivergate area is therefore stopped.

Mr. Somers suggested that the Attorney General's office or the DEQ staff attorney prepare a memo on this possibility. He further stated that by adopting the report and setting standards, boundaries are fixed and damaged areas such as the Port of Portland's Rivergate industrial park would have a cause of action directly against the offending Washington industry for damages for their potential clients.

It was MOVED by Mr. Somers, seconded by Dr. Phinney and carried to approve the recommendation of the hearings officer to adopt the staff report which included proposing designation of the following air quality maintenance areas: Portland-Metropolitan area for particulates, sulfur dioxide, carbon monoxide, and photochemical oxidants; Longview-Kelso Corridor for particulates and sulfur dioxide; and the Eugene-Springfield and the Medford-Ashland area for particulates.

DOUGLAS-FIR TUSSOCK MOTH MONITORING PLAN, STATUS REPORT

Dr. Westgarth informed the Commission that the ad hoc Task Force for Planning and Implementing Monitoring of the Tussock Moth Problem Area in Oregon and Washington had met on April 18th in Walla Walla, involving 67 persons from 23 agencies.

He presented his report concerning plans for the environmental monitoring of 408,000 acres in the event the area is sprayed with DDT for the purpose of controlling the tussock moth infestation. He noted that the program is incomplete in that it is only a residue monitoring program.

In response to questions, Dr. Westgarth said that as soon as the snow in the area melts sufficiently to permit entry, a preliminary study would be made for the purpose of getting a pre-spray reading of the area. Dr. Westgarth explained the three-step program: the application of DDT, monitoring of that application to see that it hit the target area, and monitoring of the residue. The Task Force would begin the residue monitoring immediately following the DDT

application, and monitor again in the fall and the spring of 1975. The second phase of the program--which is not funded--proposes a long-term combined research effort to determine the long-range effects of DDT.

The Commissioners and the Director expressed their concern for funding of the second phase and their continued commitment to explore all possibilities for financial assistance.

PUBLIC FORUM

No one wished to be heard when the Chairman announced the Public Forum scheduled for 10 a.m.

SOLID WASTE TIRE DISPOSAL, CENTRAL REGION

Mr. Bolton gave a slide talk presentation on the tire disposal problem in and around Mitchell in Central Oregon. He said that in February 1974, the Central Region, DEQ, was informed by members of the Wildlife Commission that they had observed a number of tires in the Mitchell area. At the same time, Mr. Schmidt of the Department's Solid Waste Management Division received an application for a permit to dispose of tires in that area. Department staff immediately inspected the area and saw the results of a flash flood which dislodged tires that had been hauled to an unauthorized disposal site on the Robert Woodward ranch outside Mitchell. The tires were generated by the Les Schwab Production Center in Prineville and had previously been disposed of at the rate of about 4,000 per month at the company's disposal site at Grassy Butte Cinder Pit until the Highway Division terminated the site in March 1973. DEQ staff had tried unsuccessfully since the spring of 1973 to determine where the tires were being disposed. The Wildlife Commission report, the receipt of the application for a solid waste disposal permit and subsequent staff investigation revealed the Woodward ranch as the point of origin of the tires.

Mr. Bolton informed the Commission that Mr. Woodward had contracted with Les Schwab's Prineville plant to haul and dispose of tires that had come to the plant for retreading but had not passed the company's retread standards. Mr. Woodward intended to use these tires for soil stabilization, but in about a 10-month period hauled approximately 40,000 tires to his property which proved to be too many to handle adequately. Following the January flash floods in the area, about 10,000 tires washed away, and the Department since has received reports of tires observed as far away as the John Day River, although most have been found within 16 miles of the Woodward ranch.

Mr. Bolton said the problem is two-fold: the retrieval and disposal problem faced by the Woodwards, and the disposition of tires and unsatisfactory retreaded tires by Les Schwab at Prineville and the company's three-state outlets. Solutions are being mutually explored by the Department, the Woodwards and the company.

Questions followed as to how the Department would recover its costs for monitoring the cleanup of the tires. Mr. Bolton said the Department preferred not to levy civil penalties at this time because all parties are cooperatively searching for a viable, economic approach to the problem. Meanwhile, waste tires are being retained at the Prineville plant, and the Department is awaiting a disposal plan requested from the company by May 1st.

Mr. Schmidt briefly explained methods of tire disposal. In the Portland-Metropolitan area, a shredder has been operational for about 15 months. A passenger car tire can be shredded and incorporated into a landfill at a cost of 16¢. The Metropolitan Service District also has adopted an ordinance to become effective in August 1974, which establishes a program for controlling the movement of waste tires. In Central and Western Oregon, tires will continue to be hauled to authorized landfills. However, in the long run the Department hopes that energy recovery disposal systems, such as grinding and burning, can be perfected. Currently, burning still presents problems such as gaseous and metallic particulate emissions.

DEQ LABORATORY PROPOSAL

Mr. Cannon summarized his memorandum report concerning the conclusions of an Executive Department study of alternatives for a new DEQ laboratory facility.

Portland State University, which proposed conversion of existing space for DEQ laboratory use, received the highest recommendation. Another proposal was to build a laboratory at Clackamas Community College in Oregon City. Higher education bonds might possibly be used for the Portland State facility, but a General Fund appropriation would be necessary for a new building. The legal questions involved in the use of the bonds still have not been resolved.

Mr. Cannon recommended that the Commission support Portland State's proposal and his recommendations outlined in an April 10th memorandum, and further to authorize him to support the Executive Department's request to the Emergency Board for approval of the Portland State University site and the funding of the necessary architectural and engineering fees.

It was MOVED by Dr. Crothers to approve the Director's recommendation with the added comment that the proposal is "highly desirable." The motion was seconded by Mr. Somers and carried.

TUSSOCK MOTH

Prior to his slide talk presentation, Dr. Westgarth distributed pictures of the tussock moth in its larval and adult stages and close-ups of the damaged areas.

Slides of the infested area showed a very rugged terrain with high hills, valleys and streams. These waterways are affected by ongoing salvage logging operations which cause runoffs into the streams with the probability of sediment problems for the next ten years. Even though some very small streams are involved, they are important because they are spawning streams for migratory fish.

Dr. Westgarth briefly explained the spraying operation by helicopters, noting that the job must be done by the end of May or the first week in June when the larvae hatch and are in their first and most dangerous stage, which is also the time when they are most susceptible to DDT. The 408,000 acres designated for spraying include trees of different species, untouched by the tussock moth which is selective to the Douglas fir and true firs.

Following the presentation, Mr. Loren Hughes, a La Grande businessman and the Vice Chairman of the Oregon Forest Practices Act, Eastern Region, discussed the devastation and long-range impact of the tussock moth on the Northeast Oregon forests. He said that all of the damaged areas will be entirely salvage logged, and that the sites of heaviest damage were unproductive areas, in large measure due to the forest management practice of monoculture. Clear-cutting will provide many healthy sites for mixed culture tree growth.

He discussed the economic impact on the area, noting that salvaged logs are bringing in only about 25 percent of their value because the magnitude of the salvage logging operations has depressed the market. The trees must be cut within two years of being killed by the tussock moth since fir trees are particularly susceptible to insect damage. Boise Cascade is putting in a chipping plant to utilize small trees and insect-damaged trees.

Mr. Hughes explained that reforestation in Northeast Oregon is usually accomplished by natural regeneration. The Forest Practices Act rules for the

Eastern Region require that a tree must appear naturally on an open stand within three years or the area can be manually planted.

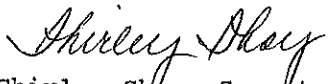
In reply to a question as to what help the Commission might provide, Mr. Hughes said help is needed to enforce the Forest Practices Act, and the Commission and the Department could provide assistance through their involvement in water quality programs.

The Chairman asked if anyone else wished to speak.

Mrs. Harold Zurbrick, of La Grande, asked for help concerning fallout on her residence from the Boise Cascade particleboard plant, and assistance in protesting the possible burning of the county's solid waste in Boise Cascade's furnaces. The Chairman told her to write to the Department giving necessary details.

Mr. Ernest J. Kirsch, Union County Extension Agent, commented on problems faced in forestry and agriculture by prohibition on the use of some insecticides known to control certain pests. The result is that research is being done to find alternate methods of controlling these pests. On the other hand, in Central Oregon thousands of acres of pine trees have been killed by the pine beetle but very little research has gone into finding means of controlling it. He approved the use of DDT on the tussock moth damaged areas.

There was no further business and the meeting was adjourned at noon.


Shirley Shay, Secretary
Environmental Quality Commission

MINUTES OF THE FIFTY-SEVENTH MEETING

of the

OREGON ENVIRONMENTAL QUALITY COMMISSION

May 24, 1974

Public notice having been given to the news media, other interested persons and the Commission members as required by law, the fifty-seventh meeting of the Oregon Environmental Quality Commission was called to order by the Chairman at 9 a.m. on Friday, May 24, 1974, in the Second Floor Auditorium of the Public Service Building, 920 Southwest Sixth Avenue, Portland, Oregon.

Commission members present were B. A. McPhillips, Chairman, Dr. Morris K. Crothers, Mrs. Jacklyn L. Hallock, Dr. Grace S. Phinney, and Ronald M. Somers.

The Department was represented by Director Kessler R. Cannon; Deputy Director Ronald L. Myles; Assistant Directors Wayne Hanson (Air Quality), Harold L. Sawyer (Water Quality) and Kenneth H. Spies (Land Quality); Regional Administrators E. Jack Weathersbee (Northwest), Verner J. Adkison (Midwest) and Richard P. Reiter (Southwest); staff members Thomas R. Bispham, Barbara A. Burton, Michael J. Downs, Russell H. Fetrow, Thomas R. Fisher, Thomas Guilbert, Patrick L. Hanrahan, John M. Hector, Merlyn L. Hough, Raymond M. Johnson, John F. Kowalczyk, John R. Lariviere, Gary W. Messer, Allen H. Mick, Douglas D. Ober, Harold M. Patterson, Ernest A. Schmidt, Barbara J. Seymour, Shirley G. Shay, Fredric A. Skirvin, Paul M. Stolpman, Dr. Warren C. Westgarth, and Chief Counsel Raymond P. Underwood.

Representing EPA Region X, Oregon Operations Office, was Director John J. Vlastelicia.

MINUTES OF THE APRIL 19, 1974 COMMISSION MEETING

It was MOVED by Dr. Crothers, seconded by Mr. Somers and carried that the minutes of the fifty-sixth meeting of the Commission, held in La Grande on April 19, 1974, be approved as prepared and distributed.

PROGRAM ACTIVITY REPORT FOR THE MONTH OF APRIL 1974

Mr. Myles reported the actions taken by the Department during the month of April 1974, regarding the following 48 domestic sewerage, 2 industrial waste, 26 air quality control, and 5 solid waste management projects:

Water Quality Control - Northwest Region (17)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
4-2-74	Gladstone	Ridgewood No. 2 Sewer	Prov. app.
4-2-74	Salem	Chadwick Glen Subdn. Sewers	Prov. app.
4-3-74	West Linn	Schlabach Tract Sewers	Prov. app.
4-8-74	Salem	Eola Dr. N.W. Barberry St. Sewer	Prov. app.
4-9-74	Portland	S.E. Barbara Welch Road Sewer	Prov. app.
4-9-74	Troutdale	Santana Addition Sewers	Prov. app.
4-9-74	Oak Lodge S.D.	Oakridge Subdn. Phase 2 Sewers	Prov. app.
4-10-74	Marion County	Illahe Hills Country Club Sewer	Prov. app.
4-15-74	Salem	Southtree Estates Sanitary Sewer Imp.	Prov. app.
4-16-74	Multnomah County	Errol Heights Park Sewers	Prov. app.
4-16-74	Portland	Waste Disposal Facility for Harbor Patrol Base	Prov. app.
4-17-74	Lake Oswego	Jan's Subdn. L.I.D. 139	Prov. app.
4-24-74	Hillsboro	Portland - Hillsboro Airport Sewer	Prov. app.
4-25-74	Gladstone	Charolais Heights Sewers	Prov. app.
4-25-74	Warrenton	First St., Birch Court to Block 133 Sewers	Prov. app.
4-26-74	Multnomah County	Barkerbrook & Holcomb Hts. Sewer	Prov. app.
4-26-74	Gresham	Bartels' Sewer Extension	Prov. app.

Water Quality Control - Water Quality Division (31)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
4-1-74	Medford	Harry & David Factory Sanitary Sewers	Prov. app.
4-1-74	Central Point	First St. & Fourth St. Sewer	Prov. app.
4-1-74	USA (Tigard)	Panorama West Condominium Sewer	Prov. app.
4-1-74	Toledo	Shewey's Addn. Sewer	Prov. app.
4-1-74	USA (Aloha)	STP Expansion Equipment	Prov. app.
4-1-74	Pendleton	Mt. Hebron & Downtown Bypass Int.	Prov. app.
4-2-74	Cedar Hills	Lynnwood Relief Sewer (USA)	Prov. app.
4-2-74	Astoria	C.O. #11 to Sch. A - Int. Project	Approved
4-5-74	Oak Lodge S.D.	C.O. #7 - STP Contract	Approved
4-5-74	Florence	Florence St. Sewer	Prov. app.
4-5-74	Sunriver	West Cascade Trunk Sewer - Mt. Village East Trunk Sewer	Prov. app.
4-5-74	Astoria	C.O. #6 Sch. C - STP Contract	Approved
4-8-74	Springfield	Seeger Estates - 2nd Addn. Sewers	Prov. app.
4-8-74	USA (Aloha)	Equip. Specifications - STP Expansion	Prelim. app.
4-9-74	Bend	Greenwood Manor Apt. Sewer	Prov. app.
4-11-74	Sutherlin	Sherwood Dr. Sewer	Prov. app.

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
4-11-74	Crestellyn Acres	Plans for Completion of Sewage Pumping Station and 0.7 Acre Sewage Lagoon	Prov. app.
4-11-74	Woodburn	C.O. #1 - STP Contract	Approved
4-12-74	Boardman	Homestead Village No. 1 - Trailer Park Sewers	Prov. app.
4-17-74	Salem (Willow Lake)	STP Expansion - 70 MGD - Full Secondary	Prov. app.
4-22-74	North Bend	Spruce St. Sanitary Sewer	Prov. app.
4-22-74	Prineville	Hillcrest Subdn Sewers	Prov. app.
4-24-74	USA (Forest Grove)	T.V. Hwy Sewer Relocation	Prov. app.
4-26-74	USA (Gaston)	Evert Brown Sewer	Prov. app.
4-27-74	Florence	Spruce Subdn Sewers	Prov. app.
4-29-74	Pendleton	Addendum #1 - Mt. Hebron Sewer	Approved
4-30-74	BCVSA	Renault Ave. & Stearns Way Sewers	Prov. app.
4-30-74	Junction City	Lynch Subdn Sewers	Prov. app.
4-30-74	Echo	C.O. #A-1 - Sewer Contract	Approved

Water Quality Control - Industrial Projects (2)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
4-3-74	Clackamas County	<u>Eagle Creek National Fish Hatchery</u> waste water control facilities	Prov. app.
4-12-74	Washington County	<u>M. W. Sandhagen Dairy</u> animal waste facilities	Prov. app.

Air Quality Control - Northwest Region (6)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
4-11-74	Multnomah County	<u>General Battery Corporation</u> control of fumes from lead melting pots utilizing fabric filter	Approved
4-15-74	Multnomah County	<u>Beall Pipe and Tank Corporation</u> control of asphalt and coal for emissions from the coal tar pots and pipe coating and lining operation, by passing the contaminated air through four fiberglass filtration systems	Approved
4-16-74	Multnomah County	<u>Ash Grove Cement Co.</u> control of quick lime dust during kiln startup and shutdown by ducting the emissions to the existing baghouses	Approved
4-16-74	Multnomah County	<u>Terminal Flour Mills Company</u> control of grain and flour dust emissions from existing cyclones by replacing them with three reverse air jet bag filters	Approved

Air Quality Control - Northwest Region (cont)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
4-17-74	Clackamas County	<u>Alpine Veneer, Inc.</u> control of veneer drier emissions by combustion of the hydrocarbons prior to discharge	Approved
4-17-74	Multnomah County	<u>McCall Oil and Chemical Company</u> construction of a 270,000 barrel capacity storage tank for No. 6 fuel oil	Approved

Air Quality Control - Air Quality Division (20)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
4-1-74	Hood River County	<u>Champion International, U.S. Plywood Division</u> installation of a wood waste energy recovery system with hog fuel boiler	Cond. app.
4-2-74	Coos County	<u>Roseburg Lumber Co. Plant #5</u> installation of Hammerquist baghouse filters	Approved
4-2-74	Douglas County	<u>Roseburg Lumber Co. Plant #4</u> installation of Hammerquist baghouse filters	Approved
4-2-74	Douglas County	<u>Roseburg Lumber Co. Plant #3</u> installation of Hammerquist baghouse filters	Approved
4-8-74	Multnomah County	<u>Fred Meyer Shopping Center</u> 484-space parking facility	Approved
4-11-74	Multnomah County	<u>Lynch Terrace School</u> 73-space parking facility	Cond. app.
4-12-74	Washington County	<u>Tanasbourne Town Center</u> 705-space parking facility	Req. add. info.
4-15-74	Multnomah County	<u>Woodlawn Housing Project</u> 100-space parking facility	Cond. app.
4-15-74	Lane County	<u>Weyerhaeuser Co., Springfield</u> installation of a system to control TRS emissions from "other sources"	Approved
4-15-74	Lane County	<u>Weyerhaeuser Co., Springfield</u> installation of an electrostatic precipitator for lime kiln particulate control	Approved
4-17-74	Douglas County	<u>Hub Lumber Co.</u> installation of wood waste recovery system with hog fuel boiler	Approved
4-18-74	Hood River County	<u>Hanel Lumber Co.</u> installation of wood waste recovery system with hog fuel boiler	Approved

Air Quality Control - Air Quality Division (cont)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
4-22-74	Clackamas County	<u>Holly Farm Shopping Center</u> 501-space parking facility	Req. add. info.
4-22-74	Multnomah County	<u>Mountain Village Apartments</u> 450-space parking facility	Req. add. info.
4-23-74	Washington County	<u>Sunset Volkswagon</u> 171-space parking facility	Conceptual app.
4-24-74	Multnomah County	<u>PGE Office Building</u> 401-space parking facility	Approved
4-25-74	Marion County	<u>Kaiser Aetna</u> (shopping center) 420-space parking facility	Cond. app.
4-26-74	Lane County	<u>Coburg Plaza</u> (Phases II & III) 65-space parking facility	Cond. app.
4-26-74	Lane County	<u>Wood Products Credit Union</u> 93-space parking facility	Cond. app.
4-26-74	Multnomah County	<u>Cooper Development Co.</u> (apartments) 76-space parking facility	Conceptual app.

Solid Waste Management - Northwest Region (2)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
4-18-74	Tillamook County	<u>Crown Zellerbach Corporation</u> Hallinan Road Disposal Site, new wood waste landfill; proposed permit	Approved
4-22-74	Yamhill County	<u>U.S. Plywood Corp.</u> Willamina Mill Landfill; existing wood waste landfill; letter authorization	Prov. app.

Solid Waste Management - Solid Waste Management Division (3)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
4-2-74	Linn County	<u>Lebanon Sanitary Landfill</u> existing domestic site; Operational Plan	Prov. app.
4-5-74	Linn County	<u>Tomco Inc. Landfill</u> existing domestic site; Operational Plan	Prov. app.
4-10-74	Lane County	<u>Marcola Disposal Site</u> existing domestic site; Operational Plan	Prov. app.

Dr. Crothers asked to what extent, if any, was an enterprise in the state delayed because the Department did not have the necessary staff to process a permit application in a timely manner. The staff acknowledged delays in processing permit applications in all program areas, particularly NPDES permit

applications, primarily due to procedural requirements of federal legislation, but also due to the shortage of staff in certain areas.

Dr. Crothers asked about the status of the sewage disposal plans submitted by Wa-Chuck for the Portage Inn, The Dalles. Mr. Cannon replied that on May 23, the Department had received a letter from the City of The Dalles, stating that the City would accept the sewage from the facility and supervise its handling. Mr. Sawyer explained that Wa-Chuck proposed building a holding tank as an interim facility.

It was MOVED by Mr. Somers, seconded by Mrs. Hallock and carried to give confirming approval to the staff actions reported.

PUBLIC HEARING ON ADOPTION OF PERMANENT RULES PERTAINING TO ADMINISTRATIVE PROCEDURES

Proper notice having been given as required by state law and administrative rules, the public hearing in the matter of the adoption of permanent rules pertaining to administrative procedures was called to order by the Chairman at 9:30 a.m. All Commissioners were in attendance.

Mr. Myles presented the staff memorandum report dated May 9, 1974, proposing that the present temporary rules pertaining to administrative procedures, which repealed Sections 11-005 through 11-170, Oregon Administrative Rules, Chapter 340, Division 1, Subdivision 1, and adopted in lieu Sections 11-005 through 11-135, adopted by the Commission on March 22, 1974, be adopted as permanent rules of the Commission.

Mr. McPhillips noted for the record that no correspondence on this matter had been received to date. He then opened the hearing for public testimony. However, no one wished to testify.

It was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that the present temporary rules be approved and adopted as permanent rules of the Commission pertaining to administrative procedures. (A copy of these rules is made a part of the permanent file.)

PGE HARBORTON (PORTLAND), STATUS REPORT AND REQUEST FOR PUBLIC HEARING

Mr. Kowalczyk presented the staff memorandum report regarding the status of

the air contaminant discharge permit issued by the Department on September 21, 1973, for PGE's Harborton gas turbine electric generating facility, with respect to future operation and fuel use projections and a detailed and comprehensive compliance demonstration program and schedule.

The report contained the Director's recommendation that a public hearing be authorized before a hearings officer in Portland, at a time and place to be determined by the Director, to consider modifying PGE's Harborton permit in accordance with the following staff recommendations:

1. Incorporate PGE's projected fuel use-operating schedule for the 13-month period beginning July 1, 1974, into the Harborton permit as a maximum allowable use.
2. Require minimum use of the facility to the extent possible.
3. Continue to require use of natural gas to the maximum extent available when operation is necessary.
4. Require a detailed projected fuel use-operating schedule for each remaining month of operation to be submitted to the Department for approval by the 15th of each preceding month.
5. Require monthly reports on the progress toward relocation of the plant to be submitted to the Department each month beginning August 1, 1974.
6. Prohibit commercial power generation until compliance with permit conditions is demonstrated or an acceptable compliance schedule is submitted and approved for particulate and carbon monoxide emissions while gas firing, smoke spot when oil firing and sound pressure levels.
7. Require a comprehensive air monitoring program and schedule to be submitted to the Department for approval by August 1, 1974, for implementation beginning September 1974, which will define actual air quality impact of the facility including plume rise under various meteorological conditions including "worst" ventilation conditions.
8. Provide for restricting operating hours and/or power levels at Harborton if noise becomes a significant problem prior to attaining compliance with sound pressure levels contained in the Harborton air contaminant discharge permit.

Mrs. Hallock asked if the Department had received any information from the City of Portland regarding the status of the land use permit, which will expire in the fall of 1974, issued by the City for the Harborton facility. Mr. Cannon replied that the Department had been advised that a definitive answer from the City would be forthcoming in early June. He added that if the Commission approved the request for a public hearing, he would want it held within a month.

Dr. Phinney asked for clarification of the manner in which the decision is made as to the amount of natural gas available.

Mr. H. A. Porter, Senior Vice President of Portland General Electric Company, replied that PGE had requested an estimate from Northwest Natural Gas Company as to the availability of gas for this fall, and the best estimate is that no gas will be available during the winter months. Mr. Porter said that it is PGE's view that availability of fuel will be restrictive as far as the company's ability to operate is concerned.

Discussion followed on the staff evaluation of the performance of the turbines with respect to emissions control capability.

It was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that the Director's recommendation for a public hearing be approved.

PGE BETHEL (MARION COUNTY)--STATUS REPORT, JOINT PUBLIC HEARING

Mr. Mick presented the staff memorandum report regarding complaints of noise and vibration from the operation of PGE's gas turbine power generating facility at the Bethel substation located east of Salem.

He reported that a public hearing has been scheduled before the Environmental Quality Commission and Mid-Willamette Valley Air Pollution Authority Board at 7:30 p.m. on June 17, 1974, in the City Council Chambers of the Salem Civic Center, in order that the EQC and MWVAPA Board can receive an updated evaluation of the environmental impact of the Bethel turbine generators and to consider the need for possible modification of PGE's air contaminant discharge permit and/or noise limits or operating conditions. A tour of the Bethel facility and nearby residences will precede the public hearing.

WEYERHAEUSER COMPANY, May 13, 1974 PUBLIC HEARING

The Chairman stated that the tentative agenda for this meeting anticipated a report on the subject hearing and an opportunity for public comment. Although the agenda item was subsequently removed, Mr. McPhillips wanted to provide an opportunity for anyone from the Springfield area who might have come to Portland to testify. However, no one responded to the Chairman's invitation.

BOISE CASCADE (SALEM)

Mr. Fetrow presented the staff memorandum report regarding a proposed modification to the air contaminant discharge permit for Boise Cascade's Salem Pulp and Paper Plant, and authorization for a public hearing to consider the company's proposed expansion of pulping capacity and improvements to its waste water control facility.

In order to meet the recovery system particulate requirements by June 1, 1975, as stated in the permit, Boise Cascade submitted to the Department a Notice of Construction and Application for Approval of the installation of a mist eliminator on the recovery furnace, action on which was requested of the Commission at this meeting; and the installation of counter current washers and an additional (eighth) digester, to be the subjects of the proposed public hearing.

The report contained the Director's recommendation that the Commission:

1. approve, subject to staff approval of detailed plans and specifications, installation of a mist eliminator to control plume opacity and particulates and authorization of modifications to Boise Cascade's Air Contaminant Discharge Permit as per Attachment A;
2. authorize a public hearing to be held at the Salem Civil Center at 7:30 p.m., June 27, 1974, to further consider proposed expansion of pulping capacity and proposed improvements to wastewater control facilities.

Mr. C. J. Fahlstrom, Resident Manager of the Boise Cascade Salem Pulp and Paper Mill, distributed to the Commission copies of a prepared statement which he read (a copy has been made a part of the permanent file).

In summary, Mr. Fahlstrom's statement agreed with the clarifying intent of the wording change in Condition 1, Section A of the proposed modification to the Salem mill air contaminant discharge permit, but requested a change in the recommended construction and demonstrated compliance dates for installation of a mist eliminator to control plume opacity (from June 1, 1975 to July 1, 1975) because of a delayed delivery time given by the manufacturer. The company also asked for a hearing earlier than the proposed June 27th date.

It was MOVED by Mr. Somers, seconded by Dr. Phinney and carried to approve the Director's recommendation with the substitution of the company's proposed revised schedule.

CARGILL, INC. (PORTLAND)

Mr. Bispham presented the staff memorandum report regarding a proposed modification of the company's air contaminant discharge permit to accommodate a revised compliance schedule submitted by the company together with a check for the full amount of the civil penalty levied (\$100 per day for 20 days in violation).

In summary, the Cargill proposal incorporates a three-phase control program:

Phase I proposes to relocate the existing barge unloading facility and utilize a modified conveyor system by January 1, 1975. The company believes this will result in an 80 percent reduction of particulate emission from this operation.

Phase II relates to the control of emissions from the truck and grain transfer and receiving, transfer of grain to storage and grain cleaning facilities. Compliance of these facilities would be accomplished in the same time frame as the original schedule.

Phase III encompasses the control of emissions from the barge unloading and ship loading operations. Cargill has requested a final completion date of May 1, 1976, which exceeds the original compliance date by six months for this portion of the overall control program.

Mr. Bispham presented the Director's recommendation that the Commission authorize acceptance of the proposed revised compliance schedule and incorporation of said schedule into a proposed modified permit to be issued pursuant to required notice and hearing procedures.

It was MOVED by Mr. Somers, seconded by Mrs. Hallock and carried to approve the Director's recommendation.

Discussion followed concerning the effectiveness of the \$100 per day penalty, the maximum amount that can be levied for a permit violation. It was generally agreed that the amount was large enough to deter pollution and to gain the attention and subsequent cooperation of companies in violation.

Mr. Cannon noted for the record that as far as the Department is concerned, "both Cargill and The Port of Portland were equally at fault in getting us to this position and delaying the improvements that were necessary to resolve the problem."

PUBLIC FORUM

The Chairman altered the order of the agenda to provide an opportunity for anyone in attendance to be heard on any subject pertinent to the Commission's jurisdiction. No one responded.

WESTERN FOUNDRY COMPANY, WASHINGTON COUNTY

Mr. Bispham presented the staff memorandum report regarding "recent excessive and highly visible" emissions from the operation of Western Foundry Company for which the Department issued a Notice of Violation on January 31, 1974. In subsequent meetings with Western Foundry representatives, the Department required the company to submit a short-range program for best practicable control of the entire foundry. This requirement will be met by June 3, 1974, when the original scrubber serving the cupola and electric arc furnace will be on line. Regarding the long-range program to provide separate control systems for the electric arc furnace, sand-handling processes and cleaning room, the Department and Western Foundry Company agreed to the following compliance schedule which will be incorporated into the company's forthcoming permit:

1. June 15, 1974, or before, submit a Notice of Construction with engineering plans and specifications for the control of air contaminants from the electric arc furnace, sand-handling equipment and cleaning room operations.
2. August 15, 1974, or before, receive Department approval of the engineering plans and specifications with any required amendments.
3. September 15, 1974, or before, the company shall have issued purchase orders for the air pollution control equipment approved in item #2 with copies thereof furnished to the Department.
4. February 1, 1975, or before, Western Foundry Company shall furnish proof to the Department of procurement of the air pollution control equipment approved in item #2.
5. March 1, 1975, or before, the company shall have initiated on-site construction for the installation of the air pollution control equipment.
6. May 1, 1975, or before, Western Foundry Company shall complete the installation and adjustment of the air pollution control equipment and have attained compliance with the Department standards. (At this time, the existing restored Venturi scrubber system would serve only the existing cupola.)

The Director's recommendation requested the Commission to authorize acceptance of the proposed program and compliance schedule for incorporation in the Western Foundry permit subsequent to the required public notice and hearing.

Commissioners and staff discussed the issue raised by Mr. Somers as to the propriety of the Commission's accepting this type of recommendation until the entire administrative process was completed; that is, by granting acceptance of the proposal at this time, the Commission would be giving de facto approval without benefit of other information which might be brought to the public hearing. Mr. Somers commended the staff for assisting the company in developing control procedures to attain compliance, but wanted to avoid placing the Commission in a posture of prejudging an applicant.

Mr. Weathersbee agreed and said that the purpose of the report was to bring the matter to the Commission for their information and direction. Mr. Underwood said that the staff memorandum should have been worded as a status report to the Commission without any recommendation for action by the Commission.

The Commission concurred and added that they appreciated being advised.

REYNOLDS ALUMINUM (TROUTDALE)

Mr. Kowalczyk presented the staff memorandum report on the status of activities related to issuance of a proposed air contaminant discharge permit to Reynolds Metals Company. A public hearing to consider adoption of the proposed permit has been set for June 10, 1974, in Portland before the Department's Hearings Officer.

No formal action by the Commission was required.

Discussion followed on Dr. Crothers' question to Mr. Somers as to the propriety of members of the Commission visiting aluminum plants. Mr. Somers stated that if there is known conflict in the proposed issuance of a permit and/or a substantial question over the issuance of a permit, the Commission or any member of the Commission must not take ex parte testimony from one side or the other without giving the other side an opportunity to be present. Where

there is no known conflict in the issuance of a permit, or when the Commission is considering administrative regulation that would affect an entire industry, the Commission should make every effort to learn as much as possible about the particular plant or industry.

Mr. Cannon pointed out that if three or more Commissioners visit a plant, requirements of the public meeting law must be met.

Mr. Underwood summarized by stating that under Fasano, the Commission must avoid ex parte contacts in a conflict situation. The Commission must also avoid visits in such numbers that the members are technically involved in a public meeting without prior notice. Other than those two exceptions, the Commission could conduct whatever visits or inspections it deemed necessary to and appropriate to the conduct of its business.

LABISH VILLAGE (MARION COUNTY), PROPOSED MORATORIUM ON SUBSURFACE SEWAGE SYSTEMS

Mr. Messer presented the staff memorandum report dated May 13, 1974, on Labish Village subdivision with respect to problems with the subsurface sewage systems because of soil formation and lot size. Sewage failures in the subdivision have been estimated as high as 50 percent by the Director of Marion County Health Services. The decision to sewer the subdivision was recently reached by Marion County, the City of Salem, the Marion-Polk Boundary Commission, and the Department of Environmental Quality. The residents of the area have also recognized the need for sewers and a Sanitary Service District is in the process of being formed.

Mr. Cannon provided more detail on the problem presented by Labish Village. The subdivision lies beyond the containment boundaries for the City of Salem established by the Marion-Polk Boundary Commission. The problem of the septic tank failure rate in the area could have been resolved either by sewerage the area or by forcing the residents to move out. All parties concerned met and agreed upon the proposal presented to the Commission, that is, to build a pressure sewer line to serve Labish, connecting it to the City of Salem, and ask the Commission to place a moratorium on further development within the subdivision; ask the appropriate governmental units to prohibit further building outside the area; and request the Commission and the Department to control the development of the area by issuing a waste discharge permit on the sewer line.

Mr. Somers questioned the Commission's authority to use a waste discharge permit to facilitate the resolution of local zoning problems.

Mr. Sawyer explained that the county service district which is being established in the area would propose a collection system of a certain size and capacity and apply to the DEQ for a permit to construct and operate the system; the Department's responsibility would be to review the permit application to insure that it meets DEQ requirements. He added that the key reason for limiting septic tank installation in the areas outside of but immediately adjacent to Labish Village is that continued installation of septic tanks with their high rate of failure would force annexation to the City of Salem to solve a health hazard problem and could result in expansion of the subdivision through the mandatory extension of the city sewer system.

Mr. Messer clarified the Director's recommendation by stating that the Department was requesting the Commission to authorize a public hearing to consider the moratorium proposal.

It was MOVED by Mr. Somers, seconded by Mrs. Hallock and carried to set the matter for public hearing.

PUBLIC HEARING ON PROPOSED AMENDMENTS TO NPDES PERMIT PROCEDURES

Proper notice having been given as required by state law and administrative rules, the public hearing in the matter of the adoption of proposed amendments to the National Pollutant Discharge Elimination System (NPDES) permit procedures was called to order by the Chairman at 11:30 a.m. All Commissioners were in attendance.

Mr. Sawyer presented the staff memorandum report dated May 14, 1974, proposing amendments to the waste discharge permit rules adopted by the Commission on September 21, 1973, by adding language to section 45-035, subsections (6), (7) and (8), Oregon Administrative Rules, Chapter 340, Division 4, Subdivision 5, as follows (new material underscored):

Subsection (6): After the 14-day applicant review period has elapsed, the public notice and fact sheet shall be circulated in a manner prescribed by the Director. Any public notice under this section shall be prepared and circulated consistent with the requirements of regulations issued under the Federal Act. The fact sheet,

proposed NPDES permit provisions, application and other supporting documents will be available for public inspection and copying.

- (7) The Director shall provide an opportunity for the applicant, any affected state, or any interested agency, person, or group of persons to request or petition for a public hearing with respect to NPDES applications. If the Director determines that useful information may be produced thereby, or that there is a significant public interest in holding a hearing, a public hearing will be held prior to the Director's final determination. There shall be public notice of such a hearing.
- (8) At the conclusion of the public involvement period, the Director shall make a final determination as soon as practicable and promptly notify the applicant thereof in writing. Any NPDES permit issued hereunder shall contain such pertinent and particular conditions as may be required to comply with the Federal Act or regulations issued pursuant thereto. If the Director determines that the NPDES permit should be denied, notification shall be in accordance with section 45-050. If conditions of the NPDES permit issued are different from the proposed provisions forwarded to the applicant for review, the notification shall include the reasons for the changes made. A copy of the NPDES permit issued shall be attached to the notification.

These additions essentially formalize procedures which are presently in effect by virtue of a memorandum of agreement between EPA and the Department.

The only witness who wished to be heard on this matter was Mr. Christopher Kittell, representing the Northwest Environmental Defense Center (NEDC), who distributed to the Commission copies of a prepared statement which he then read (a copy is made a part of the permanent file). As a part of his statement, he proposed further changes to the proposed amendments to the NPDES rules which the NEDC believed would more clearly establish compliance with the Federal Act and regulations issued pursuant thereto.

Following the Commission's questioning of the witness, Mr. Underwood pointed out that the pertinent issue before the Commission was consideration of whether or not the proposed amendments presented by Mr. Sawyer be adopted. Mr. Kittell or any one else could petition the Commission for rule changes under the procedural rules adopted by the Commission earlier in the day.

It was MOVED by Dr. Crothers, seconded by Mr. Somers and carried that the proposed amendments to the NPDES rules be adopted.

The Chairman recessed the meeting for luncheon.

MARTIN MARIETTA ALUMINUM, INC. (THE DALLES)

Following the luncheon recess, the Chairman reconvened the meeting at 1:30 p.m.

Mr. Skirvin presented the staff memorandum report dated May 17, 1974, regarding the public hearing conducted by the Commission on May 3, 1974, at The Dalles, for the purpose of (1) considering an air contaminant discharge permit proposed for issuance to Martin Marietta Aluminum, Inc. and (2) considering a petition on behalf of the Wasco County Fruit and Produce League requesting that the Commission designate The Dalles as a Special Problem Area.

The matter before the Commission at this meeting was:

1. to determine whether or not The Dalles area should be designated as a Special Problem Area, and
2. to determine whether or not the proposed permit should be issued. (The proposed permit as written requires compliance with the existing aluminum plant emission limits upon issuance.)

Mr. Somers asked that the transcript made of the hearing be corrected to show that on page 140, Mr. Somers, not Mr. Haskins, was speaking.

It was MOVED by Dr. Crothers, seconded by Mr. Somers and carried that no action be taken on the request for designation of The Dalles as a Special Problem Area. Mrs. Hallock voted "no" and for the record the Chairman voted "aye."

It was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that the proposed air contaminant discharge permit be issued as proposed.

AMBIENT AIR STANDARD FOR LEAD, STATUS REPORT

Mr. Johnson presented the staff memorandum report dated May 17, 1974, regarding a proposed ambient air standard for lead which will be presented for public hearing on June 24, 1974 in Portland. The following standard will be recommended for adoption:

The lead concentration measured at any sampling station, using sampling and analytical methods on file with the Department, shall not exceed 2.0 ug/m³ as an arithmetic average concentration of all samples collected during any three calendar month period.

Discussion followed on the problem of enforcing such a standard and on the health hazard aspect of high concentrations of lead in the ambient air.

It was MOVED by Mr. Somers, seconded by Mrs. Hallock and carried that the report be accepted as part of the record.

COMPLEX SOURCES RULE REVISION, STATUS REPORT

Mr. Downs presented the staff memorandum report dated May 20, 1974, regarding proposed revisions to the Complex Sources Rule adopted in January 1972, following adoption of Oregon's Clean Air Act Implementation Plan. The Environmental Protection Agency (EPA) has required its revision as a part of the Department's Maintenance of Air Quality Standards.

The main points made by EPA for consideration in revising the rule are: 1) regulations and procedures must apply statewide; 2) rule requirements must apply to other traffic generating sources as well as highways and parking facilities; 3) specific provisions must be made for complex sources proposals to be made available for public review and comment; and 4) owners and operators of proposed complex sources must comply with applicable portions of the transportation control strategy in the State Implementation Plan.

Mr. Downs summarized the proposed revision of the rules which will be presented at a public hearing on June 24, 1974, in Portland.

It was MOVED by Mr. Somers, seconded by Mrs. Hallock and carried to adopt the status report as part of the record.

SULFUR CONTENT OF FUELS, INFORMATIONAL REPORT

Mr. Hanson presented the staff memorandum report dated May 20, 1974, regarding Commission rules pertaining to sulfur content in fuel oils, and specifically the rule pertaining to residuals, incorporated as part of Oregon's Clean Air Act Implementation Plan, which after July 1, 1974, requires that "no person shall sell, distribute, use, or make available for use, any residual oil containing more than 1.75 percent sulfur by weight."

Following is a summary of the oral report presented by Mr. Hanson:

Late last fall the Commission adopted the following position relative to the energy crisis in the United States: "The nation must find ways to produce energy without degrading the environment. In Oregon, industry and the public need to understand that the Environmental Quality Commission will not use the energy crisis to back off from environmental quality standards."

In January, the Department wrote to oil suppliers to obtain information as to what the shortage would be, what kind of sulfur content they would be able to supply the state, and how much more oil they would be able to supply if in fact the regulations were changed. Letters received in reply and other information received by the Department indicate a general concern among industry distributors and oil manufacturers as to their ability to meet the Department regulation of 1.75 percent sulfur by weight in residual oil. There evidently is no problem in meeting the Department's regulations on the lighter distillates such as home heating oil.

Northwest Natural Gas Company has notified industrial users that there could be a potentially greater shortage of natural gas this winter, which would mean a greater dependency on residual oil. Some of the oil companies have notified their customers and distributors that they are not going to be able to supply them oil because of the Department regulation.

Mr. Hanson then read a copy of the letter sent by the Department in early May to approximately 60 companies which included manufacturers, major industrial users and distributors. In summary, the letter informed the recipients that a partial response to the information requested from them by the Department in January, 1974, indicated there may be some difficulty in complying with the 1.75 percent sulfur limitation for residual fuel, effective July 1, 1974; that currently "the Department does not have sufficient information to justify a specific recommendation to the Commission nor to project a long-range plan. Therefore, unless specific written applications with supporting information justifying a variance are received and granted by the Commission, we [the Department] will have no alternative but to strictly enforce the regulation."

Following Mr. Hanson's presentation and questions from the Commission members, the Chairman called on witnesses who wished to be heard.

Mr. Thomas C. Donaca, General Counsel, Associated Oregon Industries (AOI), distributed copies of a prepared statement which he read (a copy is made a part of the permanent file). In summary, Mr. Donaca's testimony dealt with the

problems of lack of availability of residual fuels, regulations pertaining to sulfur content by weight recently promulgated by the Federal Energy Office, and difficulties posed by the variance procedure. In view of these and other matters reported by Mr. Donaca, AOI requested a one-year extension of the 2.5 percent sulfur limitation, from July 1, 1974 to July 1, 1975.

Mr. Jack R. Brown, representing Crown Zellerbach, distributed copies of a prepared statement which he read (a copy is made a part of the permanent file). In summary, Mr. Brown's testimony indicated the steps taken by Crown Zellerbach to acquire adequate supplies of fuel that would meet Oregon's environmental requirements. The company's supplier, Union Oil Company, has indicated it cannot meet the 1.75 percent sulfur limitation during the 1974-75 winter period. Further, Crown Zellerbach was informed by Northwest Natural Gas Company "to expect between 180 to 210 days of 100% gas curtailment between September 1, 1974 and May 31, 1975" (the previous winter Crown Zellerbach experienced 138 days' curtailment). Thus, the estimated fuel oil usage has had to be increased. The company also supported the one-year extension of the 2.5 percent sulfur limitation.

Mr. David C. Klick, Secretary of the Northwest Food Processors Association, and speaking on behalf of 28 Oregon members of the Association, distributed copies of a prepared statement which he read (a copy is made a part of the permanent file). In summary, Mr. Klick's testimony affirmed the dependency on residual fuel for the processing industry as well as other kinds of industry in Oregon, particularly if natural gas is curtailed. Further, "...any shortage of residual fuel oil caused by DEQ's enforcement of a 1.75% limit which suppliers cannot meet would have an adverse affect on food processors..." The Association recommended maintenance of the 2.5 percent sulfur limitation for another year.

Mr. Leonard Gassner, Executive Director, The Oil Heat Institute of Oregon, commented on his concern for the 20 or so members of the Institute who distribute residual oil, and for the more than 2,500 end-users of residual fuel oils in Oregon, including schools at all levels, state institutions, apartment houses, hotels, rest homes and various major industries. He agreed that distributors did not have control over the product they received, but added that the end users also did not have control. He said the variance procedure would present "an unusual administrative problem" due to the large number of variances

applications that would have to be filed. He urged a one-year extension of the 2.5 percent sulfur limitation.

Mr. Cannon pointed out that the Department had made a good faith effort to get the information needed to make an evaluation of the situation and recommendation to the Commission. He wanted the record to note the dismay and frustration "we have all experienced...with the apparently highhanded position of the oil companies."

Mr. Dennis L. Samuelson, Superintendent of the Portland Terminal, Union Oil Company of California, submitted a letter which indicated that Union Oil intended to file an application for a variance prior to June 10th. Representatives from the Company plan to attend the June 21st meeting of the Commission in Coos Bay. (A copy of the letter is made a part of the permanent file.)

There were no other witnesses.

Mr. Cannon noted for the record that the Commission and Department had received a letter from Hanna Nickel Smelting Company in Riddle, Oregon, requesting the Commission to delay for one year implementation of the 1.75 percent sulfur by weight limitation. (A copy of this letter is made a part of the permanent file.)

PROPOSED NOISE RULES, STATUS REPORT

Mr. Stolpman presented the staff memorandum report dated May 15, 1974, on the status of departmental implementation of the noise control enabling legislation, which requires the Department to establish specifications for equipment to be used in the monitoring of noise emissions and the procedures for the collection, reporting, interpretation and use of data obtained from noise monitoring activities prior to the adoption of noise control regulations. To meet this requirement, Department staff prepared the following procedures manuals, the contents of which were summarized in the staff report:

1. Sound Measurement Procedures Manual, NPC-1
2. Requirements for Sound Measuring Instruments and Personnel, NPC-2
3. Motor Vehicle Sound Measurement Procedures Manual, NPC-21

The remainder of the staff report dealt with a proposed policy statement applicable to all noise rules, exceptions and variances, and a summary of the

proposed standards for new and in-use motor vehicles including off-road recreational vehicles and motorcycles.

Mr. Stolpman presented the Director's recommendation that on June 21, 1974 in Coos Bay, the Commission hold a public hearing for the purpose of adopting the noise manuals and the noise rules for motor vehicles.

Mrs. Janette Egger, Chairman of the Oregon Environmental Council Noise Pollution Subcommittee, read a brief statement regarding the roadways section of the proposed noise rules, requesting a hearing on this section within two months, to be held in a centrally located city.

It was MOVED by Mr. Somers, seconded by Dr. Crothers and carried to approve the Director's recommendation to hold the requested public hearing.

PORTLAND COMMUNITY COLLEGE, ROCK CREEK CAMPUS, PROPOSED PARKING FACILITY

Mr. Downs presented the staff memorandum report dated May 23, 1974, regarding an application from Portland Community College (PCC) to construct a 449-space parking facility ancillary to a proposed new PCC campus known as the Rock Creek Campus.

Land use and transportation problems were analyzed in the report, concluding with the Director's recommendation that the Commission issue an order prohibiting construction of the 449-space parking facility proposed by Portland Community College, without prejudice to the right of Portland Community College to file a revised application when an approved location has been obtained from the Columbia Region Association of Governments (CRAG).

Witnesses were called by the Chairman.

Mr. Hugh McGilvra of Forest Grove, member of the Board of PCC and District Zone #7 representative, discussed the concept of PCC with its emphasis on technical and vocational education as it related to the ancillary developments proposed in the PCC Master Plan for the Rock Creek Campus. He summarized the five-year development of the proposed campus and discussed the problems presented by changing requirements imposed by successive Washington County planning directors. Continued delays have extended the opening date of the campus from September 1974 until at least the fall of 1975.

Mr. John Mosser, attorney for PCC, stated that he was unaware of any problems with the parking facility application until the week of the May 24th Commission meeting. He said that the site work specifications were out for bid and that the architects were working on final plans for the building which PCC hoped to let out for bid in August or September. He developed the project's history to illustrate "how thoroughly the campus has worked with all the agencies which make up CRAG..."

Mr. Mosser pointed out that the final choice of the Rock Creek site was urged by a former Washington County planning director, and thus 250 acres were purchased in 1970 for \$550,000 from local funds. Recent land use zoning changes established the Rock Creek site as a forest conservation and agricultural zone. PCC, however, applied to Washington County and secured conditional use approval for the campus to continue in the Rock Creek location. Final approval is contingent upon PCC's meeting site plan conditions specified by the Washington County Planning Commission at its meeting on May 14th, that is, PCC must have EQC approval of the parking space facility, Boundary Board approval for water and sewerage, and must submit a landscape plan.

PCC submitted its parking facility application on March 15, 1974, and on March 27th received a letter from the DEQ requesting additional details on the proposed transit service and computer carpool program. DEQ subsequently received a letter from the CRAG staff indicating CRAG disapproval of the Rock Creek site. This letter and the land use questions it raised was the basis for the Director's recommendation to prohibit construction of the facility until the land use question was resolved. Mr. Mosser stated that this letter was not authorized by the CRAG Board because the proposed campus has never been discussed by the Board, and that both staff and members of CRAG's Board agreed with PCC that approval must come from the Washington County Planning Commission, not from CRAG.

Mr. Mosser suggested that the Commission authorize the parking facility but with the provision that if the CRAG Board votes on May 31st that it does not want the campus at Rock Creek, the EQC disapprove it; or, authorize the Director either to approve the parking facility if there is no action by the CRAG Board on May 31st, or to reject the parking facility if the CRAG Board says on May 31st that it does not want PCC to locate at Rock Creek.

Discussion followed concerning acreage devoted to agriculture, requirements for a building permit, and the status of the Washington County Master Plan.

Roger Mellem, Administrative Assistant, presented the prepared statement of Multnomah County Commissioner Donald E. Clark, who could not attend the meeting because of a prior commitment (a copy is made a part of the permanent file). Commissioner Clark urged the Commission to prohibit construction of the parking facility "until such time as all of the questions are answered and concerns are resolved." He recommended that the site location matter be referred to CRAG for resolution.

In the discussion that followed, Dr. Crothers asked Mr. Mosser if CRAG now has any legal standing to disapprove the use of the land. Mr. Mosser replied that it does not have, that CRAG hopes to have a first draft of a master plan by July 1, 1975 for adoption in 1977, after which the agency would be in a legal position to review and act upon plans approved previously by other governmental units.

Mr. Roy Hemmingway, representing the Oregon Environmental Council, spoke against the PCC parking facility application. He felt that the Commission should consider the project in a comprehensive fashion and not just its air pollution impact.

Mr. Downs stated that the staff report as prepared only addressed the land use implication because it is the policy of the Commission not to take action until land use problems are resolved. Although the report did not specifically address the transportation aspects of the application, the staff found the proposed program inadequate. Action on the application had been withheld because of land use problems and the inadequacy of the application.

Dr. Crothers MOVED that approval be granted for construction of a 449-space parking facility unless the CRAG Board at its May 31st meeting disapproves the site; seconded by Mr. Somers.

Dr. Phinney questioned tying Commission approval to CRAG's consideration of the land use matter on May 31st, when the subject was not on CRAG's meeting agenda. Both Dr. Phinney and Mrs. Hallock expressed concern for the proposed PCC transportation program which the DEQ staff felt was not adequate.

Voting 'aye' were Mr. Somers and Dr. Crothers; voting "no" were Dr. Phinney and Mrs. Hallock. The Chair voted "aye."

Mr. McPhillips suggested Mr. Cannon contact the CRAG Board prior to May 31.

STATEWIDE SOLID WASTE MANAGEMENT ACTION PLAN, STATUS REPORT

Mr. Schmidt presented the staff memorandum report dated May 14, 1974, on the status of the Statewide Solid Waste Management Action Plan. Funds in the amount of \$1,129,630 have provided 22 local government planning projects and one service and assistance project to local governments and the Department by the Bureau of Governmental Research and Service, University of Oregon. A contingency balance of \$21,652 remains. The Statewide Solid Waste Management Action Plan is scheduled for completion in late fall 1974.

A summary of the status of state planning projects as of May 14, 1974, was attached to the report.

POLLUTION CONTROL FACILITIES FOR DISPOSAL OF SOLID WASTE--REQUEST FOR PUBLIC HEARING TO CONSIDER PROPOSED REGULATIONS

Mr. Schmidt summarized the staff memorandum report dated May 15, 1974, requesting authorization to hold a public hearing before the Commission at the June 21, 1974 Commission meeting in Coos Bay, to receive public testimony pertaining to proposed rules for state financial assistance to public agencies for pollution control facilities for the disposal of solid waste.

It was MOVED by Dr. Crothers, seconded by Mr. Somers and carried to authorize the hearing.

Mr. Cannon stated for the record that the Commission noted the fact that Mrs. Hallock left the meeting following the Portland Community College agenda item, to enter the hospital for surgery. The Commission expressed concern and extended very best wishes to Mrs. Hallock.

The meeting was adjourned at 5:15 p.m.

Shirley G. Shay, Secretary
Environmental Quality Commission

EQC clears way for Rock Creek campus

The state Environmental Quality Commission Friday quashed last-minute opposition to the Rock Creek site for a Portland Community College campus.

By a 3 to 2 vote, the commission approved a 449-space parking lot for the first phase (600 students) of the campus on 250 acres north of 186th Avenue and Springville Road in Washington County. The site is adjacent to the proposed Rock Creek Reservoir.

In another 3 to 2 vote, the EQC rejected a petition of Wasco County fruit growers to designate The Dalles area as having a special air pollution problem. The designation would have required Martin-Marietta Co. to find some way to further improve

efficiency of controls on fluoride emissions.

The commission instead approved an air emissions permit drafted by the Department of Environmental Quality staff. In essence, the permit sets standards which the DEQ believes reduce fluoride damage to cherries but do not impose hardships that could force closure of the aluminum plant.

EQC Chairman Barney McPhillips, McMinnville, and members Ronald So-

mers, The Dalles, and Dr. Morris Crothers, Salem, voted for the PCC parking lot and against designating a special problem at The Dalles. Members Jacklyn Hallock, Portland, and Grace Phinney, Corvallis, voted the opposite.

The EQC also scheduled a June 17 hearing in Salem to discuss noise problems at Portland General Electric's Bethel generating station, and ordered DEQ Director Kessler Cannon to schedule

a hearing on air and noise pollution problems at PGE's Harborton plant in Northwest Portland.

The commission gave Boise Cascade Corp. an additional year to bring its Salem pulp and paper mill into compliance with clean air standards; the new deadline is June 1, 1975.

Wood products and food processing industry spokesmen urged the commission to keep the standard for residual oil at 2.5 per cent of sul-

phur by weight until July 1, 1975. Imposition of a 1.75 per cent limit as scheduled this July 1 would mean the state's six major oil suppliers failing to sign contracts to sell in Oregon, the EQC was told.

With increased curtailment of natural gas expected during the 1974-75 heating season, the industries expect to use much more residual oil. The EQC will conduct a hearing on the oil issue at its meeting in Coos Bay next month.

Officials seek vote on school merger

If residents of the Reynolds and Rockwood school districts in East Multnomah County support merger of the two districts, they should be willing to spend between \$7 and \$8 million for a new high school and a new middle school.

Hauton Lee, superintendent of the Reynolds District, made the statement Thursday after the Multnomah County Intermediate Education District approved the proposed merger of the two districts.

In approving the merger, the IED pointed out that the move would add 800 students to the Reynolds District and require a new high school.

The next step is an election in which residents of both districts will be asked to approve the merger.

Ordinarily, the merger of school districts would not be subject to a vote after IED approval unless residents of the district signed remonstrance petitions.

"In this case the school board is out with remonstrance petitions to put the merger issue to a vote," said Reynolds School Board vice chairman Stephen Hill.

"We want the people to understand that by voting for the merger, they are in effect approving a new high and a new middle school and the financing of both these schools.

"If the merger passes, we will go to the voters with a bond issue to finance the construction of the two schools," Hill said. "But if the people are unwilling to finance the new schools, they should vote no on the merg-

er. "Without financing for the new schools, the merger would be a disaster," Hill said.

Lee said crews were gathering signatures on petitions to insure the election on the merger. The election will be either July 9 or Aug. 6, de-

pending on when the petition crews finish their work.

The merger of the two districts has been under consideration for more than two years. Citizens advisory committees in the two districts and the boards of the two districts have approved the merger unanimously.

The Rockwood-Reynolds merger evolved from a move to join Rockwood and six other elementary school districts with the Gresham Union High School District. Rockwood opted for merger with Reynolds because the district is nearer to Reynolds High School than it is to the three high schools in the Gresham district.

Lee said the addition of 800 Rockwood students to the Reynolds district would require a second high school in the Reynolds district.

Health clinic due for tots

A free preschool screening clinic for children 3 to 5 will be held June 6 at the St. Johns Lutheran Church, 4227 N. Lombard St. between 9 and noon and 1 and 4 p.m.

Children will be tested in speech, hearing, vision, nutrition and dental health on scheduled appointments.

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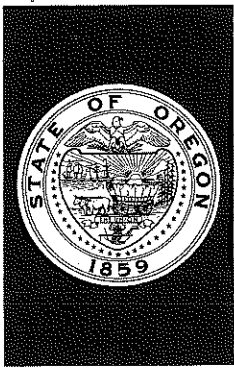
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The Dalles

Kessler R. Cannon
Director

MEMORANDUM

To : Environmental Quality Commission
From : Director
Subject: Agenda Item No. B, May 24, 1974 EOC Meeting
April 1974 Program Activity Report

During the month of April, staff action was taken relative to the list of plans and specifications which follows:

Water Quality

1. Forty-eight (48) domestic sewage projects were reviewed:
 - a. Northwest Region - 17
Provisional approval was given to 17 plans for sewer projects itemized on the attached list.
 - b. Water Quality Control Division - 31
Provisional approval was given to 22 plans for sewer projects and sewage treatment plant expansions.

Approval was given to 6 change orders and addenda for sewage treatment plants.

(An itemized list is attached.)
2. Two (2) industrial waste treatment plans were reviewed and provisional approval given:
Eagle Creek National Fish Hatchery, Clackamas County
waste water control facilities

M. W. Sandhagen Dairy, Washington County
animal waste facilities



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Air Quality

Twenty-six (26) project plans or proposals were reviewed:

1. Northwest Region - 6

Approval was given to the following six project plans:

General Battery Corporations, Multnomah County
control of fumes from lead melting pots utilizing fabric filter

Beall Pipe and Tank Corporation, Multnomah County
control of asphalt and coal for emissions from the coal tar pots and pipe coating and lining operation, by passing the contaminated air through four fiberglass filtration systems

Ash Grove Cement Co., Multnomah County
control of quick lime dust during kiln startup and shutdown by ducting the emissions to the existing baghouses

Terminal Flour Mills Company, Multnomah County
control of grain and flour dust emissions from existing cyclones by replacing them with three reverse air jet bag filters

Alpine Veneer, Inc., Clackamas County
control of veneer drier emissions by combustion of the hydrocarbons prior to discharge

McCall Oil and Chemical Company, Multnomah County
construction of a 270,000 barrel capacity storage tank for No. 6 fuel oil

2. Air Quality Control Division - 20

a. Approval was given to:

1) seven (7) project plans:

Roseburg Lumber Co. (Plant #5), Coos County
installation of Hammerquist baghouse filters

Roseburg Lumber Co. (Plant #4), Douglas County
installation of Hammerquist baghouse filters

Roseburg Lumber Co. (Plant #3), Douglas County
installation of Hammerquist baghouse filters

Weyerhaeuser Co., Springfield, Lane County
installation of a system to control TRS emissions from "other sources"

Weyerhaeuser Co., Springfield, Lane County
installation of an electrostatic precipitator for lime kiln particulate control

Hub Lumber Co., Douglas County
installation of wood waste recovery system with hog fuel boiler

Hanel Lumber Co., Hood River County

installation of wood waste recovery system with hog fuel boiler

- 2) two (2) parking space facility proposals:

Fred Meyer Shopping Center, Multnomah County

484-space parking facility

Portland General Electric Office Building, Multnomah County

401-space parking facility

- b.
- Conditional approval
- was given to:

- 1) one (1) project plan:

Champion International, U.S. Plywood Division, Hood River County

installation of a wood waste energy recovery system with hog fuel boiler

- 2) five (5) parking space facility proposals:

Lynch Terrace School, Multnomah County

73-space parking facility

Woodlawn Housing Project, Multnomah County

100-space parking facility

Kaiser Aetna, Marion County

420-space parking facility, shopping center

Coburg Plaza, Phases II and III, Lane County

65-space parking facility

Wood Products Credit Union, Lane County

93-space parking facility

- c.
- Conceptual approval
- was given to two (2) parking space facility proposals:

Sunset Volkswagon, Washington County

171-space parking facility

Cooper Development Co., Multnomah County

76-space parking facility, apartments

- d.
- Additional information
- was requested from three (3) parking space facility proposals:

Tanasbourne Town Center, Washington County

705-space parking facility

Holly Farm Shopping Center, Clackamas County

501-space parking facility

Mountain Village Apartments, Multnomah County

450-space parking facility

Land Quality

Five (5) solid waste management project plans were reviewed:

1. Northwest Region - 2

Approval was given to:

Crown Zellerbach, Hallinan Road, Tillamook County
new wood waste landfill, proposed permit

Provisional approval was given to:

U. S. Plywood, Willamina, Yamhill County
existing wood waste landfill, letter authorization

2. Solid Waste Management Division - 3

Provisional approval was given to the following:

Lebanon Sanitary Landfill, Linn County
existing domestic site, Operational Plan

Tomco Inc., Landfill, Linn County
existing domestic site, Operational Plan

Marcola Disposal Site, Lane County
existing domestic site, Operational Plan

Director's Recommendation

It is the Director's recommendation that the Commission give its confirming approval to staff action on project plans for the month of April 1974.



KESSLER R. CANNON
Director

5/10/74

attachments - 2

PROJECT PLANS

Northwest Region

During the Month of April 1974, the following project plans and specifications and/or reports were reviewed by the staff. The disposition of each project is shown, pending ratification by the Environmental Quality Commission.

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
<u>Municipal Projects - 17</u>			
4-2-74	Gladstone	Ridgewood No. 2 Sewer	Prov. Approval
4-2-74	Salem	Chadwick Glen Subdn Sewers	Prov. Approval
4-3-74	West Linn	Schlabach Tract Sewers	Prov. Approval
4-8-74	Salem	Eola Dr. N. W. Barberry St. Sewer	Prov. Approval
4-9-74	Portland	S. E. Barbara Welch Road Sewer	Prov. Approval
4-9-74	Troutdale	Santana Addition Sewers	Prov. Approval
4-9-74	Oak Lodge S.D.	Oakridge Subdn Phase 2 Sewers	Prov. Approval
4-10-74	Marion County	Illaha Hills Country Club Sewer	Prov. Approval
4-15-74	Salem	Southtree Estates Sanitary Sewer Imp.	Prov. Approval
4-16-74	Multnomah County	Errol Heights Park Sewers	Prov. Approval
4-16-74	Portland	Waste Disposal Facility for Harbor Patrol Base	Prov. Approval
4-17-74	Lake Oswego	Jan's Subdn L.I.D. 139	Prov. Approval
4-24-74	Hillsboro	Portland - Hillsboro Airport Sewer	Prov. Approval
4-25-74	Gladstone	Charolais Heights Sewers	Prov. Approval
4-25-74	Warrenton	First St., Birch Court to Block 133 Sewers	Prov. Approval
4-26-74	Multnomah County	Barkerbrook & Holcomb Hts. Sewer	Prov. Approval
4-26-74	Gresham	Bartels' Sewer Extension	Prov. Approval

17 Sewer Projects

PROJECT PLANS

Water Quality Division

During the Month of April 1974, the following project plans and specifications and/or reports were reviewed by the staff. The disposition of each project is shown, pending ratification by the Environmental Quality Commission.

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
<u>Municipal Projects - 31</u>			
4-1-74	Medford	Harry & David Factory Sanitary Sewers	Prov. Approval
4-1-74	Central Point	First St. & Fourth St. Sewer	Prov. Approval
4-1-74	USA (Tigard)	Panorama West Condominium Sewer	Prov. Approval
4-1-74	Toledo	Shewey's Addn. Sewer	Prov. Approval
4-1-74	USA (Aloha)	STP Expansion Equipment	Prov. Approval
4-1-74	Pendleton	Mt. Hebron & Downtown Bypass Int.	Prov. Approval
4-2-74	Cedar Hills	Lynnwood Relief Sewer (USA)	Prov. Approval
4-2-74	Astoria	C. O. #11 to Sch. A. - Int. Project	Approved
4-4-74	Oak Lodge S.D.	C. O. #7 - STP Contract	Approved
4-4-74	USA (Aloha)	Chatelain Subdn Sewers	Prov. Approval
4-5-74	Florence	Florence St. Sewer	Prov. Approval
4-5-74	Sunriver	West Cascade Trunk Sewer - Mt. Village East Trunk Sewer	Prov. Approval
4-5-74	Astoria	C. O. #6 Sch. C - STP Contract	Approved
4-8-74	Springfield	Seeger Estates - 2nd Addn. Sewers	Prov. Approval
4-8-74	USA (Aloha)	Equip. Specifications - STP Expansion	Prelim. Approval
4-9-74	Bend	Greenwood Manor Apt. Sewer	Prov. Approval
4-11-74	Sutherlin	Sherwood Dr. Sewer	Prov. Approval
4-11-74	Crestellyn Acres	Plans for Completion of Sewage Pumping Station & 0.7 Acre Sewage Lagoon	Prov. Approval
4-11-74	Woodburn	C. O. #1 - STP Contract	Approved
4-12-74	Boardman	Homestead Village No. 1 - Trailer Park Sewers	Prov. Approval
4-17-74	Salem (Willow Lake)	STP Expansion - 70 MGD - Full Secondary	Prov. Approval

Project Plans

4-22-74	North Bend	Spruce St. Sanitary Sewer	Prov. Approval
4-22-74	Prineville	Hillcrest Subdn Sewers	Prov. Approval
4-24-74	USA (Forest Grove)	T. V. Hwy Sewer Relocation	Prov. Approval
4-26-74	USA (Gaston)	Evert Brown Sewer	Prov. Approval
4-27-74	Florence	Spruce Subdn Sewers	Prov. Approval
4-29-74	Pendleton	Addendum #1 - Mt. Hebron Sewer	Approved
4-30-74	BCVSA	Renault Ave. & Stearns Way Sewers	Prov. Approval
4-30-74	Junction City	Lynch Subdn Sewers	Prov. Approval
4-30-74	Echo	C. O. #A-1 - Sewer Contract	Approved

22 sewer plans
6 change orders & addendum
3 STP expansions
31 total



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Kessler R. Cannon
Director

MEMORANDUM

To : Environmental Quality Commission

From : Director

Subject: Agenda Item No. C, May 24, 1974 EQC Meeting

Public Hearing on Adoption of Permanent Rules Pertaining to Administrative Procedures, Repealing Sections 11-005 through 11-170, Oregon Administrative Rules, Chapter 340, Division 1, Subdivision 1, and Adopting in lieu Sections 11-005 through 11-135

Background

The administrative procedures of the Department of Environmental Quality are established through rules adopted by the Environmental Quality Commission pursuant to Oregon's Administrative Procedure Act (APA). While procedural rules adopted by the Commission may augment those promulgated in the APA, they are required by law to conform to the policies specified in the APA.

In response to legislative revisions of the APA, Commission rules regarding procedures for contested case type hearings and rule making were updated and adopted by the Environmental Quality Commission as temporary rules on March 22, 1974.

Director's Recommendation

It is the Director's recommendation that the present temporary rules be approved and adopted as permanent Rules Pertaining to Administrative Procedures, and that they be filed promptly with the Secretary of State and become effective 10 days after publication by that office.

KESSLER R. CANNON
Director

attachment - copy of temporary rules

5/9/74



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NOTICE OF PUBLIC HEARING
DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE OF OREGON

NOTICE IS HEREBY GIVEN that the Environmental Quality Commission will consider the adoption of permanent rules pertaining to administrative procedures, repealing Sections 11-005 through 11-170, Oregon Administrative Rules, Chapter 340, Division 1, Subdivision 1, and adopting in lieu Sections 11-005 through 11-135. These sections establish procedures for contested case hearings and rulemaking, and the substituted sections were adopted by the Commission as temporary rules on March 22, 1974, in Salem, Oregon. Rules of the Commission must conform to policies specified in Oregon's Administrative Procedure Act (APA); and in view of legislative modifications of the APA, an updating of the sections cited is required.

The public hearing will be held in conjunction with the next regularly scheduled meeting of the Environmental Quality Commission:

Date : May 24, 1974
Time : Meeting commences at 9 a.m.
Place: Second Floor Auditorium
Public Service Building
920 S. W. Sixth Avenue
Portland, Oregon 97204

Copies of the proposed rules are available for public inspection, or may be obtained by request from the Department of Environmental Quality, Office of the Director, 1234 S. W. Morrison Street, Portland, Oregon 97205.

Any interested person desiring to submit written testimony concerning the issues of fact, law or policy on these matters may do so by forwarding them to the Office of the Director, Department of Environmental Quality, 1234 S. W. Morrison Street, Portland, Oregon 97205; or may appear and submit testimony or be heard orally at the hearing scheduled for the above date.

The Environmental Quality Commission will be designated as the hearings officer.

Dated this 18th day of April, 1974.



KESSLER R. CANNON
Director

DEPARTMENT OF ENVIRONMENTAL QUALITY

AMENDMENT TO CHAPTER 340, OREGON ADMINISTRATIVE RULES

March 22, 1974

Sections 11-005 to 11-170, "Rules of Practice and Procedure" are hereby repealed and the following rules adopted in lieu thereof:

Division 1

RULES OF GENERAL APPLICABILITY AND ORGANIZATION

Subdivision 1

RULES OF PRACTICE AND PROCEDURE

Rule Making

11-005 DEFINITIONS. Unless otherwise required by context, as used in this subdivision:

- (1) "Commission" means the Environmental Quality Commission.
- (2) "Department" means the Department of Environmental Quality.
- (3) "Director" means the Director of the Department of Environmental Quality.
- (4) "License" includes the whole or part of any Department permit, certificate, approval, registration or similar form of permission required by law to pursue any commercial activity, trade, occupation or profession.
- (5) "Order" has the same meaning as given in ORS 183.310.

(6) "Person" includes individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the Federal Government and any agencies thereof.

(7) "Rule" has the same meaning as given in ORS 183.310.

11-010 NOTICE OF RULE MAKING. (1) Except as specifically provided otherwise by statute, the Commission shall give notice of its intention to adopt, amend or repeal any rules by publication not less than twenty (20) days prior to the date of the proposed action in the bulletin published by the Secretary of State.

(2) A copy of the notice shall be furnished to such news media as the Commission may deem appropriate.

(3) A copy of the notice shall be mailed to persons on the mailing list established pursuant to ORS 183.335(3).

(4) Each rule-making notice shall contain a description of the Commission's intended action, setting forth the subjects and issues involved in sufficient detail to inform a person that his interest may be affected. Where practicable and appropriate, a copy of the rule proposed to be adopted, amended or repealed shall be included. If the proposed rule, amendment or repeal thereof is not set forth verbatim in the notice, the notice shall state the time, place and manner in which the rule or amendment may be obtained.

(5) When the Commission is required by law to hold a public hearing on the proposed rule making, or contemplates that a public hearing is necessary or appropriate, the notice shall additionally include:

(a) The time and place of the public hearing.

(b) The manner in which interested parties may present their views at the hearing.

(c) A designation of the person who is expected to preside at and conduct the hearing, if other than the full Commission.

(6) When the Commission is not required to hold a public hearing, and does not contemplate that a hearing is appropriate to the circumstances of the proposed rule making, the notice shall additionally include:

(a) A statement of the time and place at which data, views or arguments may be submitted in writing to the Commission.

(b) A statement that any interested person desiring to express or submit his data, views or arguments at a public hearing must request the opportunity to do so.

(c) A designation of the person to whom a request for public hearing must be submitted and the time and place therefor.

(d) A statement that a public hearing will be held if the Commission receives a request for public hearing within fifteen (15) days after the Commission's notice from ten (10) or more persons or from an association having not less than ten (10) members.

11-015 REQUEST FOR A PUBLIC HEARING. If ten (10) persons or an association having more than ten (10) members make a timely request for a public hearing on proposed rule making, the Commission shall give notice thereof in conformity with section 11-010(5).

11-020 POSTPONING INTENDED ACTION. (1) The Commission shall postpone its intended action upon request of an affected person, received within fifteen (15) days after the Commission's notice, in order to allow the requesting person an opportunity to submit data, views or arguments concerning the proposed action.

(2) Postponement of the date of intended action shall be no less than ten (10) nor more than ninety (90) days. In determining the length of postponement, the Commission shall consider the time necessary to give reasonable notice of the postponement and the complexity of the subject and issues of the intended action.

(3) The Commission shall give notice of the postponement pursuant to section 11-010 but publication in the Secretary of State's bulletin is required only when the notice can be published in the bulletin prior to the postponement date of the intended action.

(4) This section does not apply to adoption of temporary rules by the Commission pursuant to ORS 183.335(2) and section 11-050.

11-025 CONDUCT OF HEARING. (1) The hearing shall be conducted before the Commission, with the Chairman as the presiding officer, or before any member of the Commission, the Director, or other person designated by the Commission to be the presiding officer.

(2) At the commencement of the hearing, any person wishing to be heard shall advise the presiding officer of his name, address and affiliation. Additional persons may be heard at the discretion of the presiding officer. The presiding officer shall provide an appropriate form for listing witnesses which shall indicate the name of the witness, whether the witness favors or opposes the proposed action and such other information as the presiding officer may deem appropriate.

(3) At the opening of the hearing, the presiding officer shall state, or have stated, the purpose of the hearing.

(4) The presiding officer shall thereupon describe the manner in which interested parties may present their views at the hearing.

(5) Subject to the discretion of the presiding officer, the order of the presentation shall be:

(a) Statements of proponents.

(b) Statements of opponents.

(c) Statements of any other witnesses present and wishing to be heard.

(6) The presiding officer and any member of the Commission shall have the right to question or examine any witness making a statement at the hearing. The presiding officer may, in his discretion, permit other persons to examine witnesses.

(7) There shall be no rebuttal or additional statements given by any witness except as requested by the presiding officer. However, when such additional statement is given, the presiding officer shall allow an equal opportunity for reply.

(8) The hearing may be continued with recesses as determined by the presiding officer until all listed witnesses present and wishing to make a statement have had an opportunity to do so.

(9) The presiding officer shall, where practicable and appropriate, receive all physical and documentary evidence presented by witnesses. Exhibits shall be marked and shall identify the witness offering each exhibit. The exhibits shall be preserved by the Department for a period of one year or, at the discretion of the Commission, returned to the party submitting it.

(10) The presiding officer may set reasonable time limits for oral presentation and may exclude or limit cumulative, repetitious or immaterial matter.

(11) A verbatim oral, written, or mechanical record shall be made of all the hearing proceedings, or, in the alternative, a record in the form of minutes.

11-030 PRESIDING OFFICER'S REPORT. Where the hearing has been conducted before other than the full Commission, the presiding officer, within a reasonable time after the hearing, shall provide the Commission with a written summary of statements given and exhibits received, and a report of his observations of physical experiments, demonstrations or exhibits. The presiding officer may also make recommendations to the Commission based upon the evidence presented, but the Commission is not bound by such recommendations.

11-035 ACTION OF THE COMMISSION. Following the hearing by the Commission, or after receipt of the report of the presiding officer, the Commission may adopt, amend or repeal rules within the scope of the notice of intended action.

11-040 NOTICE OF COMMISSION ACTION: CERTIFICATION TO SECRETARY OF STATE. The Department shall file in the Office of the Secretary of State a copy of each rule adopted, amended or repealed by the Commission, certified by the Director, or Deputy Director, of the Department.

11-045 PETITION TO PROMULGATE, AMEND OR REPEAL RULE: CONTENTS OF PETITION, FILING OF PETITION. (1) An interested person may petition the Commission requesting the promulgation, amendment or repeal of a rule. The petition shall be in typewritten form, signed by or on behalf of the petitioner and shall contain a detailed statement of:

(a) The rule petitioner requests the Commission to promulgate, amend or repeal. If amendment of an existing rule is sought, the rule shall be set forth in the petition in full with matter proposed to be deleted therefrom enclosed in brackets and proposed additions thereto shown by underlining.

(b) Ultimate facts in sufficient detail to show the reasons for adoption, amendment or repeal of the rule.

(c) All propositions of law to be asserted by petitioner.

(d) Sufficient facts to show how petitioner will be affected by adoption, amendment or repeal of the rule.

(e) The name and address of petitioner and of any other persons known by petitioner to be interested in the rule sought to be adopted, amended or repealed.

(2) The petition shall be deemed filed when received by the Department at the office of the Director.

(3) Upon receipt of the petition, the Department:

(a) Shall serve a true copy of the petition, together with a copy of any applicable rules of practice, on all persons named in the petition, and on those whom the Department believes to have an interest in the proceeding. For the purposes of this subsection, service shall be deemed perfected on the date such copies are mailed to the last known address of the person being served.

(b) Shall advise petitioner that he has fifteen (15) days in which to supplement his petition in writing with additional data, views or arguments.

(c) Shall advise all other persons served that they have fifteen (15) days in which to submit written data, views or arguments regarding the petition.

(d) May schedule oral presentation of petitioner's views if petitioner makes a request therefor, or if the Commission wishes to hear petitioner orally.

(4) The Commission shall promptly either deny the petition or initiate rule-making proceedings in accordance with sections 11-005 through 11-040 and, if it denies the petition, shall issue an order setting forth its reasons in detail. The order shall be mailed to the petitioner and to all other persons upon whom a copy of the petition was served.

11-050 TEMPORARY RULES. (1) The Commission may proceed without prior notice or hearing, or upon any abbreviated notice and hearing that it finds practicable and appropriate, to adopt a rule without the notice otherwise required by ORS chapter 183 and by these rules. In such a case, the Department shall:

(a) File a copy, certified by the Director or by the Deputy Director of the Department, of the rule with the Secretary of State.

(b) File with the Secretary of State the Commission's findings that failure of the Commission to act promptly will result in serious prejudice to the public interest or to the interest of the parties concerned. The findings shall be supported by a statement of specific facts and reasons.

(c) Take practicable and appropriate measures to make the temporary rule known to persons who may be affected by it.

(d) Furnish copies of the temporary rule to such news media as the Commission deems appropriate to comply with the notice requirement of these rules.

(2) A temporary rule adopted in compliance with this section becomes effective immediately upon filing with the Secretary of State, or at a designated later date.

(3) A temporary rule may be effective for no longer than 120 days, and may not be extended, renewed or repromulgated beyond the initial 120 days. In accordance with the procedures established by sections 11-005 through 11-040, the Commission may adopt a rule identical to an existing temporary rule.

11-055 APPLICATION OF SECTIONS 11-005 to 11-040. Sections 11-005 through 11-040 do not apply to rules establishing an effective date for a previously effective rule or establishing a period during which a provision of a previously effective rule will apply.

Declaratory Rulings

11-060 INSTITUTION OF PROCEEDINGS FOR DECLARATORY RULINGS. On petition of any interested person, the Commission may, at its discretion, issue a declaratory ruling with respect to the applicability to any person, property or state of facts of any statute or rule enforceable by the Commission.

11-065 CONTENTS OF PETITION. The petition shall be typewritten and shall contain:

(1) The statute or rule for which petitioner seeks a declaratory ruling.

(2) A detailed statement of the facts upon which petitioner requests the Commission to issue its declaratory ruling.

(3) Sufficient facts to show how petitioner will be affected by the requested declaratory ruling.

(4) All propositions of law or contentions to be asserted by petitioner.

(5) The questions presented for decision by the Commission.

(6) The specific relief requested.

(7) The name and address of petitioner and of any other person known by petitioner to be interested in the requested declaratory ruling and the reason for such interest.

11-070 FILING AND SERVICE OF PETITION. (1) The petition shall be deemed filed when received by the Department at the office of the Director.

(2) The Commission shall inform the petitioner promptly after the filing of the petition whether it intends to issue a ruling.

(3) If the Commission intends to issue a ruling, the Department shall serve a copy of the petition, and a notice of a hearing at which the petition will be considered, on all

persons named in the petition, and on all other persons the Department believes to have an interest in the outcome of such a ruling.

(4) The notice of hearing required by subsection (3) of this section shall include:

(a) The time and place of the hearing.

(b) A designation of the person who is expected to preside at and conduct the hearing, if other than the full Commission.

11-075 CONDUCT OF HEARING: BRIEFS AND ORAL ARGUMENT.

(1) A hearing for a declaratory ruling may be held before the Commission or a member thereof, the Director, or any other person designated by the Commission to preside at and conduct the hearing.

(2) At the hearing, petitioner and any other interested party shall have the right to present oral argument. The presiding officer may impose reasonable time limits on the time allowed for oral argument. Petitioner and other interested persons may file briefs with the Commission in support of their respective positions. The Commission or its designee shall fix the time and order of filing briefs.

11-080 PRESIDING OFFICER'S OPINION. In those instances where the hearing has been conducted before a person other than the full Commission, the presiding officer shall prepare an opinion conforming in form and content to the requirements of subsection 11-085(2). The Commission is not bound by the opinion of the presiding officer.

11-085 DECISION OF COMMISSION: TIME, FORM AND SERVICE.

(1) The Commission shall issue its declaratory ruling within sixty (60) days of:

(a) Where no briefs are permitted to be filed subsequent to the hearing, the close of the hearing.

(b) Where permission has been granted for the filing of briefs subsequent to the hearing, the deadline set for the filing of briefs.

(2) The ruling shall be in the form of a written opinion and shall set forth:

(a) The facts being adjudicated by the Commission.

(b) The statute or rule being applied to those facts.

(c) The Commission's conclusion as to the applicability of the statute or rule to those facts.

(d) The Commission's conclusion as to the legal effect or result of applying the statute or rule to those facts.

(e) The reasons relied upon by the Commission to support its conclusions.

(3) The Department shall mail the Commission's ruling to all persons upon whom it served the petition in compliance with subsection 11-070(3), and to all other persons on the mailing list established pursuant to ORS 183.335(3).

11-090 EFFECT OF COMMISSION RULING. A declaratory ruling issued in accordance with these rules is binding between the Commission and the petitioner on the state of facts alleged, or found to exist, except:

(1) When altered or set aside by a court.

(2) When the ruling is based on a rule of the Commission, the rule is amended, repealed or superseded pursuant to rule making conducted in accordance with sections 11-005 through 11-040.

(3) Where the declaratory ruling is adverse to petitioner, when altered by the Commission.

Contested Cases

11-095 IMMEDIATE SUSPENSION OR REFUSAL TO RENEW A LICENSE.

If the Commission finds a serious danger to the public health or safety and sets forth the specific reasons for such findings, the Commission may suspend or refuse to renew a license without hearing. If the licensee demands a hearing within ninety (90) days after the date of notice to the licensee of such suspension or refusal to renew, a hearing as provided in sections 11-110 through 11-135 shall be granted to the licensee as soon as practicable after such demand, and the Commission shall issue an order pursuant to such hearing confirming, altering or revoking its earlier order. Such a hearing need not be held where the order of suspension or refusal to renew is accompanied by or is pursuant to, a citation for violation which is subject to judicial determination in any court of this state, and the order by its terms will terminate in case of final judgment in favor of the licensee.

11-100 NOTICE OF OPPORTUNITY FOR A HEARING. (1) Except as otherwise provided in section 11-095, before the Commission or Department shall by order suspend, revoke, refuse to renew or issue a license or enter an order in any other contested case as defined in ORS Chapter 183, it shall afford the licensee, the license applicant or other party to the contested case an opportunity for hearing after reasonable notice, served personally or by registered or certified mail.

(2) Notice of opportunity for a hearing shall include:

(a) A statement of the party's right to request a hearing.

(b) A statement of the authority and jurisdiction under which the hearing would be held.

(c) A reference to the particular sections of the statutes and rules involved.

(d) A short and plain statement of the matters asserted or charged.

(e) A statement that if the party desires a hearing, the agency must be notified within twenty (20) days of the date of mailing of the notice.

11-105 ORDERS WHEN NO HEARING REQUESTED. When a party has been given an opportunity to request a hearing within a specified time and no hearing has been requested, or if a hearing has been set, notice thereof given and the party does not appear, the Commission or the Department may, based upon a prima facie case made on the record of the Commission or

the Department, as the case may be, enter a written order at the expiration of the time, stating the matters before it supporting the order, and that the order shall become effective immediately upon service on the party.

11-110 NOTICE OF HEARING. (1) The Department shall serve notice of a hearing personally or by registered or certified mail upon each party.

(2) Notice of a hearing shall include:

(a) All matters required to be included in the notice of opportunity for hearing under section 11-100(2)(b)(c) and (d).

(b) A statement of the time and place of the hearing.

(c) A designation of the person who is expected to preside at and conduct the hearing, if other than the full Commission.

(d) A statement that any party to the contested case may be represented by counsel at the hearing.

11-115 SUBPOENAS AND DEPOSITIONS. (1) The Department shall issue subpoenas on behalf of any party to a contested case upon a showing of good cause, and a showing of general relevance within the reasonable scope of the proceedings. Witnesses appearing pursuant to subpoena, other than persons requesting the hearing, members of the Commission, the Director or employees of the Department, shall receive fees and mileage as prescribed by law for witnesses in civil actions.

(2) An interested person may petition the Department for an order that the testimony of a material witness be taken by deposition. Fees and mileage are to be paid as determined by applicable statutes.

11-120 CONDUCT OF HEARING. (1) The hearing shall be conducted before the Commission, under the control of the chairman as presiding officer, or before any Commission member or other person designated by the Commission or Director to be presiding officer.

(2) At the discretion of the presiding officer, the hearing shall be conducted in the following manner:

(a) Statement and evidence of the Commission or Department in support of its proposed action.

(b) Statement and evidence of affected persons in support of, requesting modification of or disputing the Commission's or the Department's proposed action.

(c) Rebuttal testimony, if any.

(3) All testimony shall be taken upon oath or affirmation of the witness from whom received. The officer presiding at the hearing shall administer oaths or affirmations to witnesses.

(4) The following persons shall have the right to question, examine or cross-examine any witness:

(a) The presiding officer.

(b) Where the hearing is conducted before the full Commission, any member of the Commission.

(c) Counsel for the Commission or the Department.

(d) Where the Commission or the Department is not represented by counsel, a person designated by the Commission or the Director.

(e) Any party to the contested case or such party's counsel.

(5) The hearing may be continued with recesses as determined by the presiding officer.

(6) The presiding officer may set reasonable time limits for oral presentation and shall exclude or limit cumulative, repetitious or immaterial matter.

(7) The presiding officer shall, where appropriate and practicable, receive all physical and documentary evidence presented by parties and witnesses. Exhibits shall be marked, and the markings shall identify the person offering the exhibits. The exhibits shall be preserved by the Department as part of the record of the proceedings.

(8) A verbatim oral, written or mechanical record shall be made of all motions, evidentiary objections, rulings and testimony.

11-125 EVIDENTIARY RULES. (1) The rules of evidence as in equity proceedings shall apply to all hearings in contested cases.

(2) All offered evidence, not objected to, will be received by the presiding officer subject to his power to exclude or limit cumulative, repetitious, irrelevant or immaterial matter.

(3) Evidence objected to may be received by the presiding officer with rulings on its admissibility or exclusion to be made at the time a final order is issued.

11-130 PROPOSED ORDERS: FILING OF EXCEPTIONS AND ARGUMENT.

(1) In contested cases before the Commission, if a majority of the members of the Commission were not present at the hearing or have not considered the record, and the order is adverse to a party, a proposed order, including findings of fact and conclusions of law, shall be served upon the parties. The Commission shall not render a final order in the contested case until each party adversely affected has been given an opportunity to file exceptions and present arguments to the Commission.

(2) In contested cases before the Department, if the Director was not present at the hearing or has not considered the record, and the order is adverse to a party, a proposed order, including findings of fact and conclusions of law, shall be served upon the parties. The Director shall not render a final order in the contested case until each party adversely affected has been given an opportunity to file exceptions and present arguments to the Director.

11-135 FINAL ORDERS IN CONTESTED CASES. NOTIFICATION.

(1) Final orders in contested cases shall be in writing or stated in the record, and may be accompanied by an opinion.

(2) Final orders shall include the following:

(a) Rulings on admissibility of offered evidence if not already in the record.

(b) Findings of fact, including those matters which are agreed as fact, a concise statement of the underlying facts supporting the findings as to each contested issue of fact and each ultimate fact required to support the Commission's or the Department's order.

(c) Conclusions of law.

(d) The Commission's or the Department's order.

(3) The Department shall serve a copy of the final order upon every party or, if applicable, his attorney of record.



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229- 5301

TOM McCALL
GOVERNOR

KESSLER R. CANNON
Director

June 3, 1974

Mrs. Ione Hanson
Office of Secretary of State
121 State Capitol
Salem, Oregon 97310

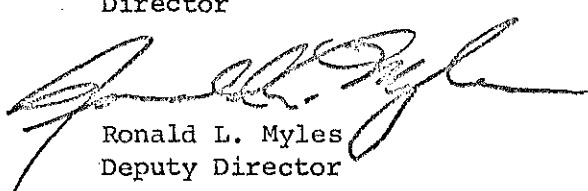
Re: Chapter 340, Oregon Administrative Rules, Division 1,
Subdivision 1, Environmental Quality Commission Permanent
Rules Pertaining to Administrative Procedures

Dear Mrs. Hanson:

Please file the enclosed certificate of rule adoption and publish
the enclosed summary thereof in the next issue of the Secretary
of State's Administrative Bulletin.

Cordially,

KESSLER R. CANNON
Director


Ronald L. Myles
Deputy Director

enclosures

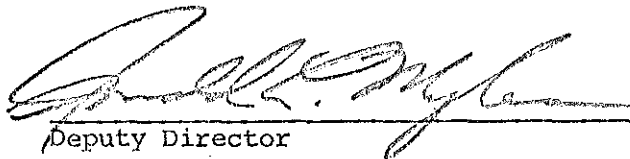
CERTIFICATION OF RULE ADOPTION

ENVIRONMENTAL QUALITY COMMISSION

I, Ronald L. Myles, Deputy Director, Oregon Department of Environmental Quality, certify that a modification of Chapter 340, Oregon Administrative Rules, Division 1, Subdivision 1, Sections 11-005 through 11-135, pertaining to administrative procedures, were adopted by the Commission as permanent rules on May 24, 1974, as shown by Exhibit A attached hereto, and made a part thereof.

I further certify that the attached Exhibit A is a true and correct copy of the original thereof.

Dated this 30th day of May, 1974.



Deputy Director
Oregon Department of Environmental Quality

ENVIRONMENTAL QUALITY COMMISSION

NOTICE OF GENERAL SUBJECT MATTER

OF RULE CHANGES

On May 24, 1974 the Environmental Quality Commission amended chapter 340 of Oregon Administrative Rules: by repealing sections 11-005 through 11-170 pertaining to the practices and procedures to be followed in contested case and rulemaking hearings; and by adopting new sections 11-005 through 11-135 as permanent rules pertaining to the same subjects.

Copies of the rules adopted are available upon request made to the office of the director of the Department of Environmental Quality at 1234 S. W. Morrison Street, Portland, Oregon 97205. (Telephone 229-5696).



ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

TOM McCALL
GOVERNOR

B. A. McPHILLIPS
Chairman, McMinnville

GRACE S. PHINNEY
Corvallis

JACKLYN L. HALLOCK
Portland

MORRIS K. CROTHERS
Salem

Ronald M. Somers
The Dalles

Kessler R. Cannon
Director

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item d, May 24, 1974, EQC Meeting

PGE Harborton, Portland - Status Report;
Authorization for Public Hearing to Consider
Permit Modification

Background

On September 21, 1973, the EQC issued an air contaminant discharge permit for PGE's Harborton gas turbine electric generating facility to meet the critical need for interim electrical energy generation capacity. In order to minimize air quality and noise impacts, the permit contains many restrictive conditions which include:

1. Limitations on overall operating hours for the period ending 30 June '74.
2. Restriction of fuel use to natural gas to the maximum extent possible (contracted for 94% of time).
3. Prohibiting plant operation at the Harborton location after the PGE Trojan nuclear power facility becomes commercially operational or after September 1, 1975, whichever time first occurs.

Section 2.6 of PGE's Harborton permit required PGE to file with the Department by 1 January 1974 a detailed schedule of projected operating time and fuel use for the period July 1, 1974 until the Trojan nuclear power facility becomes operational. Section 2.7 provides that the Department modify PGE's permit after public hearing specifying an approved operating schedule for the remainder of the permit period and incorporating such other conditions as may be determined to be appropriate.



Contains
Recycled
Materials

On December 28, 1973, PGE submitted a projected operating and fuel use schedule for Harborton for the 13 month period ending August 31, 1975, (see attachment 1). In summary, this schedule was based on critical water conditions and indicated, to the extent fuel supplies will permit, that maximum generation of all resources in the Pacific Northwest must be utilized to meet anticipated load demands. For Harborton 80% operation was projected for each of the 13 months with no prediction on the quantities of oil versus gas to be burned due to the uncertainties of fuel supplies at that time.

In regard to past operation of Harborton, with rapid improvements in hydroelectric power supply beginning in November 1973, actual operation for the 73-74 fall/winter period was much less than initially projected. Operation to date has been less than 20% of the total projected 3540 hours. Natural gas was used as a fuel approximately 90% of the operating time.

Tests were conducted at Harborton during December '73 and January '74 to assess compliance with air and noise emission requirements. Results of these tests indicated that:

1. Particulate and carbon monoxide emission while gas firing exceeded permit limits by factors of 2 and 10, respectively.
2. Smoke spot standards while oil firing periodically exceeded permit limits by a factor of 2.
3. Sound pressure levels exceeded permit limits by approximately 10 db in the low frequency range.

Special tests were conducted in January 1974 on one turbine with alternative combustion systems in an unsuccessful attempt to bring the facility into compliance with air emission limits.

Actual air quality impact of the emissions from the facility were not able to be assessed because the total operation of the Harborton turbines has been sporadic and almost negligible.

Since water conditions for hydroelectric power generation have steadily improved with spring and summer runoff now able to be predicted with some accuracy and since full compliance with permit conditions has not been attained as yet, the Department in a letter dated April 23, 1974, (see attachment 2) requested, among other items, the following:

1. Submission of a realistically revised operating and fuel use schedule.

2. A firm detailed schedule for demonstrating compliance with permit emission limits not complied with to date.
3. A special ambient monitoring program to assess actual air quality impact of the facility.

On May 3, 1974, PGE submitted a response to the Department's request (see attachment 3) which in summary indicated that future operation and fuel use projections are still essentially the same as projected in their letter of December 28, 1973, and that the interval April 23 to May 3 was an inadequate time to develop a detailed and comprehensive compliance demonstration program and schedule.

Evaluation

Operating and Fuel Use Schedule

Despite record snow packs and more accurate projections of water runoff PGE appears to be unable to project their system's resources for the 13 month period beginning in July 1974. PGE has indicated that power purchases made last winter do not appear to be available for the coming year and fuels supplies are still not able to be forecasted.

The inability of PGE to project their power resources and operation and fuel supplies for the immediate short term future and the potential for almost base load operation of Harborton despite what would appear most favorable hydroelectric power supplies would appear to strengthen the case that the Department will never be able to realistically restrict Harborton operation to a peaking facility for which it was originally designed. This also supports the Department's position that the turbines should not be permanently located at Harborton and should be located in an area where they can be operated without such restrictive limitations.

Compliance with Air Emission Limits

Although PGE has known of non-compliance with particulate and CO permit emission limits when gas firing and periodic non-compliance with smoke spot permit limits when oil firing at least since early 1974 and has had their equipment vendor trying adjustments and modifications to attain compliance, compliance as of this date has not been demonstrated. In PGE's May 3, 1974, correspondence with the Department it was noted that the equipment vendor was completely surprised at the high emissions when gas firing at Harborton. Since the permit limits imposed by the Department were established from projected emission data submitted by

the turbine vendor it would appear that the equipment vendor may not have tested the engine design sold to PGE sufficiently to predict its emission characteristics. PGE has proposed tests to be conducted within a month on two additional combustion systems in an attempt to attain compliance.

Pending the results of further tests, PGE may either attain compliance or be in a position to submit an acceptable compliance schedule. In the interim the Department position as stated in its letter of April 23, 1974, of not allowing any further commercial power generation at Harborton until compliance is attained or an acceptable compliance schedule negotiated should be maintained.

Compliance with Noise Limits

PGE has indicated that additional sound suppression equipment has been ordered for Harborton and that deliveries for the first of four systems is scheduled for the fourth quarter of 1974. The Department has not obtained a firm compliance schedule for operating noise limitations and proposes to maintain its position of no commercial power generation until such schedule is submitted and approved. The Department has conducted subjective noise tests at Harborton with the plant operation restricted to sound pressure limits on the ACD permit (1 of 4 units running at base load). The Department is of the opinion that if noise permit conditions are met there should be no audible sound at nearby residences except during low background noise periods in the early morning hours. Noise from car, truck and ship traffic and other industrial noise should present more of an impact than the turbines although the slightly audible continuous rumble of the turbines might be a basis for some complaints if windows in nearby residences on the Harborton hillside are left open during periods of sleep. The Department must reserve the right to limit operation of Harborton if sustained operation before noise abatement equipment is installed creates a significant nuisance.

Assessment of Air Quality Impact

A more concerted effort appears necessary to assess air quality impact of the Harborton turbines in order to:

1. Regulate the remaining operation of the facility at Harborton to insure protection of public health and welfare.
2. Accurately assess suitability of relocation sites for the facility.

DIRECTOR'S RECOMMENDATION

It is the Director's recommendation that a Public Hearing be authorized, before a Hearings Officer in Portland at a time and place to be determined by the Director, to consider modifying PGE's Harborton permit in accordance with the following staff recommendations:

1. Incorporate PGE's projected fuel use-operating schedule for the 13-month period beginning July 1, 1974, into the Harborton permit as a maximum allowable use.
2. Require minimum use of the facility to the extent possible.
3. Continue to require use of natural gas to the maximum extent available when operation is necessary.
4. Require a detailed projected fuel use-operating schedule for the each remaining month of operation to be submitted to the department for approval by the 15th of each preceding month.
5. Require monthly reports on the progress toward relocation of the plant to be submitted to the Department each month beginning 1 August 1974.
6. Prohibit commercial power generation until compliance with permit conditions is demonstrated or an acceptable compliance schedule is submitted and approved for particulate and carbon monoxide emissions while gas firing, smoke spot when oil firing and sound pressure levels.
7. Require a comprehensive air monitoring program and schedule to be submitted to the Department for approval by 1 August 1974 for implementation beginning September 1974 which will define actual air quality impact of the facility including plume rise under various meteorological conditions including "worst" ventilation conditions.
8. Provide for restricting operating hours and/or power levels at Harborton if noise becomes a significant problem prior to attaining compliance with sound pressure levels contained in the Harborton air contaminant discharge permit.



Kessler R. Cannon

Attachments

- 1) December 28, 1973 letter from PGE to DEQ
- 2) April 23, 1974 letter from DEQ to PGE
- 3) May 3, 1974 letter from PGE to DEQ

PORTLAND GENERAL ELECTRIC COMPANY

ELECTRIC BUILDING

PORTLAND, OREGON 97205

A. J. PORTER
SENIOR VICE PRESIDENT

File Ad - PGE Harborton
M/iteo.

December 28, 1973

Mr. Diarmuid O'Scannlain, Director
Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97204

Dear Mr. O'Scannlain,

In accordance with the requirement of Section 2.6 of
Air Contaminant Discharge Permit No. 26-2499 for the
Harborton Plant, there is enclosed a Table entitled
"Harborton Combustion Turbine Operating Estimate
1974 - 1975. For the reasons indicated in the footnote,
the tabulation, of necessity, is different in some
respects from Table II of the permit.

Sincerely



AJP/ms

PORTLAND GENERAL ELECTRIC COMPANY

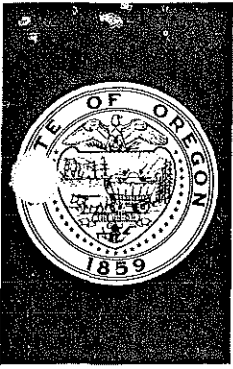
HARBORTON COMBUSTION TURBINE OPERATING ESTIMATE

1974 - 1975

	Jul 1974	Aug	Sep	Oct	Nov	Dec	Jan 1975	Feb	Mar	Apr	May	Jun	Jul	Aug
Base Load Rating, MW	207	208	212	220	228	232	234	231	227	222	217	212	207	208
Projected Operation, MW 73-74	165	166	169	176	182	185	188	185	182	178	173	170	165	166
			169	175	160	130	134	120	113	53	20	21	SAME AS 74	
Equivalent Base Load Hours 75-74	595	595	576	595	576	595	595	538	595	576	595	576	595	595
Fuel Use:			570	590	510	420	420	350	370	170	70	70	7,000	
If all gas - therms x 10 ⁶	15.3	15.4	15.2	16.4	16.3	17.2	17.5	15.5	16.9	16.0	16.1	15.3	15.3	15.4
If all oil - bbl. x 10 ³	250	251	247	266	266	280	284	253	275	260	262	249	250	251

The projected operation of the Harborton plant is based on critical water conditions which will require, to the extent available fuel supplies will permit, maximum feasible generation of all resources in the Pacific Northwest in order to meet anticipated load demands. The actual operation of Harborton will depend on prevailing water conditions at the time and will be first on natural gas to the extent available, and then on distillate fuel oil. In view of the uncertainties affecting the availability and allocation of fuel supplies and the inability to forecast water conditions at this time, it is impossible to predict what the actual operation at Harborton will be or the respective amounts on gas or oil.

12/28/73



DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHWEST REGION OFFICE

1010 N.E. COUCH STREET • PORTLAND, OREGON • 97232 • (503) 238-8471

TOM McCALL
GOVERNOR

April 23, 1974

KESSLER R. CANNON
Director

E. J. WEATHERSBEE
Region Administrator

Portland General Electric Co.
Power Resources
621 S.W. Alder
Portland, Oregon 97205

Attention: A. J. Porter

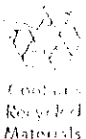
Re: AQ - PGE Harborton

Gentlemen:

As you know Section 2.7 of your Air Contaminant Discharge Permit requires that a public hearing be held prior to the Department modifying your permit to incorporate a new projected operating time and fuel use schedule for the period July 1, 1974, until the PGE Trojan nuclear power facility becomes operational. Please be advised it is the Department's intent to propose modifications to the subject permit as part of a Status Report to the Environmental Quality Commission at its May 24, 1974, meeting to be held in Portland. Subsequently the Department expects to schedule a public hearing in early June on this matter so that your permit modification can be accomplished by 1 July 1974.

In regard to your proposed operating time and fuel use schedule submitted to the Department on December 28, 1973, it is our understanding that water reserves, system electrical load, and fuel supply conditions can now be forecasted with better accuracy than they were when you first submitted your schedule - at least for portions of your 1974-75 operating schedule. Therefore, we are requesting that you submit a realistically revised operating schedule by May 3, 1974, for the period 1 July 1974 to 31 August 1975 based on the following conditions:

1. Median as well as critical water conditions.
2. Negotiated or proposed gas contract.
3. Minimum use of Bethel and Harborton turbines.



4. Minimal load growth for scheduled time period.

A revised graphical presentation of your entire system load and resource use (similar to 7/73-6/75 chart presented at Harborton permit hearing) would be most helpful and is requested.

In regard to the condition #4, the Department is of the opinion that PGE should not be marketing electricity at a rate which will force extended operation of combustion turbines beyond peaking or system backup conditions. The Department believes that from an environmental and energy conservation standpoint PGE should not be marketing large blocks of industrial power or electric resistance heating until its system resources in this state can generate this power in environmentally acceptable ways.

There also remain certain conditions in your Harborton Air Contaminant Discharge Permit which PGE has not demonstrated compliance with as of this date. These items have been discussed with PGE over the last several months. Please be advised that before the Department can allow further commercial operation of your Harborton facility PGE must demonstrate compliance or have an acceptable compliance schedule incorporated in your ACD permit. It is the Department's intent to include compliance schedules as necessary in the permit modification procedures we will undertake in the next two months. PGE is therefore requested to also submit by May 3, 1974, dates for submission of plans, issuance of equipment purchase orders, initiation of on-site construction, and demonstration of compliance for the following items in your permit.

1. Section 1.2.3 - Particulate Emission Rate when natural gas firing.
2. Section 1.2.6 - Carbon Monoxide Emission Rate when natural gas firing.
3. Section 1.3.6 - Carbon Monoxide Emission Rate when oil firing.
4. Section 1.3.7 - Smoke spot number when oil firing.
5. Section 1.4 - Sound pressure levels.

You will note that Section 3.1 of your permit requires PGE to take immediate steps to bring the facility into compliance with conditions 1.2, 1.3 and 1.4 of your permit. It is the Department's objective that PGE demonstrate compliance with the above permit limits prior to initiating any substantial commercial power generation this fall or winter.

In addition there are other items in your permit which we would like to resolve and respond to in our Status Report to the EQC at the May 24 meeting. These items are as follows:

1. Section 1.4 The Department would like to conduct an evaluation of the sound characteristics of the Harborton turbines off plant site near residences on the Harborton hillside and Sauvie Island when turbines are operating at or near sound pressure levels specified in this section of your permit. These evaluations, including sound pressure level measurements and subjective evaluations by our staff, should be conducted during normal day time and night time ambient background noise levels. We request that this testing be completed as soon as possible but not later than May 10, 1974. Arrangements for testing should be made through J. F. Kowalczyk of this office.
2. Section 3.1 Complete compliance emission test data collected during mid December 1973, has not been submitted to this office. We request this data to be submitted by May 3, 1974.
3. Section 3.2 The second quarterly progress report regarding development of NOx reduction system due 1 April 1974 has not been received. We request that this also be sent to us by May 3, 1974.
4. Section 4.3 Since the required ambient air monitoring program was not completely initiated until after fall and winter peaking operation of Harborton turbines, we have little data to evaluate the actual air quality impact of this facility. We are requesting that a special air monitoring program be conducted which will to some extent define plume rise and air quality impact. This program can consist at a minimum of operating your mobile and fixed air monitors around Harborton during the required noise tests. If this data is inconclusive, a more extensive program will be required.

Your prompt attention in this matter will be appreciated.

Very truly yours,

KESSLER R. CANNON
Director

E. J. Weathersbee, Administrator
Northwest Region Office

JFK;lb

cc: Air Quality Division

cc: *George Eisher*

PORTLAND GENERAL ELECTRIC COMPANY

ELECTRIC BUILDING

PORTLAND, OREGON 97205

A. J. PORTER
SENIOR VICE PRESIDENT

May 3, 1974

File AQ-PGE Harborton,
Mult. Co.

Mr. E. J. Weathersbee, Administrator
Northwest Region
Department of Environmental Quality
1010 N. E. Couch Street
Portland, Oregon 97232

Dear Mr. Weathersbee,

This is in reply to your request of April 23, 1974 for additional information regarding operating schedules, exhaust emission data and sound pressure levels at our Harborton combustion turbine facility. You have specifically requested a revised operating schedule for the period July 1, 1974 to August 31, 1975, based on four stated conditions.

In the schedule supplied to you December 28, 1973, the uncertainties were pointed out which resulted in the inability to predict water conditions and availability of fuel supplies at that time. I regret to report that the situation is essentially the same today even though it is almost a certainty that reservoirs will refill this spring due to the above normal snow pack now existing, thus ensuring a good probability of better than normal runoff conditions on July 1, the beginning of the next operating year under the Pacific Northwest Coordination Agreement. However, it is expected that reservoirs will go on control some time during the latter part of August, after which time there will be no assurance of what to expect in the way of stream flow levels until after the pattern of late fall and early winter precipitation has become established.

The latest summary of loads and resources, prepared under the auspices of the Pacific Northwest Utilities Conference Committee, indicates that again the region is facing a deficiency in firm resources in 1974-75 in the advent of critical water conditions. Also, we have been advised by Northwest Natural Gas Company that due to numerous uncertainties it is impossible to forecast, at this time, what natural gas volumes may be available for combustion turbine operation after July 1. So far, the only commitment we have for oil is a contract with Hawaiian Independent Refinery, Inc. for 400,000 barrels of No. 2 distillate to be delivered during the last half of this year.

Therefore, about the only change we can now make in the tabulation furnished you on December 28 would be to indicate a minimum operation of the Harborton plant until reservoirs go on control, probably during the latter part of August.

Mr. E. J. Weathersbee
May 3, 1974
Page Two

We believe the enclosed chart will portray our load-resource situation for the period July 1, 1974 through August 31, 1975, including the effect of some of the variables specifically mentioned in your letter. You will note that even if we assume median hydro conditions and the same load level as last year, there is a very sizable additional energy requirement which can only be covered by purchases if available from other utilities, by extended operation of PGE's combustion turbines if sufficient fuel is available, by better than median water supply, or by resorting to load curtailment. Because of the high cost of turbine fuel, you can be assured that every effort will be made to secure any other available means of meeting our load requirements rather than relying on combustion turbine generation.

Some of the purchases which we were able to make last winter from other utilities do not appear to be available this year, while other purchases may only be available in the advent of better than critical water conditions. Preliminary discussions have been initiated with respect to purchases from Canadian utilities but nothing definite has yet developed.

We realize that you may feel this is not a completely responsive answer to this portion of your request but under the circumstances we believe it is as definitive as can be stated at this time. Comments on the other items requested in your April 23 letter are contained in the enclosed memorandum prepared by George J. Eicher, Manager, Department of Environmental Services.

Sincerely



AJP/ms

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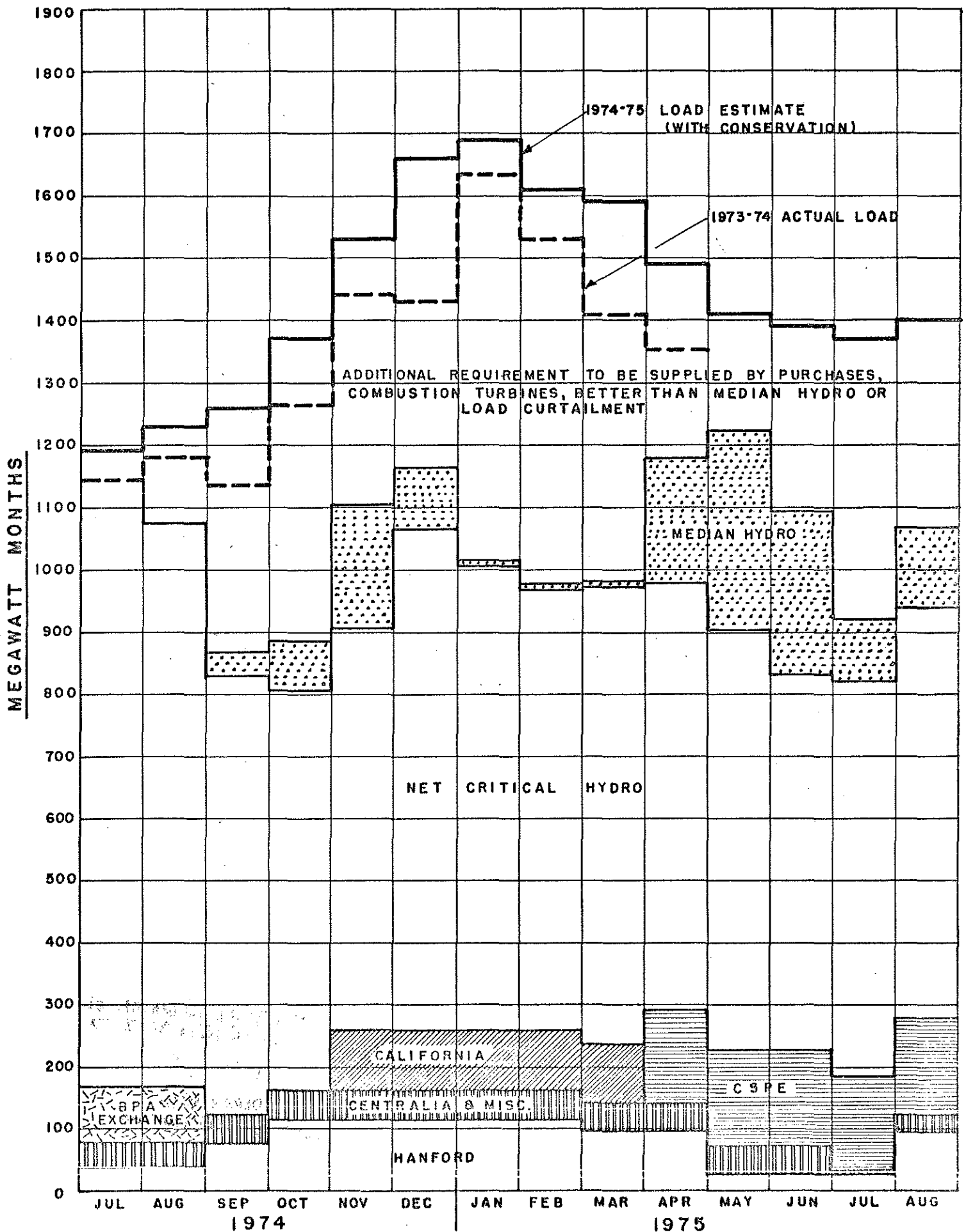
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MAY 06 1974

**DEPARTMENT OF
ENVIRONMENTAL QUALITY**

PORTLAND GENERAL ELECTRIC COMPANY

ENERGY LOADS AND RESOURCES



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MAY 06 1974

**DEPARTMENT OF
ENVIRONMENTAL QUALITY**

May 3, 1971

MEMORANDUM

To: A. J. Porter
From: G. J. Eicher *GJE*
Subject: Harborton Gas Turbines

Reference is made to Mr. Weathersbee's letter of April 23, 1974 on the above subject. I understand that you are preparing a reply to the portions up to the middle paragraph of page 2. This will address the remainder of the letter.

Taking up the air quality portions, we feel that it should be pointed out that the period April 23 through May 3 is an inadequate interval for development of compliance schedules for the listed items. DEQ had not previously indicated a compliance schedule intent.

TPM has proposed, and PGE accepted, a plan for testing two additional combustion system configurations on unit 3A which should resolve the question of whether any available dual fuel system can meet CO permit requirements on natural gas. The attached TPM letter explains its problem with this aspect. The first of these tests is planned for the week of May 20 and the second for that of June 20. In discussions with John Kowalczyk of DEQ today, he approved the concept.

TPM letter to be reviewed by DEQ. Work on this. (John Kowalczyk) (John Kowalczyk) (John Kowalczyk)

During these tests, a concurrent program will develop data on smoke performance and its susceptibility to fuel additive control. The spare Apollo additive injection pump installed at unit 3 will provide short run times between changes in concentrations. This should resolve the question of whether this additive can reliably reduce smoke spots to No. 2 or less on liquid fuel.

The TPM letter addressing the points raised by DEQ regarding emission levels of contaminants from C1 engines and variability thereof, hopefully will provide DEQ with an acceptable basis for adjusting Harborton emission limits.

With respect to paragraph 1, item 2 of page 3, the required data was received from TPM on May 2 and a copy delivered to John Kowalczyk this morning.

John

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**NORTHWEST REGION OFFICE
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MAY 06 1974

**DEPARTMENT OF
ENVIRONMENTAL QUALITY**

Turbo Power & Marine Systems

U
SUBSIDIARY OF UNITED AIRCRAFT CORPORATION
A

TEL (203) 677-4331

April 30, 1974

FARMINGTON,
CONNECTICUT 06032

Mr. Bruce Snyder
Portland General Electric Company
621 South West Alder Street
Portland, Oregon 97205

Dear Bruce:

In our discussions on April 16, 1974, you asked for additional background information on levels of emissions and expected variations, along with our philosophy regarding emissions. I will attempt to cover all pertinent points and provide sufficient commentary in order that a full understanding may be achieved.

I will address, specifically, the values now contained in your DEQ permit, what our position is with respect to those limits and why we take the position we do.

Smoke - 10% opacity on gas and oil which is equivalent to Von Brand 92. Measurement techniques being what they are, this is a safe limit which will permit operation without additive on B/M C-IDF engines. Smoke spot #2, VB#98, will always necessitate use of an additive.

Particulates - The 3.13 pph limit on gas should be raised to 10 pph. The 31.3 pph limit on oil should stand even though the level on the one engine tested at Harborton was below 15 pph. We have measured values up to 30 pph on oil even though these appear to represent an anomaly. Particulates on gas tend to range from 1/6 to 1/3 the levels on oil, hence the recommended 10 pph level.

NOx - Both the 188 #/Hr on gas and the 355 #/Hr on oil should stand. You remarked that you had noted a 50 #/Hr difference in an engine at Bethel and one at Harborton; this can be expected what with measurement, method, condition and calculation variations along with engine variations. The levels given you, on which the permit levels are based, represent the upper end of the band of data obtained on "C" engines on gas and oil. From mid to high power levels we have recorded up to 100 ppm variations - engine to engine.

SO₂ - The permit limits of 1.3 #/Hr and 105 #/Hr on gas and oil respectively appear arbitrary and may come from boiler experience. Our only comment is that every ppm of sulfur in the fuel used will convert to a ppm of SO₂; we have

*HELCO 50pph
only
on oil*

Turbo Power & Marine Systems

Mr. Bruce Snyder

-2-

April 30, 1974

no way to control this. You should calculate a safe, acceptable limit based on this philosophy.

CO - The present limits of 15.6 #/Hr on gas and 15.2 #/Hr on oil should be looked at carefully. The limits apparently were established based on predicted values. "A" engines show a wide range of CO emissions on natural gas, but the curve of high values versus MW is steadily trending downward from 130 ppm at 10 MW to 20 ppm at 25 MW - tending asymptotically toward 10 ppm. This same trend is true for both "A" and "C" series engines on distillate fuel. The "C" engines on gas show a completely different trend - downward from 175 ppm at 10 MW to 130 ppm at 20 MW, but then upward at higher powers, or at best a flattening out at a relatively high ppm level. As I pointed out at our meeting, this trend on gas was a complete surprise to us when we first saw it at Harborton. We have since confirmed this trend at FRDC on production DF engines, again at FRDC on a test engine used for water injection evaluation, and again through the repeated test at Harborton. *don't know*

The major difference in the "C" series combustors is in the DF configuration wherein the "C" engine incorporates a high pressure drop burner can and an aerating fuel nozzle to reduce smoke when burning liquid fuel. This configuration directs high velocity air into the dome of the can and through the nozzles to help atomize liquid fuel for more complete combustion, hence, less smoke. Unfortunately, this high velocity air is still present when operating on natural gas. I say unfortunately because the result is a venturi effect on the gas flow which increases the effective gas injection velocity into the burner can. Design analysis by combustion group personnel, when the "C" engine was designed, indicated that the combined effects of gas velocity through the "C" nozzle gas restrictor and the aerating air flow would result in an effective gas injection velocity equivalent to "A" engine values. In fact, the aerating air flow has a more powerful effect than expected. *any other site?*

Injection velocity is very critical to CO generation - the higher the velocity, the higher the CO. I think you'll agree that we proved this with the "A" series non-aerating nozzles that were tested at Harborton. In the case of the "C" engine one type of emission, smoke, was lowered and another, CO, increased - when we tested the "A" nozzles at Harborton, CO was reduced but smoke increased.

As you may have heard from Don Miller, we have two additional configurations both of which retain dual fuel capability, that offer a good possibility for further reducing CO when burning natural gas. One is the full A-11 combustor with pressure atomizing, non-aerating nozzles and low pressure drop burner cans. The second incorporates a modified outer nozzle nut, with the above components, in which oversized nozzle scrubbing air holes are reduced in size to minimize venturi effects. The first configuration

Turbo Power & Marine Systems

Mr. Bruce Snyder

-3-

April 30, 1974

is available for test right now; the second requires some work but should be available within the next week or so. We will set up a test program and schedule with PGE as soon as the whole package is put together; we are aiming for having results before your permit hearings.

We've noted other cross effects similar to the smoke/CO effects noted here. In our efforts to reduce NO_x with water injection, we have found that with increasing water flow NO_x levels decrease, but CO values increase.

This NO_x /CO trend is understandable when you consider two combustion characteristics which directly affect both emissions - residence time and temperature. NO_x can be reduced by shortening residence time in the primary combustion zone, but CO increases because conversion of CO to CO_2 by oxidation is reduced. NO_x also can be reduced by reducing peak combustion temperature, but CO is again increased because the conversion of CO to CO_2 via oxidation is also reduced. We certainly hope that with NO_x control systems we will be able to achieve an acceptable balance of these two pollutants. In the meantime we have alerted EPA, as has a committee of ASME, to this cross effect in an effort to prevent promulgation of regulations that no one can meet.

Particulate emissions is a troublesome subject, primarily because of the possible errors inherent in all of the available measuring techniques. EPA, in studying this problem finally concluded that they should not recommend a particulate regulation because of this measurement problem and the fact that gas turbine particulate emissions were low enough in any case. For all "A" and "C" series engines the variation in values we've measured at given power levels varies from a factor of 2 to a factor of 10.

In the dry filter/wet impingement type of system that is used in Southern California and was seriously considered by EPA, relatively small differences in the before and after weights of measuring train components can seriously affect the calculation of total particulates. Weight measurements, or differences in weight, are in milligrams - this after sampling times of 1 hour or greater. These small weight values are then multiplied by a very large figure representing the total mass flow of the engine over the same sampling time. Obviously, errors in a tricky weighing process at a low milligram level can drastically affect the final result. There is also the problem of the ambient particulate level. If there is hard particulate in the air, a gas turbine will suck it up and pass most of it through to the sampling point in the exhaust.

Apparent engine to engine variations would be greatly reduced, if in all cases, (1) the method used incorporated an infinite number of sampling points in the exhaust, (2) the methods of measuring and/or analyzing each

Turbo Power & Marine Systems

Mr. Bruce Snyder

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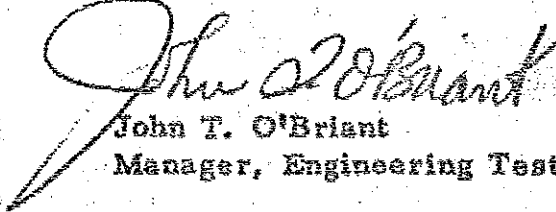
April 30, 1974

parameter (flow, gas constituents, etc.) were absolutely accurate, (3) there were no sampling probe lengths wherein changes due to oxidation, leakage, temperature changes, etc., could occur, and (4) calculations based on other inaccurate measurements or assumptions were not required.

I hope that this information and commentary helps in your ongoing discussion within your company and with the air pollution authorities. Should you have any questions or require clarification of any of the points covered here please call me in Farmington, Connecticut (203) 677-4081 Ext. 387.

Very truly yours,

TURBO POWER AND MARINE SYSTEMS, INC.


John T. O'Briant
Manager, Engineering Test

JTO:mmc

**NORTHWEST REGION OFFICE
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MAY 06 1974

**DEPARTMENT OF
ENVIRONMENTAL QUALITY**

Stam &

Copies to:

East Salem Environmental Assoc.

Marlene Frady

Dr. Lee Jensen, OSU

PGE

Mike Roach, Mid Will. Valley APA

Marion County Commissioners

Marion County Planning Dept.

Towne & Associates

Russ Fetrow

Noise Control Div.



ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

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MORRIS K. CROTHERS
Salem

Ronald M. Somers
The Dalles

Kessler R. Cannon
Director

MEMORANDUM

To : Environmental Quality Commission

From : Director

Subject: Agenda Item No. E, May 24, 1974, EQC Meeting

PGE Bethel, Marion County - Status Report; Authorization for Joint Department of Environmental Quality/Mid-Willamette Valley Air Pollution Authority Public Hearing to Consider Modifications of Noise or Operating Limitations

Background

Portland General Electric Company (PGE) began operation of the gas turbine power generating facility at the Bethel substation located approximately two miles east of I-5 on the north side of State Street at 53rd Street in July 1973. Since this plant has been in operation, 126 complaints of noise and vibration have been logged.

As a direct action to provide the Bethel community relief from unwarranted disturbance and to insure appropriate and timely study and control of noise emissions from the turbines, the Department, by letter dated December 5, 1973, directed PGE to:

- (1) limit operation of turbines to the hours of 7 a.m. to 8:30 p.m. at a power level no greater than 25 megawatts per generating pack, and
- (2) work out an appropriate arrangement for a joint PGE/DEQ sound monitoring and evaluation program.

Status of Bethel Noise Study:

PGE employed Robin M. Towne and Associates, Inc., Consultants in Acoustics; to conduct a complex five part study of the noise and vibration at the turbine generators and their impact on residences in the area. Meanwhile, a group of area residents, organized as the East Salem Environmental Committee, hired Dr. Lee Jensen from OSU to conduct independent noise and vibration measurements simultaneously with the Robin M. Towne engineers. DEQ staff coordinated these studies and logged their own subjective comments of perceived noise from the generators.



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The field tests were completed May 1, 1974, and it is expected that PGE will submit the Towne report to the Department prior to June 1. Dr. Jensen's report is also expected to be received some time in May. Summaries of these reports will be provided to EQC members as soon as they become available.

Joint EQC/MWVAPA Public Hearing

A public hearing has been scheduled before the combined Environmental Quality Commission and Mid-Willamette Valley Air Pollution Authority Boards at 7:30 p.m., June 17, 1974, at the Salem Civic Center, Council Chambers, in order that the EQC and MWVAPA Board can receive an up-dated evaluation of the environmental impact of the Bethel turbine-generators and to consider the need for possible modification of its air emission permit and/or noise limits or operating conditions.

The staff of the Mid-Willamette Valley Air Pollution Authority will review PGE's Air Contaminant Discharge Permit renewal and present the state of the art in control of turbine power plant atmospheric emissions.

A summary of the Robin M. Towne study will be presented by PGE, or Robin Towne, Inc., followed by a DEQ staff report which will include (1) background information on noise problems at PGE; (2) evaluation of the Robin M. Towne study; (3) subjective evaluation by staff; (4) a review of the Department's imposed noise limits; (5) evaluation of probable impact of turbine generator noise at residences after proposed mufflers are installed on the exhaust stacks.

It is anticipated that the East Salem Environmental Committee and Dr. Jensen and perhaps others will also want to present testimony.

Public Hearing Schedule

In order to familiarize the members of both the EQC and the MWVAPA Board with the Bethel facility and the associated environmental problems, a tour before the hearing through the generating plant and a visit to nearby residences while the turbine plant is operating is proposed as follows:

June 17, 1974

3:30 p.m.	Meet at DEQ Salem Office 2595 State Street.
4 - 5 p.m.	Tour through Bethel generating plant and nearby residences while plant generates power at 55 MW and 110 MW.
5:30 - 7 p.m.	Dinner at the Black Angus Restaurant.
7:30 p.m. -	Public Hearing at Salem Civic Center Council Chambers.



5/10/74

KESSLER R. CANNON
Director



ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

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Portland

MORRIS K. CROTHERS
Salem

Ronald M. Somers
The Dalles

Kessler R. Cannon
Director

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. F, May 24, 1974, EQC Meeting

Boise Cascade Corporation, Salem Pulp & Paper Plant
Proposed Modification to Air Contaminant Discharge Permit;
Authorization for Public Hearing to Consider Proposed
Expansion.

On April 1, 1974, the Department received a Notice of Construction and Application for Approval on the following from Boise Cascade Corporation, Salem Pulp and Paper Plant:

1. Installation of a Mist Eliminator on Recovery Furnace by June 1, 1975.
2. Installation of Counter Current Washers by February 1, 1976.
3. Installation of an additional digester (eighth one) by February 1, 1976.

Item 1, above, is related to control of particulate and recovery furnace plume opacity required by Condition 4, Section A, of the Company's present Air Contaminant Discharge Permit. Since the Company's permit provides for compliance with this section by July 1, 1974, acceptance of this part of the company's proposal would require modification of its permit to extend the compliance date to June 1, 1975.

Item 2, would provide more efficient washing of pulp and thereby reduce the waste load on the company's secondary treatment ponds and also the waste load discharged to the river and is related capacity-wise to the expansion of pulping capacity proposed by item 3.

Item 3, would increase pulping capacity by 10% over present permit limits and 25% over actual average pulp production. This would balance pulp production capacity with paper production capacity and relieve the mill's present dependency upon imported pulp.



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Because of the July 1, 1974, deadline for compliance with condition 4, Section A, the Commission is requested to act upon the company's proposal for installation of a mist eliminator (item 1) to control plume particulates and opacity and to authorize modification of the company's permit to incorporate a realistic installation schedule.

In addition, the Commission is requested to authorize a public hearing to be held in the Salem Civic Center at 7:30 p.m., June 27, 1974, to further consider the company's proposed expansion of pulping capacity and improvements to its waste water control facilities (items 2 and 3).

PROPOSED MODIFICATION TO AIR CONTAMINANT DISCHARGE PERMIT Condition 4, Section A)

Background

Condition No. 4 of Section A of the Air Contaminant Discharge Permit issued to Boise Cascade Corporation, Paper Group, Salem, Oregon, requires the following:

- "4. As soon as practicable but not later than July 1, 1974, the recovery system particulate emission shall not exceed the following:
 - a. Four (4) pounds per adt of pulp produced, or
 - b. An opacity equal to or greater than twenty percent (20%) for an aggregated time or more than three (3) minutes in any one (1) hour exclusive of uncombined moisture."

Records submitted for the recovery boiler by the company for the 1973 operating year showed that monthly average particulate emission levels (pounds of particulates per adt of pulp produced) varied from a low of 2.24 to a high of 7.90 with an overall average of 5.63. Plume opacity has periodically greatly exceeded 20%. Sulfur dioxide levels have for the most part met permit conditions. The problem that has generated the most complaints from the citizens of Salem has been opacity (visibility reduction) and odor from the recovery system during periods of unfavorable meteorology.

In order to meet the requirements of condition No. 4, Boise Cascade has been researching possible solutions to the problem together with other ammonia base sulfite mills. This research has provided two alternatives which are: (1) internal modification to the recovery boiler's absorption tower; and (2) installation of a mist eliminator. At the present time, the tower modification is not a proven system on full scale operation, while mist eliminators have recently proven capable of operating extremely well with essentially zero visible emissions.

After meeting several times with the management of Boise Cascade on the particulate, odor and opacity problems which are compounded by the meteorological conditions in their Salem location, the company has agreed to install a mist eliminator on the following schedule:

- a. Preliminary engineering submitted May 1, 1974.
- b. Order of major equipment June 1, 1974.
- c. Detailed engineering completed October 1, 1974.
- d. Complete installation March 1, 1975.
- e. In compliance June 1, 1975.

Staff Evaluation

The staff of the Department has reviewed Boise Cascade's request in light of the present state of the art in controlling emissions from ammonia base recovery systems. At present, mist eliminators are in operation at the Finch Pruyn Co. mill in Glenn Falls, N.Y. and at the Scott Paper Co. mill in Everett, Washington. Both are ammonia base sulfite mills similar to the Boise Cascade Salem mill. These systems have been proven capable of controlling the recovery boiler stack to zero visible emissions; however, a plugging problem of the mist eliminators has occurred at both of these mills causing periods of discontinued use.

The staff feels that the plugging problem experienced at the above two mills is caused by boiler operation problems which can be avoided in the installation at the Boise Cascade, Salem mill, by proper design.

In reviewing the other known available control alternative, namely, tower modification, a new plant, Port Carter in Quebec, has installed this system and is programmed to start up in June 1974. However, this company is also installing mist eliminators as a backup in case the tower modification doesn't work. Even if successful, tower modification does not appear likely to provide the degree of control that can be achieved by properly operating mist eliminators.

Based on a pilot system study recently conducted by the company which reduced the recovery boiler opacity to zero, it appears that a substantial decrease in sulfur dioxide (SO₂) can be realized with the mist eliminator as well as providing zero opacity and reducing the particulate problem.

In the final analysis, a mist eliminator system appears to be the highest and best practical treatment available, and could be designed to eliminate the plugging problem.

PROPOSED MODIFICATION TO AIR CONTAMINANT DISCHARGE PERMIT (Condition 1, Section A)

In reviewing the company's present Air Contaminant Discharge Permit in connection with this proposed modification, an oversight was found in condition number 1, Section A, which needs to be corrected. Condition number 1 states:

- "1. After July 1, sulfur dioxide (SO₂) emissions from the sulfite pulp mill (including the recovery system) shall not exceed the following:
 - a. 800 ppm as an hourly average.
 - b. 5500 pounds per day as a monthly average, or
 - c. Twenty (20) pounds per unbleached, air-dried ton (adt) or 6200 pounds per day as a maximum daily emission."

Since the steam generating boiler facilities are included in this permit for the sulfite pulp mill, the above condition is misleading. This condition was intended to be written for all process SO₂ emissions, including the recovery system but excepting those from steam generating boiler facilities which are covered in condition Number 5 of Section A. Therefore, this condition is proposed to be modified as follows:

1. After July 1, 1974, sulfur dioxide (SO₂) emissions from the sulfite pulp mill (excluding the steam generating boiler facilities) shall not exceed the following:
 - (a, b, and c remain the same)

DIRECTOR'S RECOMMENDATION

It is the Director's recommendation that the Commission act as follows:

1. Approve, subject to staff approval of detailed plans and specifications, installation of a mist eliminator to control plume opacity and particulates and authorization of modifications to Boise Cascade's Air Contaminant Discharge Permit as per Attachment A.
2. Authorize a public hearing to be held at the Salem Civic Center 7:30 p.m., June 27, 1974, to further consider proposed expansion of pulping capacity and proposed improvements to wastewater control facilities.



Kessler R. Cannon

Attachment A

ATTACHMENT A

Proposed Modifications to Boise Cascade Corporation Salem Mill
Air Contaminant Discharge Permit (May 24, 1974)

Condition 1, Section A

1. After July 1, 1974, sulfur dioxide (SO₂) emissions from the sulfite pulp mill (including the recovery system) [(excluding the steam generating boiler facilities)] shall not exceed the following:
 - a. 800 ppm as an hourly average,
 - b. 5,500 pounds per day as a monthly average, or
 - c. Twenty (20) pounds per unbleached, air-dried-ton (adt) or 6,200 pounds per day as a maximum daily emission.

Condition 4, Section A

4. [A] As soon as practicable but not later than ~~July 1, 1974~~ [June 1, 1975] the recovery system particulate emissions shall not exceed the following:
 - a. Four (4) pounds per adt of pulp produced, or
 - b. An opacity equal to or greater than twenty percent (20%) for an aggregated time or more than three (3) minutes in any one (1) hour exclusive of uncombined moisture.
- [B] The permittee shall install a mist eliminator to control recovery boiler emissions in accordance with the following schedule:
 - a. By no later than July 1, 1974, submit plans and specifications to the Department for all necessary construction and/or modification work.
 - b. By no later than August 1, 1974, obtain approval from the Department of engineering plans and specifications with any required amendments of the air contaminant control system.
 - c. By no later than September 1, 1974, issue all purchase orders for components and control equipment.

- d. By no later than December 1, 1974, commence construction and/or modification work.
- e. By no later than March 1, 1975, complete all construction and/or modification work, and
- f. By no later than June 1, 1975, demonstrate that the recovery boiler is operated in compliance with Condition 4[A].

Item 2

Copies to:

Cargill
Port of Portland
Rob Haskins



ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

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Corvallis

JACKLYN L. HALLOCK
Portland

MORRIS K. CROTHERS
Salem

Ronald M. Somers
The Dalles

Kessler R. Cannon
Director

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item No. G, May 24, 1974, EQC Meeting

Cargill, Incorporated - Proposed Permit Modification

Background

Cargill, Inc. operates the Port of Portland grain elevator at Terminal No. 4, Portland, Oregon. This operation which annually handles in excess of one million tons of grain is one of the largest sources of particulate emission in the present NWR jurisdiction. The 1970 Emission Inventory listed Cargill as emitting 1283 tons of dust and fine grain particles per year. The implementation plan required a reduction of 1105 tons of particulates/year from this plant. This represents nearly 23% of the required particulate emission reduction in Multnomah County.

In order to comply with the implementation plan, the CWAPA Board of Directors, in March 1973, entered a joint Consent and Order with Cargill and the Port of Portland to attain compliance. A Waiver and Consent procedure was also agreed to at this same time which allowed either party to revoke this commitment at any time prior to May 1, 1973, by serving written notice to CWAPA.

According to the compliance schedule, preliminary engineering was due on May 1, 1973. The Port of Portland submitted this information on time, however, in the same transmittal letter, dated April 30, 1973, the Port of Portland revoked its consent to comply with the previously agreed compliance schedule. The problem stemmed from the failure of the Port and Cargill reaching agreement on lease renewal conditions.



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Due to the shortage of personnel during the CWAPA - DEQ merger in July 1973, the company was issued a temporary permit until December 31, 1973.

After further negotiations with the Port of Portland and Cargill, the Department issued a proposed air contaminant discharge permit to Cargill, Inc. on January 17, 1974, which included the following revised compliance schedule:

- 2.1 January 15, 1974, or before, the permittee shall submit a report in writing confirming that the Port of Portland and Cargill, Incorporated have reached final agreement to proceed with final design of the grain handling and storage facility including air pollution control equipment.
- 2.2 May 1, 1974, or before, the permittee shall file with the Department a Notice of Construction along with complete engineering plans and specifications of the system or systems for the control of the grain handling and storage facility.
- 2.3 June 15, 1974, or before, the permittee shall obtain approval from the Department of engineering plans and specifications of any required amendments of the air contaminant control systems.
- 2.4 July 1, 1974, or before, furnish documentation to the Department that a contract has been awarded for the acquisition and installation of the control systems and in the event that Cargill, Incorporated elects to perform any acquisition or installation, said Cargill, Incorporated shall have issued purchase orders for the components of the system involved with their own construction with copies of said purchase orders furnished to the Department.
- 2.5 August 1, 1974, or before, the permittee shall initiate on-site construction for installation of the approved grain handling and storage control systems.
- 2.6 January 1, 1975, or before, furnish documentation to the Department that 25% of the construction and installation of the air contaminant control systems is complete. Copies of progress payments made to the contractor showing not less than 25% completion shall be sufficient.

2.7 May 15, 1975, or before:

2.7.1 Furnish documentation to the Department that 75% of the construction and installation of the air contaminant control system is complete. Copies of progress payments made to contractor showing not less than 75% completion shall be sufficient proof.

2.7.2 Emissions of air contaminants from the grain handling and storage facilities shall have been reduced by not less than 80% and a report filed with the Department demonstrating how said reduction was accomplished.

2.8 November 15, 1975, or before, the air contaminant control systems shall be completely constructed and installed and in operation and the entire grain handling and storage facility operating in compliance with Department rules.

By March 1, 1974, after repeated contact by the Department, Cargill had failed to comply with permit Section 2.1, because it still had not reached agreement with the Port on lease terms. The Department therefore issued a five-day warning letter for failure to comply with said permit condition and advised the company that further failure to comply would result in the imposition of civil penalties at the rate of \$100/day.

In light of the Department's warning letter of March 1, 1974, and Cargill's continued failure to comply with permit Section 2.1, the Department imposed a civil penalty of \$100 per day for each day from March 9, 1974, through March 28, 1974, for a total of \$2,000.

The Department further advised Cargill that if the matter was not immediately resolved such that Cargill would clearly be able to abate its pollution problem within the time frame required by the permit, the Department would continue the daily civil penalties and also schedule a show cause hearing before the EQC at its May 24, 1974, meeting to consider revocation of Cargill's permit and entering of a cease and desist order relative to the atmospheric emissions.

In a letter dated April 9, 1974, Cargill submitted a letter appeal of the civil penalty to the Department. However, after subsequent meetings with Department representatives, Cargill has now submitted the following attached documents:

1. Written Agreement between Cargill and the Port of Portland to proceed immediately with final design of the air pollution control equipment.
2. Request for modification of the compliance schedule in the existing permit to accommodate the time lost to date.
3. Interim proposal to reduce emissions from barge and ship unloading and loading.
4. A check for \$2,000 for the previously imposed civil penalties.

With respect to the proposed compliance schedule modification, Cargill has proposed a three-phase control program.

Phase I proposes to relocate the existing barge unloading facility and utilize a modified conveyor system by January 1, 1974. The company believes this will result in an 80% reduction of particulate emission from this operation.

Phase II relates to the control of emissions from the truck and train transfer and receiving, transfer of grain to storage and grain cleaning facilities. Compliance of these facilities would be accomplished in the same time frame as the original schedule.

Phase III encompasses the control of emissions from the barge unloading and ship loading operations. Cargill has requested a final completion date of May 1, 1976, which exceeds the original compliance date by six months for this portion of the overall control program.

Conclusion

The Department has concluded that acceptance of the proposed revised schedule is the most expedient means of attaining compliance with the Department's standards and restoring and maintaining air quality in a progressive manner.

Recommendation

It is the recommendation of the Director that the Commission authorize acceptance of the proposed revised compliance schedule and incorporation of said schedule into a proposed modified permit (attachment 1) to be issued pursuant to required notice and hearing procedures.

A handwritten signature in cursive script, appearing to read "Kessler R. Cannon".

KESSLER R. CANNON
Director

Attachments: Cargill, Incorporated letter dated April 30, 1974
Proposed Permit Compliance Schedule Modification
Cargill, Incorporated letter dated May 8, 1974

Cargill Incorporated Terminal No. 4 Grain Elevator

2. Compliance Schedule

Phase I
(Interim control of barge unloading facility)

- 2.1 January 1, 1975, or before, Cargill, Incorporated will reduce emissions from the existing barge unloading facility by relocating the present facility and utilizing a modified conveyor system.

Phase II

- 2.2 May 1, 1974, or before, the permittee shall submit a report in writing confirming that the Port of Portland and Cargill, Inc. have reached agreement to proceed with final design of the grain handling and storage facility including air pollution control equipment.
- 2.3 June 30, 1974, or before, the permittee shall submit a report in writing confirming that the Port of Portland and Cargill, Inc. have reached agreement regarding the lease of and modifications to the grain handling and storage facility, including air pollution control equipment, that will insure that construction, installation and operation of the air pollution control equipment will proceed in accordance with the revised compliance schedule.
- 2.4 July 1, 1974, or before, the permittee shall file with the Department a Notice of Construction along with complete engineering plans and specifications of the system or systems for the control of emissions from the truck and train transfer and receiving, transfer of grain to storage, and grain cleaning facilities.
- 2.5 August 15, 1974, or before, the permittee shall obtain approval from the Department of engineering plans and specifications with any required amendments of the air contaminant control systems pertaining to truck and train receiving, transfer of grain to storage, and grain cleaning facilities.
- 2.6 September 1, 1974, or before, furnish documentation to the Department that a contract has been awarded for the acquisition and installation of the control systems pertaining to truck and train receiving, transfer of grain to storage, and grain cleaning facilities, and in the event that Cargill, Inc. elects to perform any acquisition or installation, said Cargill, Inc. shall have issued purchase orders for the components of the system involved with their own construction with copies of said purchase orders furnished to the Department.

Cargill, Incorporated Terminal No. 4 Grain Elevator

-2-

- 2.7 September 15, 1974, or before, the permittee shall initiate on-site construction or installation of the approved grain handling and storage control systems pertaining to truck and train receiving, transfer of grain to storage, and grain cleaning facilities.
- 2.8 January 1, 1975, or before, furnish documentation to the Department that 25 percent (25%) of the construction and installation of the air contaminant control systems pertaining to the truck and train receiving, transfer of grain to storage, and grain cleaning facilities is complete. Copies of progress payments made to the contractor showing not less than 25 percent completion shall be sufficient.
- 2.9 May 15, 1975, or before:
- 2.9.1 Furnish documentation to the Department that 75 percent (75%) of the construction and installation of the air contaminant control systems pertaining to truck and train receiving, transfer of grain to storage, and grain cleaning facilities is complete. Copies of progress payments made to contractor showing not less than 75 percent completion shall be sufficient proof.
- 2.9.2 Emissions of air contaminants from the truck and train receiving, transfer of grain to storage, and grain cleaning facilities shall have been reduced by not less than 80 percent (80%) and a report filed with the Department demonstrating how said reduction was accomplished.
- 2.10 November 15, 1975, or before, the air contaminant control systems pertaining to truck and train receiving, transfer of grain to storage, and grain cleaning facilities shall be completely constructed and installed and in operation and the entire grain handling and storage facility pertaining to truck and train receiving, transfer of grain to storage, and grain cleaning facilities operating in compliance with Department rules. 1/

1/ Minor adjustments to final compliance dates pertaining to the transfer of grain to storage facilities may be required because of the modernization program.

Cargill, Incorporated Terminal No. 4 Grain Elevator

-3-

Phase III

- 2.11 August 1, 1974, or before, the permittee shall file with the Department a Notice of Construction along with complete engineering plans and specifications of the system or systems for the control of emissions from the ship loading and barge unloading facilities.
- 2.12 September 15, 1974, or before, the permittee shall obtain approval from the Department of engineering plans and specifications with any required amendments of the air contaminant control systems pertaining to ship loading and barge unloading facilities.
- 2.13 November 1, 1974, or before, furnish documentation to the Department that a contract has been awarded for the acquisition and installation of the control systems pertaining to the ship loading and barge unloading facilities, and in the event that Cargill, Inc. elects to perform any acquisition or installation, said Cargill, Inc. shall have issued purchase orders for the components of the system involved with their own construction with copies of said purchase orders furnished to the Department.
- 2.14 November 15, 1974, or before, the permittee shall initiate fabrication or installation of the approved grain handling and storage control systems pertaining to ship loading and barge unloading facilities.
- 2.15 April 1, 1974, or before, furnish documentation to the Department that 25 percent (25%) of the fabrication or installation of the air contaminant control systems pertaining to the ship loading and barge unloading facilities is complete. Copies of progress payments made to the contractor showing not less than 25 percent completion shall be sufficient.
- 2.16 October 1, 1975, or before:
 - 2.16.1 Furnish documentation to the Department that 75 percent of the fabrication and installation of the air contaminant control systems pertaining to ship loading and barge unloading facilities is complete. Copies of progress payments made to contractor showing not less than 75 percent completion shall be sufficient proof.

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS
Issued by the
Department of Environmental Quality for

Expiration Date: 6/30/76

Page 4 of 4

Appl. No.: 128

File No.:

Cargill, Incorporated Terminal No. 4 Grain Elevator

-4-

- 2.16.2 Emissions of air contaminants from the barge unloading facilities shall have been reduced by not less than 80 percent (80%) and a report filed with the Department demonstrating how said reduction was accomplished.
- 2.17 May 1, 1976, or before, the air contaminant control systems pertaining to ship loading and barge unloading facilities shall be completely constructed and installed and in operation and the entire grain handling and storage facility operating in compliance with Department rules.

LINDSAY, NAHSTOLL, HART, DUNCAN, DAFOE & KRAUSE

ATTORNEYS AT LAW

THE CARRIAGE HOUSE

1331 S. W. BROADWAY

PORTLAND, OREGON 97201

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ALFRED C. VEAZIE, OF COUNSEL
CABLE ADDRESS: "CARRIAGE"
TELEPHONE (503) 226-1191

May 8, 1974

Robert L. Haskins, Esq.
Assistant Attorney General
555 State Office Building
Portland, Oregon 97201

Re: Notice of Assessment of Civil Penalty
NWR-AQ-74-006-03
Cargill, Incorporated, Multnomah County

Cargill, Incorporated
Air Contaminant Discharge Permit No. 26-2009
REQUEST FOR MODIFICATION OF COMPLIANCE SCHEDULE

Dear Mr. Haskins:

Confirming our discussions regarding the Request for Modification of Compliance Schedule submitted by Cargill on April 30, 1974, we confirm that Line 5 of Section 2.2 should be amended to add the term "and train" in the phrase ". . . truck transfer and receiving. . ." As amended, Line 5 will read: ". . . truck and train transfer and receiving, and transfer of grain to stor-".

Also, Cargill assents to the inclusion of the following language in the Modified Compliance Schedule:

"2.1(a) 30 June 1974, or before, the permittee shall submit a report in writing confirming that the Port of Portland and Cargill, Inc. have reached sufficient agreement regarding the lease of and modifications to the grain handling and storage facilities, including air pollution control equipment, that will insure that construction, installation and operation of the air pollution control equipment will proceed in accordance with the revised Compliance Schedule."

RECEIVED

MAY 09 1974

DEPARTMENT OF
ENVIRONMENTAL QUALITY

Robert L. Haskins, Esq.
May 8, 1974
Page 2

Re: Cargill, Inc.

We believe that this language accurately reflects the intent of the Department's request. Please keep us advised of your decisions regarding Cargill's request for Compliance Schedule modification.

Yours very truly,

Robert E. Babcock

REB:a

cc: Kessler R. Cannon, Director
Department of Environmental Quality

Mr. Harry D. Starr
Cargill, Incorporated

LINDSAY, NAHSTOLL, HART, DUNCAN, DAFOE & KRAUSE

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GLEN McCLENDON

GUNTHER F. KRAUSE 1995-1997

ALFRED C. VEAZIE, OF COUNSEL

CABLE ADDRESS: 'CARRIAGE'

TELEPHONE (503) 228-1191

April 30, 1974

Department of Environmental Quality
Northwest Region Office
1010 N. E. Couch Street
Portland, Oregon 97232

Attention: Kessler R. Cannon, Director

Re: Notice of Assessment of Civil Penalty
NWR-AQ-74-006-03
Cargill, Incorporated, Multnomah County

Cargill, Incorporated
Air Contaminant Discharge Permit No. 26-2009
REQUEST FOR MODIFICATION OF COMPLIANCE SCHEDULE

Gentlemen:

Confirming our discussions with your representatives, Cargill, Incorporated requests that the following modified compliance schedule be incorporated into its air contaminant discharge permit No. 26-2009 in lieu of that schedule currently specified:

2. Compliance Schedule

- 2.1 1 May 1974 or before, the permittee shall submit a report in writing confirming that the Port of Portland and Cargill, Inc. have reached agreement to proceed with final design of the grain handling and storage facility including air pollution control equipment.
- 2.2 1 July 1974 or before, the permittee shall file with the Department a Notice of Construction along with complete engineering plans and specifications of the system or systems for the control of emissions from the truck transfer and receiving, transfer of grain to storage, and grain cleaning facilities.
- 2.2(a) 1 August 1974 or before, the permittee shall file with the Department a Notice of Construction along with

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Quality
April 30, 1974
Page 2

Re: Cargill, Incorporated

complete engineering plans and specifications of the system or systems for the control of emissions from the ship loading and barge unloading facilities.

- 2.3 15 August 1974 or before, the permittee shall obtain approval from the Department of engineering plans and specifications with any required amendments of the air contaminant control systems pertaining to truck and train receiving, transfer of grain to storage, and grain cleaning facilities.
- 2.3(a) 15 September 1974 or before, the permittee shall obtain approval from the Department of engineering plans and specifications with any required amendments of the air contaminant control systems pertaining to ship loading and barge unloading facilities.
- 2.4 1 September 1974 or before, furnish documentation to the Department that a contract has been awarded for the acquisition and installation of the control systems pertaining to truck and train receiving, transfer of grain to storage, and grain cleaning facilities, and in the event that Cargill Incorporated elects to perform any acquisition or installation, said Cargill Incorporated shall have issued purchase orders for the components of the system involved with their own construction with copies of said purchase orders furnished to the Department.
- 2.4(a) 1 November 1974 or before, furnish documentation to the Department that a contract has been awarded for the acquisition and installation of the control systems pertaining to the ship loading and barge unloading facilities, and in the event that Cargill Incorporated elects to perform any acquisition or installation, said Cargill Incorporated shall have issued purchase orders for the components of the system involved with their own construction with copies of said purchase orders furnished to the Department.
- 2.5 15 September 1974 or before, the permittee shall initiate on-site construction or installation of the approved grain handling and storage control systems pertaining to truck and train receiving, transfer of

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Page 3

Re: Cargill, Incorporated

grain to storage, and grain cleaning facilities.

- 2.5(a) 15 November, 1974 or before, the permittee shall initiate fabrication or installation of the approved grain handling and storage control systems pertaining to ship loading and barge unloading facilities.
- 2.6 1 January 1975 or before, furnish documentation to the Department that 25 percent (25%) of the construction and installation of the air contaminant control systems pertaining to the truck and train receiving, transfer of grain to storage, and grain cleaning facilities is complete. Copies of progress payments made to the contractor showing not less than 25 percent completion shall be sufficient.
- 2.6(a) 1 April 1975 or before, furnish documentation to the Department that 25 percent (25%) of the fabrication or installation of the air contaminant control systems pertaining to the ship loading and barge unloading facilities is complete. Copies of progress payments made to the contractor showing not less than 25 percent completion shall be sufficient.
- 2.7 15 May 1975 or before:
- 2.7.1 Furnish documentation to the Department that 75 percent (75%) of the construction and installation of the air contaminant control systems pertaining to truck and train receiving, transfer of grain to storage, and grain cleaning facilities is complete. Copies of progress payments made to contractor showing not less than 75 percent completion shall be sufficient proof.
- 2.7.2 Emissions of air contaminants from the truck and train receiving, transfer of grain to storage, and grain cleaning facilities shall have been reduced by not less than 80 percent (80%) and a report filed with the Department demonstrating how said reduction was accomplished.
- 2.7(a) 1 October 1975 or before:
- 2.7(a).1 Furnish documentation to the Department that 75 percent of the fabrication and installation of the air con-

Department of Environmental
Quality
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Page 4

Re: Cargill, Incorporated

taminant control systems pertaining to ship loading and barge unloading facilities is complete. Copies of progress payments made to contractor showing not less than 75 percent completion shall be sufficient proof.

- 2.7(a).2 Emissions of air contaminants from the barge unloading facilities shall have been reduced by not less than 80 percent (80%) and a report filed with the Department demonstrating how said reduction was accomplished.
- 2.8 15 November 1975 or before, the air contaminant control systems pertaining to truck and train receiving, transfer of grain to storage, and grain cleaning facilities shall be completely constructed and installed and in operation and the entire grain handling and storage facility pertaining to truck and train receiving, transfer of grain to storage, and grain cleaning facilities operating in compliance with Department rules. 1/
- 2.8(a) 1 May 1976 or before, the air contaminant control systems pertaining to ship loading and barge unloading facilities shall be completely constructed and installed and in operation and the entire grain handling and storage facility operating in compliance with Department rules.

The dates set forth in the requested modified compliance schedule are those for which, in the opinions of the Port, Cargill, and their contracting engineers, compliance is possible. The dates must, however, be conditioned by a recognition that unforeseeable delays in delivery of necessary equipment may occur. If no unusual delays do occur, Cargill does anticipate full compliance by May 1, 1976.

The modified schedule will extend the ultimate compliance date by six months. Further legal proceedings regarding currently assessed penalties--or penalties later assessed--could well cause further delays in achieving compliance. To avoid those further delays and to attempt to improve Portland air quality

1/ Minor adjustments to final compliance dates pertaining to the transfer of grain to storage facilities may be required because of the modernization program.

LINDSAY, NAHSTOLL, HART, DUNCAN, DAFOE & KRAUSE

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Quality
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Page 5

Re: Cargill, Incorporated

within the shortest practicable period, Cargill will take two further measures if the requested schedule is approved.

First, Cargill will, at a cost of approximately \$75,000--an amount which will not be recouped and which exceeds currently approved air contaminant control expenditures--temporarily relocate its barge unloading facilities and alter the mechanical methods of unloading. As you know, Cargill now uses pneumatic air devices to unload barges. The method which Cargill will follow if the Request is granted incorporates "Marine legs" (a modified conveyor system) and will reduce emissions from the barge unloading operations by approximately 80%. This is a proven method now in use here in Portland. It may reduce overall emissions by as much as 25%. This reduction can be achieved by the end of 1974.

Second, Cargill will pay the full amounts of all penalties now assessed--\$2,000.00. Cargill's check in that amount is enclosed. If this Request is approved, the check may be cashed and Cargill's Request for Hearing on the penalty dismissed. By this tender of this amount, Cargill does not now waive its right to contest the penalty or the underlaying authority for its assessment. If the requested modified schedule, or another mutually acceptable, is not approved, Cargill will expect the return of its check.

Cargill stands ready to consult with your representatives at any time in an effort to achieve compliance. We ask, however, that one fact be clearly understood: The air contaminant control equipment, at least in the ship loading and barge unloading facilities, can be installed only after modernization of those areas is complete. The schedule for modernization is partially under the Port's control. Cargill alone cannot alter that schedule; delays in completion of modernization will necessarily affect ultimate compliance dates.

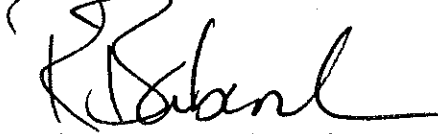
Finally, Section 2.1 of the proposed modified schedule requires Cargill to ". . . submit a report in writing confirming that the Port of Portland and Cargill, Inc. have reached agreement to proceed with final design of the grain handling and storage facility including air pollution control equipment." An agreement, signed April 26, 1974, between the Port and Cargill is enclosed. We believe that this agreement complies fully with the requirements of Section 2.1.

Department of Environmental
Quality
April 30, 1974
Page 6

Re: Cargill, Incorporated

Approval of Cargill's Request will prevent further delays resulting from continued legal proceedings. Approval will result in an overall approximate 25% reduction in emissions nearly one year before the original compliance date. Approval will hasten what is, after all, the ultimate goal of all parties-- cleaner air for Portland. Cargill requests your approval of its proposed modifications.

Yours very truly,

A handwritten signature in cursive script, appearing to read "R. Babcock", written in dark ink.

Robert E. Babcock

REB:a
Enclosures
cc: Robert L. Haskins, Esq.
Assistant Attorney General

AGREEMENT

THIS AGREEMENT is entered into on this 26th day of April, 1974, between the PORT OF PORTLAND (hereinafter "Port") and CARGILL, INCORPORATED (hereinafter "Cargill").

WHEREAS, Port and Cargill are engaged in negotiations for entering into a new long term lease for the grain terminal facilities at Terminal #4, Portland, Oregon, which lease will provide that Cargill will be responsible for the installation of air pollution control equipment; and

WHEREAS, Port and Cargill desire to avoid any interruption of current usage of those facilities during the negotiations; and

WHEREAS, the State of Oregon Department of Environmental Quality has threatened to revoke the Air Contaminant Discharge Permit No. 26-2009 for the use of these facilities unless the Port and Cargill reach agreement "to proceed with final design...including air pollution control equipment."

NOW, THEREFORE, Port and Cargill agree as follows:

1. Cargill shall proceed with the final design of the air pollution equipment facility; and the Port shall provide all cooperation and assistance necessary for such design.
2. In the event no lease of the facilities is successfully negotiated between the parties, Cargill agrees to reimburse the Port for such direct expenses as may be actually incurred by Port relative to the preparation of such design between the date of this Agreement and the date lease negotiations are terminated, but in no event later than June 30, 1974.

3. The foregoing agreement is without prejudice to, and is not to be considered a waiver of, the present legal positions of either the Port or Cargill regarding the responsibility and liability for the installation of such air pollution control equipment as may be necessary to comply with the standards of the Department of Environmental Quality.

PORT OF PORTLAND

CARGILL INCORPORATED

By Mason J. Ludlow
Assistant Secretary, Treasurer

By Harry N. Starr
Reg'n. Supt.

Stan H.

Copy to:

Western Foundry



ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

TOM McCALL
GOVERNOR

B. A. McPHILLIPS
Chairman, McMinnville

GRACE S. PHINNEY
Corvallis

JACKLYN L. HALLOCK
Portland

MORRIS K. CROTHERS
Salem

Ronald M. Somers
The Dalles

Kessler R. Cannon
Director

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item, No. H, May 24, 1974, EQC Meeting

Western Foundry Company - Washington County
Status Report; Proposal Compliance Schedule

Background

The Department is presenting a status report of Western Foundry Company regarding recent excessive emissions from the operation which are highly visible to the general public, due to the plant's location.

Western Foundry Company is located at 8200 S. W. Hunziker Road in Tigard, Oregon. The company operates an iron and steel foundry which utilizes a 5 ton/hr. cupola furnace to produce iron and a 2 ton/hr. electric arc furnace for the production of steel.

In 1972, Western Foundry installed a high energy venturi scrubber to control the emissions from the cupola and electric arc furnaces. This system operated in compliance with Department standards for a limited period of time, after which, the system began to experience numerous breakdowns. In the later part of 1973, the system suffered a major breakdown which was not reported to the Department. Excessive visible emissions were recorded by representatives of the Department and on January 31, 1974, a Notice of Violation was issued to the company for the above cited emissions.

As a result of the Notice of Violation, a number of meetings were held with representatives of Western Foundry which have resulted in the Department requiring the company to submit a short-range program for best practicable control of the entire foundry.



Contains
Recycled
Materials

Current Status

The company has reported that the short-range program to restore the original scrubber serving the cupola and electric arc furnace will be on-line by June 3, 1974. This action will result in a substantial reduction of the current visible emissions.

Regarding the long-range program to provide separate control systems for the electric arc furnace, sand-handling processes and cleaning room, the Department and Western Foundry Company have agreed to the following compliance schedule which will be incorporated into the company's forthcoming permit:

1. June 15, 1974, or before, submit a Notice of Construction with engineering plans and specifications for the control of air contaminants from the electric arc furnace, sand-handling equipment and cleaning room operations.
2. August 15, 1974, or before, receive Department approval of the engineering plans and specifications with any required amendments.
3. September 15, 1974, or before, the company shall have issued purchase orders for the air pollution control equipment approved in item #2 with copies thereof furnished to the Department.
4. February 1, 1975, or before, Western Foundry Company shall furnish proof to the Department of procurement of the air pollution control equipment approved in item #2.
5. March 1, 1975, or before, the company shall have initiated on-site construction for the installation of the air pollution control equipment.
6. May 1, 1975, or before, Western Foundry Company shall complete the installation and adjustment of the air pollution control equipment and have attained compliance with the Department standards. (At this time, the existing restored Venturi scrubber system would serve only the existing cupola.)

The methods of control have been discussed with Western Foundry and agreed that the cupola will be controlled by a venturi scrubber and the electric arc furnace, sand-handling operation and cleaning room will be controlled by three baghouses. The Department believes this control equipment if properly designed, will be the highest and best practicable treatment.

In addition, the company has advised the Department of its intent to replace the existing 5 ton/hr. cupola furnace with a unit capable of producing 6.5 ton/hr. The company is in the process of acquiring engineering plans and specifications for the Department's review and approval. Start-up of the new furnace which is projected by November 19/5, will only be permitted after new, adequately sized venturi scrubber equipment which has been approved by the Department has been installed. The existing 5 ton/hr. cupola and the existing venturi control system would then be retired.

Conclusions

1. The proposed program will provide considerable immediate relief from present uncontrolled emissions.
2. The longer-range program will meet Department of Environmental Quality standards including highest and best practicable treatment of control requirements.
3. Considering the time required for engineering and procurement of equipment, the staff believes the date for final compliance is reasonable. In addition, attainment of compliance by May 1, 1975, is within the time-frame the Department has reported to EPA for this source.

Recommendation

The Department requests the EQC authorize acceptance of the proposed program and compliance schedule for incorporation in the Western Foundry Company permit subsequent to the required public notice and hearing.



KESSLER R. CANNON
Director



ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

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MORRIS K. CROTHERS
Salem

Ronald M. Somers
The Dalles

Kessler R. Cannon
Director

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item I, May 24, 1974, EQC Meeting

Reynolds Metals Company, Troutdale - Status Report;
Proposed Permit Issuance

Background

The Reynolds Metals Company, Sun Dial Road, Troutdale, Oregon, has applied to the Department for an Air Contaminant Discharge Permit in accordance with Oregon Revised Statutes 468.310.

The Department, after reviewing the application of Reynolds Metals Company, has prepared the attached proposed Air Contaminant Discharge Permit for consideration for adoption at the Public Hearing to be held at 9:00 a.m. June 10, 1974, in the conference room of the DEQ Northwest Region Office. Tom Guilbert of the Department staff will act as Hearings Officer.

Reynolds Metals has been given 14 days to comment on the proposed permit and they are agreeable to the permit in its present proposed form.

Public Notice of the hearing was given on May 9, 1974, and copies of the proposed permit were sent to known interested parties including the Oregon Environmental Council. Thirty days has been allowed for submission of written testimony or preparation of oral testimony for the public hearing.

Facility Description

For informational purposes, Reynolds Metals Company owns and operates an aluminum production facility located off Sun Dial Road near Troutdale, Oregon. The plant is composed of five potlines of prebake anode cells in ten potrooms. An anode bake plant furnishes blocks of anode carbon. Metal casting, electrical transformers, and maintenance facilities complete the production activity.



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Materials

The company can produce about 100,000 tons per year with the four older potlines (lines 1, 2, 3, and 4) and about 30,000 tons per year with the new potline (line 5). After completely ceasing operation on November 26, 1971, due to adverse aluminum market conditions, this company reactivated lines 1 and 4 on September 1 and 15, 1972, initially started line 5 on October 8, 1972, and reactivated line 2 on November 8, 1972. Line 2 was subsequently shut down in July 1973 due to the lack of electrical power and then restarted on January 2, 1974. Line 3 was reactivated on February 16, 1974. Thus, the plant is presently operating at full capacity.

The most important sources of air pollution are the two potroom emission control systems. These areas are the sources of almost all of the fluoride materials and visibility reducing particulates. The anode bake plant is a source of smaller amounts of fluoride and particulate materials. The height of the stack, 175 feet, accentuates the visible impact of the anode bake plant. The remaining portions of this facility presently are not considered to be sources of significantly important air contaminants.

Aluminum Plant Emission Regulations and Standards

The Department's regulation specific to air contaminant emissions from primary aluminum plants, OAR Chapter 340, Division 2, Sections 25-225 through 25-290, was initially adopted June 26, 1970, and modified on November 26, 1973. The modified regulation became effective December 25, 1973 and requires reduction of fluoride and particulate emissions on an annual average basis from present levels of approximately 8.5 lbs/T and 21.6 lbs/T to 2.5 lb/T and 10.0 lb/T, respectively. The emission limitations and requirements set forth in this regulation for aluminum plants constructed and operated on or before January 1, 1973, are included in the proposed permit. Also included are ambient air and forage fluoride limitations; an extensive monitoring and reporting program, and an emergency reduction plan which provides for curtailing operations and even shutting down the plant in case of severe air pollution emergencies.

Compliance Schedules

In order to achieve the emission levels stipulated in the modified aluminum plant regulation, the company must substantially reduce emissions from the potrooms and control the black visible emissions from the anode plant stack. A detailed program and schedule for the anode plant stack is contained in the proposed permit. The company is presently in compliance with the schedule for controlling the anode plant stack. Final plans were submitted May 1, 1974, for review and approval by the Department. Detailed plans and compliance

schedules for the potrooms will be incorporated into the issued permit as addenda items. The agreed upon permit and program will bring the entire plant into compliance with existing regulations as soon as practicable but not later than January 1, 1977.

Director's Recommendation

This is intended as a status report on activities related to issuance of an air contaminant discharge permit to Reynolds Metals Company. No formal action by the commission is required.

A handwritten signature in cursive script, appearing to read "Kessler R. Cannon".

Kessler R. Cannon

Attachment - Proposed ACD Permit

5/15/74

PRELIMINARY DRAFT

 Permit Number: _____
 Expiration Date: 3/1/77
 Page 1 of 8

AIR CONTAMINANT DISCHARGE PERMIT

 Department of Environmental Quality
 1234 S.W. Morrison Street
 Portland, Oregon 97205
 Telephone: (503) 229-5696

 Issued in accordance with the provisions of
 ORS 449.727

ISSUED TO: Reynolds Metals Company Sun Dial Road Troutdale, Oregon 97060 PLANT SITE: Sun Dial Road Troutdale, Oregon ISSUED BY DEPARTMENT OF ENVIRONMENTAL QUALITY _____ Kessler R. Cannon DIRECTOR	REFERENCE INFORMATION Application No. 0084 Date Received 5/1/73 Other Air Contaminant Sources at this Site: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 20%;">Source</th> <th style="width: 10%;">SIC</th> <th style="width: 10%;">Permit No.</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>(2)</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </tbody> </table> _____ Date		Source	SIC	Permit No.	(1)	_____	_____	_____	(2)	_____	_____	_____
	Source	SIC	Permit No.										
(1)	_____	_____	_____										
(2)	_____	_____	_____										

SOURCE(S) PERMITTED TO DISCHARGE AIR CONTAMINANTS:

Name of Air Contaminant Source	Standard Industry Code as Listed
Primary Aluminum Production	3334

Permitted Activities

Until such time as this permit expires or is modified or revoked, REYNOLDS METALS COMPANY is herewith permitted to discharge treated exhaust gases containing air contaminants including emissions from those processes and activities directly related or associated thereto in conformance with the requirements, limitations, and conditions of this permit from its primary aluminum production facility located near Troutdale, Oregon.

The specific listing of requirements, limitations and conditions contained herein does not relieve the permittee from complying with all other rules and standards of the Department.

REYNOLDS METALS COMPANY (Troutdale)Performance Standards and Emission Limits

1. The permittee shall at all times maintain and operate all air contaminant generating processes and all contaminant control equipment at full efficiency and effectiveness, such that the emissions of air contaminants are kept at the lowest practicable levels.
2. The permittee shall comply with the following emissions, ambient air and forage limitations in accordance with compliance schedules and control plans to be submitted to and approved by the Department as required in Conditions 4 and 6 of this permit.
 - a. The total fluoride emissions from all sources shall not exceed:
 - 1) A monthly average of 3.5 pounds of fluoride ion per ton of aluminum produced,
 - 2) An annual average of 2.5 pounds of fluoride ion per ton of aluminum produced, and
 - 3) Twenty-two tons of fluoride ion per month.
 - b. The total organic and inorganic particulate matter emissions from all sources shall not exceed:
 - 1) A monthly average of 13.0 pounds of particulate per ton of aluminum produced,
 - 2) An annual average of 10.0 pounds of particulate per ton of aluminum produced.
 - c. The visible emissions from any source shall not exceed 20 percent opacity at any time.
 - d. Gaseous fluorides in the ambient air calculated as fluoride ion (F^-) shall not exceed:
 - 1) Four and one-half parts per billion by volume (4.5 ppb) or 3.5 micrograms F^- per cubic meter average for any twelve (12) consecutive hours,
 - 2) Three and one-half parts per billion by volume (3.5 ppb) or 2.7 micrograms F^- per cubic meter average for any twenty-four (24) consecutive hours,
 - 3) Two parts per billion by volume (2.0 ppb) or 1.6 micrograms F^- per cubic meter average for any seven (7) consecutive days, and
 - 4) One part per billion by volume (1.0 ppb) or 0.78 micrograms F^- per cubic meter average for any thirty (30) consecutive days.

- e. The fluoride content of forage calculated on a dry weight basis shall not exceed:
- 1) Forty parts per million fluoride ion (40 ppm F⁻) average for any twelve consecutive months,
 - 2) Sixty parts per million fluoride ion (60 ppm F⁻) each month for more than two consecutive months,
 - 3) Eighty parts per million fluoride ion (80 ppm F⁻) more than once in any two consecutive months, and
 - 4) Cured forage grown in the county of Multnomah for sale as livestock feed shall not exceed 40 ppm F⁻ by dry weight after curing or preparing for sale.

(In areas where cattle are not grazed continually, but are fed cured forage, as hay, during the winter, the fluoride content of the hay shall be used as the forage fluoride content for as many months as it is fed to establish the yearly average.)

3. The use of fuels containing more sulfur than the levels indicated below is prohibited:

<u>Fuel oil grade</u>	<u>Maximum allowable S content</u>
a. ASTM Grade 1	0.3 % S by weight
b. ASTM Grade 2	0.5 % S by weight
c. ASTM Grades 4, 5 and 6	1.75% S by weight

Compliance Schedules

4. The permittee shall, no later than June 23, 1974, submit to the Department for review and approval proposed compliance schedules and control plans to reduce emissions from all sources, including but not limited to the Carbon Plant (exclusive of Carbon Plant Stack covered under Condition No. 6), Potrooms and Cast House, to achieve as soon as practicable but no later than January 1, 1977, plant wide compliance with Conditions 2a, 2b, 2c of this permit.
5. The compliance schedules and control plans referred to in Conditions 2 and 4 shall include the following increments of progress:
 - a. Date by which orders will be issued for the purchase of major component parts to accomplish emission control or process modification,
 - b. Date of initiation of on-site construction or installation of emission control equipment or process change,
 - c. Date by which on-site construction or installation of emission control equipment or process modification will be completed,
 - d. Date by which final compliance will be achieved.

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Issued by the

Department of Environmental Quality for

REYNOLDS METALS COMPANY (Troutdale)

Expiration Date: 3/1/77

Page 4 of 8

Appl. No.: 0084

File No.: 26-1851

6. The Carbon Plant Stack shall be brought into compliance with emission limits contained in Condition No. 2 in accordance with the following compliance schedule and control plan:
 - a. Continue development and evaluation of the coke filter control process and other alternative control methods including but not limited to electrostatic precipitations and other dry filters.
 - b. Submit progress reports to the Department bimonthly commencing January 31, 1974.
 - c. Submit final control plan by May 1, 1974 to the Department including detailed plans and specifications for review and approval.
 - d. Place orders for all required equipment by June 1, 1974.
 - e. Initiate on-site construction by September 30, 1975.
 - f. Complete on-site construction by January 1, 1976.
 - g. Achieve compliance with the 20% opacity limitation by January 1, 1976.

Monitoring and Reporting

7. The permittee shall effectively monitor the operation and maintenance of the primary aluminum production plant and control facilities. A record of all such data shall be maintained and submitted to the Department of Environmental Quality within thirty (30) days after the end of each calendar month unless requested in writing by the Department to submit this data at some other frequency. Unless otherwise agreed to in writing the information collected and submitted shall include, but not necessarily be limited to, the following parameters and monitoring frequencies:

<u>Parameter</u>	<u>Minimum Monitoring Frequency</u>
a. Wind direction and velocity	Daily
b. Forage fluoride at station Nos. 20D, 20E, 4A, 5, 6, 18, 20B, 4B, and 4C	Monthly with prior notice to the Department.
c. Primary potroom control system emissions	
1) Total particulates	Three times per month or once per line per month whichever is greater with prior notice to the Department.
2) Fluoride particulates	as above
3) Fluoride gases	as above

- d. Secondary potroom control system emissions
(including monitor emissions for Line 5)
- 1) Total particulates Three times per month or once per line per month whichever is greater with prior notice to the Department.
 - 2) Fluoride particulates as above
 - 3) Fluoride gases as above
- e. Carbon plant stack emissions
- 1) Total particulates Three times per year with prior notice to the Department.
 - 2) Fluoride particulates as above
 - 3) Fluoride gases as above
- f. Ambient air fluorides at station Nos. 1.5 W, 1.0 SW, 0.6 S, 1.2 SE, and 0.7 E
- 1) Fluoride gases (bicarbonate tube method with 12 hour sampling or other acceptable method to the Department) Twice daily from April 1 through November 30
 - 2) Fluoride gases and particulates (calcium formate or "limed" paper method) Monthly
- g. Ambient air fluorides at stations Nos. 1.5 W and 0.7 E (bicarbonate tube and filter method with 12 hour sampling or other acceptable method to the Department) Every 6th day as specified by the annual "Oregon State-Wide Air Sampling Network Suspended Particulate Sampling Schedule"
- h. Particulate fall-out at station Nos. 1.5 W, 1.0 SW, 0.6 S, 1.2 SE and 0.7 E Monthly
- i. Suspended particulate at station Nos. 1.5 W and 0.7 E Every 6th day as specified by the annual "Oregon State-Wide Air Sampling Network Suspended Particulate Sampling Schedule"
- j. Air pollution control systems down time (all such equipment or systems) Each occurrence

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Issued by the

Department of Environmental Quality for

REYNOLDS METALS COMPANY (Troutdale)

Expiration Date: 3/1/77

Page 6 of 8

Appl. No.: 0084

File No.: 26-1851

8. Detailed descriptions of the sampling and analytical methods, equipment, procedures and frequencies employed in the monitoring program shall be submitted no later than June 1, 1974 for review and approval by the Department.
9. The final monthly report, as required in Condition 7, submitted for any calendar year shall also include the quantities and types of fuels used during the calendar year.

Emergency Reduction Plan

10. The permittee shall continue to maintain and implement as necessary the "Pre-planned Abatement Strategy", filed with the Department under date of January 15, 1973, in response to Air Pollution Alerts, Warning, and Emergencies as these situations are declared and terminated by the Department of Environmental Quality.

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Issued by the

Department of Environmental Quality for

REYNOLDS METALS COMPANY (Troutdale)

Expiration Date 3/1/77

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Appl. No.: 0084

File No.: 26-1851

General Conditions

- G1. A copy of this permit or at least a copy of the title page and an accurate and complete extraction of the operating and monitoring requirements and discharge limitations shall be posted at the facility and the contents thereof made known to operating personnel.
- G2. This issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
- G3. The permittee is prohibited from conducting any open burning at the plant site or facility.
- G4. The permittee is prohibited from causing or allowing discharges of air contaminants from source(s) not covered by this permit so as to cause the plant site emissions to exceed the standards fixed by this permit or rules of the Department of Environmental Quality.
- G5. The permittee shall at all times conduct dust suppression measures to meet the requirements set forth in "Fugitive Emissions" and "Nuisance Conditions" in OAR, Chapter 340, Section 21-050.
- G6. (NOTICE CONDITION) The permittee shall dispose of all solid wastes or residues in manners and at locations approved by the Department of Environmental Quality.
- G7. The permittee shall allow Department of Environmental Quality representatives access to the plant site and record storage areas at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emission discharge records and otherwise conducting all necessary functions related to this permit.
- G8. The permittee, without prior notice to and written approval from the Department of Environmental Quality, is prohibited from altering, modifying or expanding the subject production facilities so as to affect emissions to the atmosphere.
- G9. The permittee shall be required to make application for a new permit if a substantial modification, alteration, addition or enlargement is proposed which would have a significant impact on air contaminant emission increases or reductions at the plant site.

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Issued by the

Department of Environmental Quality for

REYNOLDS METALS COMPANY (Troutdale)

Expiration Date 3/1/77

Page 8 of 8

Appl. No.: 0084

File No.: 26-1851

G10. This permit is subject to revocation for cause, as provided by law, including:

- a. Misrepresentation of any material fact or lack of full disclosure in the application including any exhibits thereto, or in any other additional information requested or supplied in conjunction therewith;
- b. Violation of any of the requirements, limitations or conditions contained herein; or
- c. Any material change in quantity or character of air contaminants emitted to the atmosphere.

G11. The permittee shall notify the Department by telephone or in person within one (1) hour of any scheduled maintenance, malfunction of pollution control equipment, upset or any other conditions that cause or may tend to cause a significant increase in emissions or violation of any conditions of this permit. Such notice shall include:

- a. The nature and quantity of increased emissions that have occurred or are likely to occur,
- b. The expected length of time that any pollution control equipment will be out of service or reduced in effectiveness,
- c. The corrective action that is proposed to be taken, and
- d. The precautions that are proposed to be taken to prevent a future recurrence of a similar condition.

G12. Application for a modified or renewal of this permit must be submitted not less than 60 days prior to permit expiration date. A filing fee and Application Investigation and Permit Issuing or Denying Fee must be submitted with the application. (January 1, 1977)

G13. The permittee shall submit the Annual Compliance Determination Fee to the Department of Environmental Quality according to the following schedule:

<u>Amount Due</u>	<u>Date Due</u>
a. \$175.00	June 1, 1974
b. \$175.00	June 1, 1975
c. \$117.00 (for 8 month period to 3/1/77)	June 1, 1976

Item J.

STATE OF OREGON
ROUTE SLIP

J

Copies to:

Marion County Board of Commissioners
Marion County Planning Department
City of Salem, Attention Mayor
Salem Dept. of Utilities
Marion-Polk Boundary Commission
Marion County Health Dept.
OSPIRG, Henry Richmond, Portland
Mid-Willamette Valley Council of Govts.
Russ Fetrow
Subsurface Sewage Division

Date 5-13-74
TO: Shirley Shay
Director - signature

FROM: EW

- CHECK
- | | |
|--|---|
| <input type="checkbox"/> Approval | <input type="checkbox"/> Investigate |
| <input checked="" type="checkbox"/> Necessary Action | <input type="checkbox"/> Confer |
| <input type="checkbox"/> Prepare Reply | <input type="checkbox"/> Per Telephone Conversation |
| <input type="checkbox"/> For My Signature | <input type="checkbox"/> For Your Information |
| <input type="checkbox"/> Your Signature | <input checked="" type="checkbox"/> As Requested |
| <input type="checkbox"/> Comment | <input type="checkbox"/> Note and File |
| <input type="checkbox"/> Initial and Return | <input type="checkbox"/> Return With More Details |

COMMENTS:

J = 63
E = 75



ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

TOM McCALL
GOVERNOR

B. A. McPHILLIPS
Chairman, McMinnville

GRACE S. PHINNEY
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JACKLYN L. HALLOCK
Portland

MORRIS K. CROTHERS
Salem

Ronald M. Somers
The Dalles

Kessler R. Cannon
Director

MEMORANDUM

To : Environmental Quality Commission
From : Director
Subject: Agenda Item No. J, May 24, 1974, EQC Meeting

Labish Village, Marion County - Proposed Moratorium on Subsurface Sewage Systems

Background

Labish Village is a subdivision that was approved in 1948 and expanded to its present size in 1956. It is comprised of 162 lots of which 149 are residential lots and 13 are designated for commercial purposes. Presently there are 35 lots which have no buildings.

The lots vary in size from 3,750 square feet to 43,000 square feet. The majority of lots average approximately 7,800 square feet. The topography of Labish Village consists primarily of a broad valley terrace bisected in several locations by drainageways and depressions. The soils are generally comprised of two major formations.

- A. The Woodburn Silt Loams occupy the upper terrace areas and the upper margins of the drainageways. The slopes on these formations range from 0-20% in the subdivision. At depths ranging from 28-32 inches, a poorly drained silt loam is encountered. This is commonly referred to as a "silt brittle pan." During the wet months of the year, a "perched" water table is found above this brittle pan layer. Depths to the water table will vary from 12-32 inches depending on slope and terrain. The Woodburn soils are often acceptable for subsurface sewage disposal, the main limiting factor being depth to the brittle pan layer and depth to the high seasonal water table. The water table is found closer to the surface of the ground as the slope decreases. Sizing of an adequate drainfield system on Woodburn soils is often the key to proper functioning. An average Woodburn soil, under today's standards, would require the installation of 415 lineal feet of disposal trenches to accommodate a three-bedroom dwelling.



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B. The Concord Silt Loams occupy substantial strips that bisect the subdivision in several locations. These soils are found predominantly in the drainage ways and depressed areas of the valley terrace. The soil is generally classified as being comprised of a heavy silty clay below 15 inches and very poorly drained. During the wet months of the year, perched water tables are commonly found above this silty clay layer in depths ranging from 0" to 6" below ground level. Septic tanks rarely function satisfactorily under these conditions. Considering that the mean annual precipitation for this area is about 45", the adverse perched water table condition can be expected to occur each year.

A documented house-by-house evaluation of the present functioning of septic tank systems was not made preliminary to preparing this report in that the problems of the area have been clearly established over a long period of time by the Marion County Health Department. It is obvious that the entire subdivision has many readily visible sewage disposal system failures. Mr. Cy Sherman, Director of Marion County Health Services, has estimated that sewage failures in the subdivision could be as high as 50%. This is considered by our staff to be a conservative estimate, especially during the wet months of the year. The present problem has generally been realized by all concerned parties, hence the decision to sewer the subdivision was recently reached by Marion County, City of Salem, Marion-Polk Counties Boundary Commission and the Department of Environmental Quality. The residents of the area also recognize the need for sewers and a Sanitary Service District is in the process of being formed.

The remaining concern centers around the question of allowing future development within the subdivision utilizing subsurface sewage disposal systems until sewers are made available. The Marion County Health Department has indicated it would oppose any future development of the subdivision until such time as the sewers are available.

The Department, in conjunction with staff from the Marion County Health Department, has re-evaluated the area in terms of the present Department of Environmental Quality standards for septic tank installation. It should be noted that these present standards have built-in safeguards that were not specifically addressed in previous rules. These would include provisions for maintaining minimum setbacks from property lines, increased drainfield sizing requirements, minimum separation distances between disposal field trenches, and the necessity of having a sufficient area of acceptable soil on the lot for the complete replacement of the drainfield system should a malfunction ever occur.

The most suitable areas within the Labish Village subdivision for septic tanks use are those having well-drained Woodburn Silt Loams occurring on slopes of 8-12%. Considering that these are the best conditions present, and relating these conditions to our minimum standards, it becomes apparent that the smallest acceptable lot size would have to average approximately 20,000 square feet in order to comply with existing DEQ standards.

It is felt by most people who have evaluated Labish Village that if proper sized drainfields could be installed on the Woodburn soils there would be a much lower ratio of sewage failures; however, the existing small lot sizes provide room for only a limited amount of drainfield and generally no room for future repairs. It was observed that several of the vacant lots had already been used for attempted repairs of failing septic tank systems on adjacent lots. It should be noted that the discussion so far has addressed the best soil condition present; however, the subdivision has large areas of the Concord Silt Loams, which are generally unsatisfactory for septic tank use regardless of lot size due to the poor drainage and high winter water tables.

As an overall evaluation, the Labish Village subdivision is considered a prime example of trying to place too many drainfields together in a confined area under adverse soil conditions.

CONCLUSIONS:

The Department feels the following items are pertinent and relate directly to any decision for future development within the Labish Village subdivision:

1. There is presently a large number of septic tank malfunctions within the subdivision. This problem is magnified during the winter months when high ground water tables are present.
2. General agreement has been reached to sewer the subdivision due to the numerous sewage malfunctions present.
3. The remaining undeveloped lots are too small to accommodate a subsurface sewage disposal system that would comply with existing subsurface sewage disposal standards.
4. The Marion County Health Department considers the existing sewage conditions within the subdivision to be a health hazard and opposes any further development within the subdivision using subsurface sewage disposal.

RECOMMENDATION:

It is the Director's recommendation that a building moratorium be placed on the Labish Village subdivision, halting any development on the remaining undeveloped lots until such time as sanitary sewers are provided.



KESSLER R. CANNON



ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

TOM McCALL
GOVERNOR

B. A. McPHILLIPS
Chairman, McMinnville

GRACE S. PHINNEY
Corvallis

JACKLYN L. HALLOCK
Portland

MORRIS K. CROTHERS
Salem

Ronald M. Somers
The Dalles

Kessler R. Cannon
Director

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. K, May 24, 1974, EQC Meeting
Public Hearing on Proposed Amendments to National Pollution
Discharge Elimination System (NPDES) Permit Procedures

BACKGROUND

On September 21, 1973, the Environmental Quality Commission adopted permanent revised waste discharge permits rules to replace earlier adopted temporary rules for NPDES permits. The NPDES permit program has operated in accordance with these rules since permit issuing authority was granted to DEQ by EPA.

PROPOSAL

At this time it is proposed to amend three subsections of OAR 340-45-035 to clarify the intent of these sections. The proposed amended language is attached as Exhibit A. Notice of this hearing was published in the Secretary of State's Bulletin on April 15, 1974, and mailed to interested persons on the Department mailing list on April 17, 1974.

EVALUATION

The language which is proposed to be added essentially formalizes procedures which are presently in effect by virtue of a memorandum of agreement between EPA and DEQ.

DIRECTOR'S RECOMMENDATION

It is recommended that the proposed rule changes as noted in Exhibit A be adopted.

KESSLER R. CANNON
Director

HLS:ak
May 14, 1974

Attachment: Exhibit A, Proposed Rule Changes



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PROPOSED RULE CHANGES
ENVIRONMENTAL QUALITY COMMISSION
May 24, 1974

Amend OAR Chapter 340, Division 4, Subdivision 5, Section 45-035, Subsections (6), (7) and (8), to read as follows (new material is underlined):

- Subsection (6) After the 14-day applicant review period has elapsed, the public notice and fact sheet shall be circulated in a manner prescribed by the Director. Any public notice under this section shall be prepared and circulated consistent with the requirements of regulations issued under the Federal Act. The fact sheet, proposed NPDES permit provisions, application and other supporting documents will be available for public inspection and copying.
- (7) The Director shall provide an opportunity for the applicant, any affected state, or any interested agency, person, or group of persons to request or petition for a public hearing with respect to NPDES applications. If the Director determines that useful information may be produced thereby, or that there is a significant public interest in holding a hearing, a public hearing will be held prior to the Director's final determination. There shall be public notice of such a hearing.
- (8) At the conclusion of the public involvement period, the Director shall make a final determination as soon as practicable and promptly notify the applicant thereof in writing. Any NPDES permit issued hereunder shall contain such pertinent and particular conditions as may be required to comply with the Federal Act or regulations issued pursuant thereto. If the Director determines that the NPDES permit should be denied, notification shall be in accordance with section 45-050. If conditions of the NPDES permit issued are different from the proposed provisions forwarded to the applicant for review, the notification shall include the reasons for the changes made. A copy of the NPDES permit issued shall be attached to the notification.



ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

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Portland

MORRIS K. CROTHERS
Salem

Ronald M. Somers
The Dalles

Kessler R. Cannon
Director

MEMORANDUM

To : Environmental Quality Commission

From : Director

Subject: Agenda Item No. L, May 24, 1974 EQC Meeting

Martin Marietta Aluminum, Inc., The Dalles -
Issuance of Air Contaminant Discharge Permit

The Environmental Quality Commission conducted a public hearing in The Dalles on May 3, 1974, for the purpose of considering an Air Contaminant Discharge Permit proposed for issuance to Martin Marietta Aluminum, Inc. A petition on behalf of the Wasco County Fruit and Produce League requesting that the Commission find that Martin Marietta Aluminum, Inc. is located in a Special Problem Area was also considered.

After the Department's presentation, a total of nineteen individuals made oral statements. Some letters and written statements were also submitted and made a part of the record. A copy of the proposed permit and the transcript of the hearing is attached.

Since the hearing, written statements have been received representing the views of both the growers and the company. These items are also attached.

At the hearing, the Director recommended that the attached proposed permit be issued, with such modifications as may be deemed appropriate after consideration of information developed as a result of the hearing.

The matter before the Commission today is:

1. To determine whether or not The Dalles area should be designated as a Special Problem Area, and
2. To determine whether or not the proposed permit should be issued. (The proposed permit as written requires compliance with the existing aluminum plant emission limits upon issuance.)

KESSLER R. CANNON
Director



Contains
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5/17/74



**DEPARTMENT OF
ENVIRONMENTAL QUALITY**

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229- 5301

TOM McCALL
GOVERNOR

May 16, 1974

KESSLER R. CANNON
Director

Honorable O. W. Kortge
County Judge
Wasco County
5th & Washington Street
The Dalles, Oregon 97058

Dear Judge Kortge:

I appreciated having the definitive letter on Martin-Marietta from your Wasco County Court, and copies have gone to each member of the Environmental Quality Commission, and will be entered into the record.

Best wishes.

Cordially,

KESSLER R. CANNON
Director

KRC:cm

Wasco County
5TH & WASHINGTON STREET
THE DALLES, OREGON 97058

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED

MAY 10 1974

OFFICE OF THE DIRECTOR

May 9, 1974

Mr. Kessler Cannon, Director
Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Dear Mr. Cannon:

This letter is in reference to a recent public hearing held by the Environmental Quality Commission in consideration of declaring The Dalles, Oregon a special problem area. It is the opinion of the Wasco County Court that designating The Dalles a special problem area would not accomplish any purpose that could not be achieved under present regulation. The Court finds that:

1. Gaseous hydrogen-flouride emissions result in damage to orchard crops through deformations of the pollen tubes of sweet cherry plants. In addition hydrogen-flouride introduced to a cherry leaf through the stomata may be concentrated in the mesophyll layer at the perimeter of the leaf, resulting in a "burning" of the leaf edge.
2. Evidence acquired by research specialists of Oregon State University demonstrates that the orchards are most susceptible to damage during the blossom and pollination period, of approximately six weeks duration.
3. There is no evidence that cherry orchards suffer reduced growth due to year-long flouride accumulation, as do ponderosa pines.
4. The Martin-Marietta Aluminum Plant in The Dalles is equipped with sophisticated air pollution control devices, capable of reducing the flouride content of emission to a very low level.

Mr. Kessler Cannon, Director
Department of Environmental Quality
May 9, 1974
Page 2

5. The operation of the pollution control devices, as is the operation of the electrolytic reduction process, is dependent upon an adequate supply of electrical power delivered by the Bonneville Power Administration, United States Department of the Interior.
6. Both the cherry industry and the aluminum industry are primary employers of Wasco County. Reduction in the employment or production of either industry would have multiplying repercussions in the community. The cherry industry employs full-time approximately 300 persons. The aluminum industry employs full-time approximately 500 persons.

The Wasco County Court, after discussion between the Director of Planning, agents of the Oregon State University Extension Service, orchardists, and environmental specialists with the aluminum industry, has concluded that damage to orchard crops can be reduced as effectively under existing regulation as under special problem classification, provided that:

1. The Martin-Marietta Aluminum Company continue its policy of operating scrubbers and emission control devices at maximum capacity during the Spring blossom period.
2. The Martin-Marietta Aluminum Company attempt to reduce emission content during the remainder of the year to as low a level as is economically and technologically feasible.
3. The Department of Environmental Quality conduct an emission monitoring program, using personnel not employed by the aluminum industry, and publish the resulting data.
4. Oregon State University continue to conduct research on fluoride impact to sweet cherry production, including cumulative concentration effects.


If evidence were documented, demonstrating that orchards are damaged by cumulative effects, the Court would not object to reconsideration of a special problem area designation by the Commission at a future date. The Court agrees, however, that classification at this time; lacking evidence of cumulative damage, considering the willingness of the aluminum plant management to voluntarily reduce emission content, and considering the

Mr. Kessler Cannon, Director
Department of Environmental Quality
May 9, 1974
Page 3

lack of an impartial monitoring program; would be inappropriate and unjustified. The mere designation of a special problem area would not guarantee a reduction of orchard damage, any more than local and multiple agency cooperation would guarantee a failure to achieve such a reduction.

Thank you for your consideration of this complex issue.

Sincerely


O. W. KORTGE
County Judge

RTB:ds



DEPARTMENT OF
ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5301

TOM McCALL
GOVERNOR

May 16, 1974

KESSLER R. CANNON
Director

Mr. and Mrs. Pete Miles
901 W. 9th
The Dalles, Oregon 97058

Dear Mr. and Mrs. Miles:

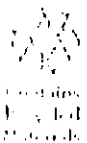
I appreciated receiving your letter and the clear expression of your concerns relating to the Martin Marietta plant at The Dalles. Your comments will be made a part of the record and called to the attention of the Environmental Quality Commission. I'm confident the Commission members will consider all aspects of the problem in making their decision on the air discharge permit. Staff reports will be offered to the Commission at the May 24 meeting in Portland, and a decision from the Commission can be expected at that time.

Best wishes.

Cordially,

KESSLER R. CANNON
Director

KRC:cm



JOHN E. UFFELMAN
ASSOCIATE

RONALD M. SOMERS
ATTORNEY AT LAW
108 E. FOURTH STREET
THE DALLES, OREGON
97058

P. O. BOX 618
PHONE 296-2181

May 14, 1974

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

R E C E I V E D

MAY 15 1974

OFFICE OF THE DIRECTOR

Mr. Kessler Cannon, Director
Department of Environmental Quality
1234 S.W. Morrison Street
Portland, Oregon 97205

Dear Mr. Cannon:

Enclosed please find a letter received recently,
from Mr. and Mrs. Pete Miles.

Very truly yours,



Ronald M. Somers

RMS:mz

Encl.

Environmental Quality Com.
City Hall
Dear Sir:

Please do consider the Cherry Farmer before you grant the Permit. The best Lawyers & Speakers to be had, discuss & debate & move the public in the Aluminium Plants' favor.

We have been in the Cherry business for 12 years and have seen a fine orchard go down hill year by year. We have seen Fluoride in a fog hang over our orchard & turn snow white blossoms brown on the edges. The trees are brittle & weakened. The bad winter freezes used to very very seldom affect the trees but now they can't stand the elements - The pickers used to hook down the branches & they were willowy - now they snap like icicles. We are gradually losing our orchard.

The huge sums of money used to fight law suits, brain wash the public, prolonging & evading emission limits could well have been used to cooperate further with the Environmental Plan. Please Help Us

PROPOSED

AIR CONTAMINANT DISCHARGE PERMIT

Department of Environmental Quality

1234 S.W. Morrison Street

Portland, Oregon 97205

Telephone: (503) 229-5696

Issued in accordance with the provisions of
ORS 449.727

<p>ISSUED TO: MARTIN MARIETTA ALUMINUM, INC. P.O. Box 711 The Dalles, OR 97058</p> <p>PLANT SITE: Martin Marietta Aluminum, Inc. 3303 W. Second Street The Dalles, OR 97058</p> <p>ISSUED BY DEPARTMENT OF ENVIRONMENTAL QUALITY</p> <p>_____ Director</p> <p>_____ Date</p>	<p>REFERENCE INFORMATION</p> <p>Application No. <u>0151</u></p> <p>Date Received <u>5/18/73</u></p> <p>Other Air Contaminant Sources at this Site:</p> <table border="1"> <thead> <tr> <th>Source</th> <th>SIC</th> <th>Permit No.</th> </tr> </thead> <tbody> <tr> <td>(1) _____</td> <td></td> <td></td> </tr> <tr> <td>(2) _____</td> <td></td> <td></td> </tr> </tbody> </table>	Source	SIC	Permit No.	(1) _____			(2) _____		
Source	SIC	Permit No.								
(1) _____										
(2) _____										

SOURCE(S) PERMITTED TO DISCHARGE AIR CONTAMINANTS:

Name of Air Contaminant Source

Standard Industry Code as Listed

PRIMARY ALUMINUM PRODUCTION

3334

Permitted Activities

Until such time as this permit expires or is modified or revoked, MARTIN MARIETTA ALUMINUM, INC. is herewith permitted to discharge treated exhaust gases containing air contaminants including emissions from those processes and activities directly related or associated thereto in conformance with the requirements, limitations, and conditions of this permit from its primary aluminum production facility located in The Dalles, Oregon.

The specific listing of requirements, limitations and conditions contained herein does not relieve the permittee from complying with all other rules and standards of the Department.

Fee Paid: \$500.00

4/2/74

Performance Standards and Emission Limits

1. The permittee shall at all times maintain and operate all air contaminant generating processes and all contaminant control equipment at full efficiency and effectiveness, such that the emissions of air contaminants are kept at the lowest practicable levels.
2. The permittee shall, upon issuance of this permit, comply with the following emissions limitations:
 - a. The total fluoride emissions from all sources shall not exceed:
 - 1) A monthly average of 3.5 pounds of fluoride ion per ton of aluminum produced,
 - 2)* An annual average of 2.5 pounds of fluoride ion per ton of aluminum produced, and
 - 3) Twenty-two tons of fluoride ion per month.
 - b. The total organic and inorganic particulate matter emissions from all sources shall not exceed:
 - 1) A monthly average of 13.0 pounds of particulate per ton of aluminum produced,
 - 2)* An annual average of 10.0 pounds of particulate per ton of aluminum produced.
 - c. The visible emissions from any source shall not exceed 20 percent opacity at any time.

* Annual averages shall be based on emission data submitted monthly to the Department beginning with that data submitted 12 months prior to the issuance of this permit.
3. The use of fuels containing more sulfur than the levels indicated below is prohibited:

<u>Fuel oil grade</u>	<u>Maximum allowable S content</u>
a. ASTM Grade 1	0.3 % by weight
b. ASTM Grade 2	0.5 % S by weight
c. ASTM Grades 4, 5 and 6	1.75% S by weight

PROPOSED

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Issued by the

Department of Environmental Quality for

MARTIN MARIETTA ALUMINUM, INC. (The Dalles)

Expiration Date: 7/1/78

Page 3 of 6

Appl. No.: 0151

File No.: 33-0001

Monitoring and Reporting

4. The permittee shall conduct an approved monitoring program which shall include:
 - a. Prescheduled plant wide emission testing for gaseous fluoride, particulate fluoride and total particulate,
 - b. Measuring of forage fluoride,
 - c. Measuring ambient air gaseous fluoride, particulate fluoride, suspended particulate, particle fallout and wind speed and direction.
5. Detailed descriptions of the sampling and analytical methods, equipment, procedures and frequencies employed in the monitoring program shall be submitted no later than June 1, 1974 for review and approval by the Department.
6. The permittee shall effectively monitor the operation and maintenance of the primary aluminum production plant and control facilities. A record of all such data shall be maintained and submitted to the Department of Environmental Quality within (30) days after the end of each calendar month unless requested in writing by the Department to submit this data at some other frequency. Unless otherwise agreed to in writing the information collected and submitted shall include, but not necessarily be limited to, the following parameters and monitoring frequencies:

<u>Parameter</u>	<u>Minimum Monitoring Frequency</u>
a. Wind direction and velocity	Continuously
b. Forage fluoride at the Tideman Ranch and Martin Marietta hay fields	Each cutting with prior notice to the Department.
c. Primary potroom control system emissions	
1) Total particulates	Three times per month or once per line per month whichever is greater with prior notice to the Department.
2) Fluoride particulates	as above
3) Fluoride gases	as above
d. Secondary potroom control system emissions	
1) Total particulates	Three times per month or once per line per month whichever is greater with prior notice to the Department.
2) Fluoride particulates	as above
3) Fluoride gases	as above

PROPOSED

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Expiration Date: 7/1/78
 Page 4 of 6
 Appl. No.: 0151
 File No.: 33-0001

Issued by the
 Department of Environmental Quality for

MARTIN MARIETTA ALUMINUM, INC. (The Dalles)

<u>Parameter</u>	<u>Minumum Monitoring Frequency</u>
e. Ambient air fluorides at station Nos. 19, 26, 30 and 31	
1) Fluoride gases and particulates (bicarbonate tube and filter method with 12 hour sampling)	Twice daily from April 1 through November 30
2) Fluoride gases and particulates (calcium formate or "limed" paper method)	Monthly
f. Air pollution control systems down time (all such equipment or systems), stud blows and paste leaks	Each occurence
7. The final monthly report, as required in Condition 6, submitted for any calendar year shall also include the quantities and types of fuels used during the calendar year.	

General Conditions

- G1. A copy of this permit or at least a copy of the title page and an accurate and complete extraction of the operating and monitoring requirements and discharge limitations shall be posted at the facility and the contents thereof made known to operating personnel.
- G2. This issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
- G3. The permittee is prohibited from conducting any open burning at the plant site or facility.
- G4. The permittee is prohibited from causing or allowing discharges of air contaminants from source(s) not covered by this permit so as to cause the plant site emissions to exceed the standards fixed by this permit or rules of the Department of Environmental Quality.
- G5. The permittee shall at all times conduct dust suppression measures to meet the requirements set forth in "Fugitive Emissions" and "Nuisance Conditions" in OAR, Chapter 340, Section 21-050.
- G6. (NOTICE CONDITION) The permittee shall dispose of all solid wastes or residues in manners and at locations approved by the Department of Environmental Quality.
- G7. The permittee shall allow Department of Environmental Quality representatives access to the plant site and record storage areas at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emission discharge records and otherwise conducting all necessary functions related to this permit.

PROPOSED

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Issued by the
Department of Environmental Quality for

MARTIN MARIETTA ALUMINUM, INC. (The Dalles)

Expiration Date: 7/1/78
Page 5 of 6
Appl. No.: 0151
File No.: 33-0001

- G8. The permittee, without prior notice to and written approval from the Department of Environmental Quality, is prohibited from altering, modifying or expanding the subject production facilities so as to affect emissions to the atmosphere.
- G9. The permittee shall be required to make application for a new permit if a substantial modification, alteration, addition or enlargement is proposed which would have a significant impact on air contaminant emission increases or reductions at the plant site.
- G10. This permit is subject to revocation for cause, as provided by law, including:
- Misrepresentation of any material fact or lack of full disclosure in the application including any exhibits thereto, or in any other additional information requested or supplied in conjunction therewith;
 - Violation of any of the requirements, limitations or conditions contained herein; or
 - Any material change in quantity or character of air contaminants emitted to the atmosphere.
- G11. The permittee shall notify the Department by telephone or in person within one (1) hour of any scheduled maintenance, malfunction of pollution control equipment, upset or any other conditions that cause or may tend to cause a significant increase in emissions or violation of any conditions of this permit. Such notice shall include:
- The nature and quantity of increased emissions that have occurred or are likely to occur,
 - The expected length of time that any pollution control equipment will be out of service or reduced in effectiveness,
 - The corrective action that is proposed to be taken, and
 - The precautions that are proposed to be taken to prevent a future recurrence of a similar condition.
- (Condition G11 shall not apply to those events required to be reported by Condition 6f of this permit.)
- G12. Application for a modified or renewal of this permit must be submitted not less than 60 days prior to permit expiration date. A filing fee and Application Investigation and Permit Issuing or Denying Fee must be submitted with the application. (May 1, 1978)

PROPOSED

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Expiration Date: 7/1/78

Issued by the

Page 6 of 6

Department of Environmental Quality for

Appl. No.: 0151

MARTIN MARIETTA ALUMINUM, INC. (The Dalles)

File No.: 33-0001

G13. The permittee shall submit the Annual Compliance Determination Fee to the Department of Environmental Quality according to the following schedule:

	<u>Amount Due</u>	<u>Date Due</u>
a.	\$175.00	May 1, 1974
b.	\$175.00	May 1, 1975
c.	\$175.00	May 1, 1976
d.	\$175.00	May 1, 1977

EXHIBITS

PUBLIC HEARING BEFORE THE ENVIRONMENTAL QUALITY COMMISSION, HELD AT THE DALLES, OREGON, MAY 3, 1974, RELATING TO PROPOSED ISSUANCE OF AN AIR CONTAMINANT DISCHARGE PERMIT TO MARTIN MARIETTA ALUMINUM, INC. AND RELATING TO THE PETITION OF THE WASCO COUNTY FRUIT AND PRODUCE LEAGUE REQUESTING THAT THE DALLES AREA BE DESIGNATED AS A SPECIAL PROBLEM AREA

- Exhibit 1 - Staff Report dated April 26, 1974, Proposed Issuance of an Air Contaminant Discharge Permit to Martin Marietta Aluminum, Inc., to which were attached a letter from B. M. Keith, The Dalles Chamber of Commerce, dated April 22, 1974, and a letter from Henry Tiano, The Dalles Chamber of Commerce, dated April 23, 1974; presented by F. A. Skirvin, Air Quality Control Division, Department of Environmental Quality, who also submitted for the record as a part of the staff report a letter received from Mrs. Jim Ellett of The Dalles, dated May 1, 1974, and a letter from Duane Peterson, President, The Dalles Chamber of Commerce, dated April 22, 1974.
- Exhibit 2 - Statement of Martin Marietta Aluminum, Inc., presented by Jack P. Doan, Vice President, The Dalles
- Exhibit 3 - Letters submitted for the record by The Honorable Don Smith, Mayor, City of The Dalles, received from Dr. John H. Skirving, The Dalles, dated April 26, 1974; Gary Donald, President, Interior Builders Association, The Dalles, dated May 1, 1974; Carl Stiefel, dated May 3, 1974; and a letter dated May 5, 1974, signed by Lucinda and Robert Patten, Mr. and Mrs. Charles Hartman, Mr. and Mrs. Anthony Goudy, Golde Johnson, Mr. and Mrs. Witold Monkiewicz, and J. Peterson, all of The Dalles.
- Exhibit 4 - Letter from B. M. Keith, The Dalles Chamber of Commerce, dated May 3, 1974, read into the record by Mr. Keith.
- Exhibit 5 - Statement of Mrs. Nicky Tom, 1815 Liberty Way, The Dalles.
- Exhibit 6 - Statement of Joseph Schulein, consulting chemical engineer, Vancouver, Washington.
- Exhibit 7 - Statement of John C. Capell, consulting professional meteorologist and staff meteorologist for KGW-TV in Portland, Oregon, submitted for the record by Arden Shenker, attorney representing the Wasco County Fruit and Produce League
- Exhibit 8 - Statement of Walter Ericksen, Chairman of the Meteorological Committee of the Wasco County Fruit and Produce League, The Dalles, together with photograph album dated 1974, submitted as Petitioner's Exhibit A
- Exhibit 9 - Statement of Virgil Ellett, Vice President, Wasco County Farm Bureau

- Exhibit 10 - Statement of United Steelworkers of America.
- Exhibit 11 - Pictures, articles and letters to the editor submitted for the record by Norman Soots, publisher, The Chronicle, The Dalles.
- Exhibit 12 - Statement by John Meredith, Superintendent of Schools of School District No. 9, "Tax Impact of Martin Marietta Aluminum Company."
- Exhibit 2 - Continuation of statement of Martin Marietta Aluminum, Inc., presented by Douglas M. Ragen, representing Martin Marietta Aluminum, Inc.
- Exhibit 13 - Letter from Jack E. Mitchell, D. C., The Dalles, dated May 1, 1974.

EXHIBITS RECEIVED AT THE DEPARTMENT OF ENVIRONMENTAL QUALITY FOLLOWING THE MAY 3, 1974 PUBLIC HEARING:

- Exhibit 14 - Letter from O. W. Kortge, Wasco County Judge, dated May 9, 1974.
- Exhibit 15 - Letter from Mr. and Mrs. Pete Miles, The Dalles.
- Exhibit 16 - Supplemental Statement of Martin Marietta Aluminum, Inc., dated May 13, 1974
- Exhibit 17 - Letter from Wilson J. Meyer, The Dalles.
- Exhibit 18 - Petitioner's Memorandum submitted by Robert M. Kerr, Of Counsel for Wasco County Fruit and Produce League

1 met in full, then the company will take the state to court. This
2 will not be the first time that the company has gone to court.

3 The phrase "spurious, technical violation" appears in
4 the company's written submission. If an alleged violation is in
5 fact spurious, then it is not a violation. If a violation is
6 "technical," does that mean that it is only a slight violation?
7 The implication of the company's deprecation of a "spurious,
8 technical violation," however, is that the company exceeds the
9 emission limitations but does not admit doing damage when those
10 emissions are excessive. Now, therefore, there is a new term in
11 the lexicon of air pollution control: emission excesses are
12 spurious technical violations. The only reason assigned by the
13 company for wishing to avoid such spurious, technical violations
14 is that the present lawsuits with the company not be prejudiced.
15 As has been pointed out many times, however, the bulk of the
16 damages sought in most of the presently pending cases relates
17 to early years of very substantial damage. Then the emission
18 excesses were neither spurious nor technical, within the new
19 lexicon term authored by the company. The company's refusal to
20 abide viable state regulations for now is nothing more than
21 that - - a refusal. The company's liability to its damaged
22 neighbors is no greater and no less as a result of the Environmental
23 Quality Commission and the Department of Environmental Quality
24 enforcing the air pollution laws of the state of Oregon. They
25 are for the protection of the environment of the state, and never
26 have been conceived to redress the private economic loss visited

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1 upon an individual neighbor of a pollution source. That quantifi-
2 cation of damages is for courts and juries. The claim of
3 "spurious, technical violations" does not help courts or juries
4 in determining how vast the damage done over the last decade and
5 a half.

6 The company blandly asserts that this Commission rejected
7 the approach of separate treatment for existing aluminum plants.
8 The very wording of the statement of purpose itself, in Section 25-255
9 of the Oregon Administrative Rules, Chapter 340, Division 2, gives
10 the lie to this assertion of the company: (1) : it is hereby
11 declared to be the purpose of the Commission to require, in accord-
12 ance with a specific program and timetable for each operating
13 aluminum plant the highest and best practicable collection, treat-
14 ment and control through feasible equipment, devices and procedures.
15 And Section 25-265(4) requires each existing primary aluminum plant
16 to proceed promptly in proposing a program and implementation plan.
17 Then the Department is to establish a schedule of compliance for
18 each existing primary aluminum plant. In Section 25-270, the
19 Department may require more restrictive emission limitations for
20 an individual plant. Explicitly, the statement of director
21 O'Scannlain, on November 20, 1973, in announcing the standards
22 adopted by the Commission six days later, focused on the individual
23 approach to be taken on an existing plant such as that of Martin
24 Marietta. On page 7 of that statement, he pointed out that the
25 Special Problems Section 25-270 would permit the more strict
26 limitations which would have an effect upon the Martin Marietta

1 timetable for more immediate compliance. The statement went on
2 to say:

3 "I emphasize that we are requiring the highest and
4 best practicable treatment and control currently
5 available. That means any part of the standards
6 could be made tighter still, if technology in the
7 future makes a tighter requirement feasible and
8 practicable. It also means that an existing plant
9 such as Martin Marietta can be required to meet an
10 immediate deadline where it has the capability to
11 achieve required levels sooner..."

12 The "sooner," to which that statement refers now has arrived.

13 To deny that The Dalles is a special problem area,
14 the company's written submission first complains that the
15 Department has not made a plant pathologist judgment of whether
16 The Dalles is a special problem area, next complains that lawyers
17 for the Wasco County Fruit and Produce League are attempting to
18 generate publicity for their clients' cases and finally attempts
19 to make personal arguments against members of the faculty of
20 Oregon State University for their conclusions that the aluminum
21 company's emanations have continued to cause reductions in the
22 fruit crops of The Dalles.

23 The lawyers for the Wasco County Fruit and Produce
24 League are content to stand upon the record of their efforts to
25 remove all cases from The Dalles and from the glare of the
26 publicity generated by the company's domination of the media of
the community. The company, of course, has resisted any efforts
to remove the trial of cases from The Dalles. It may be little
coincidence that not a single trial ever has taken place in the
city of The Dalles, notwithstanding the fact that 32 of them were

1 pending there at one time. As a result of this Commission's hearing
2 in The Dalles on May 3, 1974, ten weeks after special problem relief
3 was requested by the petitioner, the company managed to persuade
4 the court in The Dalles to postpone a trial scheduled to have
5 commenced on April 16, 1974.

6 The whole of the testimony of the representatives of
7 Oregon State University is hereby tendered to the Commission and
8 the Department, for its review should it wish to see the extent
9 to which the testimony is misquoted and taken out of context, as
10 explained to the Commission by County Extension Agent John R.
11 Thienes on May 3, 1974. Mr. Thienes' testimony is mustered as
12 if it stood for the proposition that he believes that the company
13 no longer does damage, if it ever did, to any living plant organ-
14 ism in The Dalles. The company's written submission quotes the
15 language of the most recent technical bulletin, as if it indicated
16 that the company no longer has caused any problems to the fruit
17 growing area of The Dalles. That quotation is on page 16 of the
18 company's written submission. Interestingly, the quotation stops
19 in the middle. The quotation should be continued:

20 "However, the leaf fluoride levels are patterned
21 such that as distance from the aluminum plant
22 increases, leaf fluoride levels decrease. There
23 is also a pattern relating to the wind direction.
24 Orchard sites downwind...and nearest the aluminum
25 plant...are higher than other areas and this
26 appears to be related to the air movement patterns
in the area.

"Air fluoride measurements show that air-borne
fluorides are present in The Dalles... Fruit
set surveys show that distance and direction

1 from the aluminum plant are good predictors of
2 fruit set. As distance from the aluminum plant
3 increases, fruit set increased and as direction...
4 increases, fruit set decreases. Experiments on
5 the effects of aqueous fluoride sprays and hydrogen
6 fluoride fumigations (our unpublished data) have
7 shown that fluoride will adversely affect fruit
8 set of "Royal Ann" cherries. Published data
9 indicate the relatively low levels of HF will
10 reduce cherry pollen tube growth, a process that
11 is an essential part of cherry fruit set.... We
12 conclude, therefore, that the patterns of fruit
13 set in The Dalles are a result of the atmospheric
14 fluoride from the aluminum reduction plant.

15 "The growth pattern study shows that there is a
16 relationship between the distance and direction
17 from the aluminum plant, leaf fluoride levels,
18 and annual growth, number of buds, spurs and
19 flowers."

20 That information comes as no surprise to the aluminum company, for
21 it was introduced in evidence at the last trial against the aluminum
22 company late last year. The written submission of the company
23 continues to assert that the study in which the scientists have
24 been engaged/^{was}to have been an economic study. There was an
25 economist originally hired by Oregon State University, but he
26 retired before he could finish the job. No one else has been
27 hired to do the economic analysis. A private economist was hired
28 for purposes of courtroom testimony, and he found the obvious:
29 the high fluoride levels did the damage to the crops.

30 The company would pit its list of pedigreed experts
31 against the work actually done to analyze the problems special
32 to The Dalles. A long list of names is unaccompanied in the
33 written submission by the fact that none of those experts have
34 conducted any experiments, analyses, or studies that even begin

1 to compare with the work that has been done by the scientists of
2 Oregon State University whose conclusion bothers the company. All
3 of the company's scientists agree that the principal work on
4 analysis of fluoride effects upon fruit growing industries has
5 been done at the Hood River Experiment Station by the Oregon State
6 University scientists. The company has hired no scientists to
7 conduct their own studies of the same economic, horticultural and
8 vegetative phenomena which make The Dalles a special problem area.
9 The company also seeks to apologize for taking so long in completing
10 its continuing criticism of the work that has resulted in conclusions
11 contrary to the company's interests. The company even has had the
12 temerity to suggest that a plant pathologist has to rest all of
13 his conclusions on a statistical analysis. Both the biologist-
14 scientists and the statisticians agree that the plant pathologist
15 is entitled to make his own independent expert decision, based
16 upon his subjective training and experience. Statistical tools
17 can be helpful in making the conclusions, analyses and determina-
18 tions. That the science of statistics should be the final arbiter
19 of the fact of death of plant life by fluorides is simply the
20 last refuge of the company refusal to face the fact. And that
21 fact is that The Dalles is a special problem area, requiring
22 special protection now.

23 The company criticizes Oregon State University for
24 refusal to allow open discussions, and the company asserts that
25 it has been required to go outside the state of Oregon to obtain
26 expert assistance. Those assertions are nonsense. Except for

1 harrassment of university officials, by nitpicking unpublished
2 data, there have been and are full, frank and open discussions
3 on the nature of the work being conducted.

4 Curiously, the written submission of the company makes
5 exactly the same charge as the editorial in the The Dalles
6 Chronicle: it is the attorneys for the Wasco County Fruit and
7 Produce League who are accused of seeking to obtain a special
8 problem area designation, more restrictive emission limitations,
9 and then to influence the course of litigation in the future.
10 This petition is on behalf of the Wasco County Fruit and Produce
11 League. Its Board of Directors and Research Committee have employed
12 attorneys to file this memorandum, as well as the prior reply
13 and petition on behalf of the Wasco County Fruit and Produce
14 League. The League takes full responsibility for what it requests
15 and the manner in which the request is made.

16 The company's submission asserts that nothing new has
17 occurred since November of 1973, which will allow the more
18 restrictive standards to be adopted under a special problem area
19 designation. Why need something new have occurred since then?
20 It was apparent in November of 1973, earlier that year, in earlier
21 years, and it is apparent now: The Dalles is a special problem
22 area, as County Extension Agent Thienes made quite clear. The
23 Commission may recognize what is the fact, or may ignore that
24 fact. It is fact nevertheless. It requires no new happening to
25 make The Dalles a special problem area. Nature created the
26 topography, provided the meteorology, developed the sensitivity

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1 for the fruit grown in the area, and explains the chemical reactions
2 which take place. Man, in the form of the present aluminum company
3 as successor, introduced toxic poisons, which this Commission seeks
4 to regulate. That makes the special problem. If the same poisonous
5 pollutants were introduced into the middle of the Mojave Desert, there
6 might not yet be the same special problem. If the present aluminum
7 company were now operating with the emission standards which are not
8 applicable to that existing pollution source until January 1, 1984,
9 then perhaps we would not have a special problem in The Dalles now.
10 Either take away the sensitive receptor, or take away the effective
11 poison, and the special problem may evaporate. Both the sensitive
12 receptor -- a multimillion dollar fruit growing industry, that has
13 been in The Dalles for 100 years -- and the poisonous polluter are
14 present. They constitute the special problem.

15 The company's submission in writing "rounds off" the
16 minimum level at which it has been operating, enphrased in terms
17 of pounds of fluoride emission per ton. On page 22 of the written
18 submission the company asserts that it has been as low as 1.0
19 pounds of fluorides per ton of aluminum produced, when, in fact,
20 the company has been as low as .8 pounds per ton of aluminum
21 produced. The point of the quibble is more than a quibble:
22 the company is capable of operating at less than the 1984 standards
23 right now. "On the average," however, the company would prefer
24 not to operate at less than the 1984 levels yet. But it can.
25 That is the testimony of the only independent engineering assess-
26 ments that have been obtained by the Department and furnished

1 to the Commission.

2 Finally, the company repairs to a comparison with
3 Reynolds at Troutdale, and asserts that Martin Marietta at
4 The Dalles does better. The conclusion, for Martin Marietta, is
5 that it should be permitted to do nothing, while Reynolds is
6 forced to catch up to the level of Martin Marietta efficiency.
7 Is Troutdale a special problem area? Has someone requested that
8 it be so designated? Are sensitive receptors being damaged there?
9 It is perfectly obvious why Martin Marietta has had to be cleaner
10 than Reynolds, which did not find itself in the middle of one of
11 the world's finest fruit growing industries. Let us hope that
12 we need not say "formerly one of the world's finest fruit growing
13 industries." Martin Marietta's asserted "leadership" in emission
14 control has come only after the imposition of federal court decrees
15 and millions of dollars of judgments for damages having been caused
16 by the company's emissions. Its leadership has followed where it
17 had to go to minimize its economic losses.

18 The company's written submission takes pride in a draft
19 of an Environmental Impact Statement issued by the State of Montana
20 with respect to the Anaconda Aluminum Company there. What the
21 company holds up as exemplary, from that draft, is simply a statement
22 of what Martin Marietta is capable of doing here, based upon actual
23 operating results. The Montana Environmental Impact Statement does
24 not report that this Martin Marietta Company is attempting to avoid
25 doing what it is capable of doing. Comments received from other
26 aluminum companies on that Montana draft Environmental Impact

1 Statement, moreover, assert that Martin Marietta could not have
2 such a good emission control system or it would not be protesting
3 the use of that system under state standards now. Other aluminum
4 company comments on that draft Environmental Impact Statement
5 assert that Martin Marietta's emission control system is capable
6 of very substantial improvement in design, in the use of equipment
7 and particularly in the maintenance of the equipment.

8 Finally, the company asserts that it is not possible
9 or feasible for them to turn the process "down" or "off" for
10 a limited period of time. The company, of course, did exactly
11 that during the energy crisis when precious power was not supplied
12 to the company's reduction plant. Other operating parameters are
13 within the control of the company. By lowering the temperature
14 at which the cells are operated, by increasing the bath ratio of
15 the chemical composition of the material put into the cells, by
16 computerizing and restricting the number of fugitive emissions
17 from the broken crust of the cell, the company has within its
18 own decision-making power the ability to restrict the emissions
19 of pollutants. The company has never chosen to do so in the past
20 unless it has been forced to do so. Its present position is
21 consistent with the past.

22 The company's written submission repairs to its former
23 threats and asserts legal aspects of the hearing. The Department's
24 and Commission's counsel adequately responded to all of these
25 asserted positions of the company, both at the hearing on March 22,
26 1974, and previously. In any event, the latest word from the

1 Oregon Court of Appeals is that this Department of Environmental
2 Quality and the Environmental Quality Commission in no event were
3 required to grant a so-called "contested case hearing" before
4 issuing a permit, with or without additional restrictive limitations
5 on emissions, as by the designation of a special problem area. See
6 Northwest Environmental Defense Center, et al v. Mid-Willamette Air
7 Pollution Authority, et al, 98 Adv Sh 1513 (1974).

8 2. ORAL COMMENTS AT HEARING ON MAY 3, 1974, BY ALUMINUM COMPANY

9 The vice president of the aluminum company welcomed
10 the Commission to The Dalles, a community in which he does not
11 live, after having six weeks earlier opposed the Commission holding
12 ANY hearing ANYWHERE, because of questions as to the jurisdiction
13 of the Commission to proceed. He predicted and concluded that
14 there were no new facts brought to the attention of the Commission.
15 Of the force and effect of the old facts he said nothing. He did
16 commit the company to expediting their litigation in and out of
17 the courts, a commitment which the company has yet to begin to
18 implement. When asked to take special precautions during the
19 particularly vulnerable periods of the year, the company's vice
20 president declined knowing that it was possible to take such
21 additional precautions. When asked how to avoid the fluctuations
22 in emissions created by the company, the vice president responded
23 that one day the company might have to face up to that problem,
24 but it did not wish to start yet.

25 The company's attorney presented most of the written
26 statement discussed above. He read most of it and supplemented

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1 it. It is to those supplementary comments that the Wasco County
2 Fruit and Produce League addresses these memorandum observations:

3 1. The implication given was that the testimony of
4 Jack Thienes should be disregarded because at one time he was a
5 member of the Wasco County Fruit and Produce League. It is a fact,
6 of course, that practically anyone who has ever operated a fruit
7 orchard in the The Dalles area has been a member of the Wasco
8 County Fruit and Produce League; at one time Mr. Thienes did
9 operate a fruit orchard there, and was a member of the League.

10 2. The Commission is to disbelieve the testimony of
11 the scientists from Oregon State University because a statistician
12 designated by the university to assist the plant pathologists in
13 coming to their subjective professional conclusions at one time
14 was a friend of an attorney for the Wasco County Fruit and
15 Produce League. That was a friendship which rested upon the
16 presence of that same statistician as the advisor to the Board
17 of Bar Examiners of the Oregon State Bar, of which that same
18 attorney was a member.

19 3. On February 7, 1974, representatives of the aluminum
20 company gave comments and criticisms to the Oregon State University
21 scientists on their work. The company's representatives did no
22 work of their own. The comments and criticisms are not new. Yet
23 the implication is that somehow the delivery of comments and
24 criticisms invalidates the conclusions previously drawn.

25 4. Walter Ericksen was emotional. The implication
26 given is that his testimony should be disregarded because we have

1 all seen "fog" before. A trained meteorologist knows the difference
2 between fog and its water vapor on the one hand and the trailing of
3 polluted smoke on the other hand.

4 5. The April, 1974, readings presented to the Commission
5 were indicative of ambient air measurements of one-half of what
6 the petitioner seeks for special restrictive protection during the
7 vulnerable growing season. If that is what the company can do,
8 why does it object to doing it?

9 6. The company's own fruit orchard in The Dalles shows
10 substantial increase in production over the years. On any basis
11 of comparison, however, the company's orchard, situated a mile and
12 one-half from the company stacks, produces substantially fewer
13 cherries per tree, per acre and per any other analysis than orchards
14 in the The Dalles area not affected by the aluminum plant fumigations.

15 7. Brown blossoms have been known for years; therefore,
16 the implication is that those blossoms browned by fluorides should
17 be ignored. There is a natural senescence which causes death. The
18 acceleration of that death is not natural, does reduce crops and
19 is the need for protection.

20 8. One of the independent engineers has limited
21 experience in working inside aluminum plants. The implication is,
22 therefore, that the Commission should disregard the testimony of
23 Joseph Schulein. The fact is that the attorneys for both Reynolds
24 Metals and Martin Marietta Aluminum themselves have requested the
25 assistance of that same Mr. Schulein for appraising the effective-
26 ness of pollution control systems. He actually has built models

1 of pollution control systems, and he accurately has predicted the
2 efficiencies available to the companies that refused to use the
3 pollution control systems. In Martin Marietta's case, for example,
4 the same Mr. Schulein predicted the availability of electrostatic
5 precipitation which the company stoutly denied for 10 years, until
6 it did it, as Mr. Schulein predicted.

7 3. OTHER ORAL COMMENTS AT MAY 3, 1974, HEARING

8 The vice president of Martin Marietta concluded his
9 remarks by a request that an additional speaker be heard, although
10 the Martin Marietta vice president had "no idea of what she would
11 say." By coincidence, she expressed her thank yous to Martin
12 Marietta for completely paying for the delivery of her last child.
13 The Commission chairman noted the utmost sincerity that came from
14 the testimony of that last witness. Perhaps the same sincerity
15 should have been given to the letter read to the Commission by the
16 mayor of The Dalles. Mayor Smith conveyed the written comments
17 of former mayor, Dr. Skirving.

18 Dr. Skirving's letter communication commented on the
19 bumper crops, how the company currently is meeting all standards,
20 and why the plant should not be closed. Neither that first nor
21 last witness spoke to the issues before the Commission and the
22 Department.

23 If in fact there were such bumper crops as to indicate
24 that the problem had gone away, that would be relevant. Dr. Skirving
25 did not say so. He knows the contrary.

26 People in general live longer now than they did 20 years

1 ago. That is an actuarial fact. Does that mean that people no
2 longer should be concerned about the effects of air pollutants on
3 the general health of the society? Obviously there are many other
4 reasons for people living longer now. Just so, there are many
5 other reasons for bumper crops in The Dalles: more irrigation,
6 more trees, more acreage, more fertilizer, more scientific applica-
7 tion of effective horticultural practices. And, of course, those
8 people who cultivate orchards four and one-half or five miles
9 from the aluminum plant should be able to produce more bumpers
10 for the crops. Even more so, those fruit growers who are producing
11 produce at a distance of 12 to 14 miles from the aluminum plant,
12 but whose statistics remain in the Wasco County production figures.

13 The company wishes to tell the world that it currently
14 meets all standards of governmental restriction. Therefore, the
15 company wishes to have no standards to meet. If it can postpone
16 until 1977 having to meet the present proposed Air Contaminant
17 Discharge Permit, then the company never will have to face any
18 enforcement of anyone's standards until 1977. Therefore, by
19 definition, the company can be in compliance with that which
20 does not exist. That is the kind of verbal nonsense which should
21 not be permitted to cloud the application of needed regulations
22 now.

23 No one seeks to close the aluminum plant at The Dalles,
24 except those who make the economic decision of when best, how best
25 where best and why best to operate. The petition of the Wasco
26 County Fruit and Produce League is to require emission limitations

1 which the company has achieved. The petition of the Wasco County
2 Fruit and Produce League is to require the maintenance of an
3 ambient air standard, which the company's emissions have resulted
4 in during the immediate past.

5 The question of whether The Dalles is a special problem
6 area is an issue that has been presented to 52 individuals in
7 the past, who did not have the opportunity to avoid answering.
8 Thirty of those individuals were jurors, 19 were judges and three
9 were plant pathologists serving as arbitrators under a federal
10 Consent Decree. All of them concluded that The Dalles was a
11 special problem area. The record before this Commission and its
12 predecessors for over 13 years, and the cooperative studies con-
13 ducted by Oregon State University over the last 21 years, beginning
14 with the anticipation of the known special problems that would be
15 visited upon The Dalles when the aluminum company began operating
16 there, corroborate the scientific facts. The Dalles is a special
17 problem area. This Commission may ignore or recognize that fact,
18 but it is fact, nevertheless. The contemplation of the regula-
19 tions in adopting a special problem area section must apply to
20 The Dalles now; otherwise, that regulation section is a cruel hoax
21 upon the public. The aluminum company would have that hoax
22 played now. The Commission and Department should not permit

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25 -
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1 such a result.

2 Respectfully submitted,

3 WASCO COUNTY FRUIT AND PRODUCE LEAGUE

4 By

5 TOOZE KERR, PETERSON MARSHALL & SHENKER

6
7
8 By 

9 Robert M. Kerr

10 Of Counsel for Wasco County Fruit
11 and Produce League

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SUPPLEMENTAL STATEMENT OF
MARTIN MARIETTA ALUMINUM INC.
BEFORE
THE OREGON ENVIRONMENTAL QUALITY COMMISSION

Public Hearing on Air Contamination
Discharge Permit and
Petition of Wasco County Fruit and Produce League

May 13, 1974

This supplemental statement reviews four subjects which were discussed at the May 3, 1974, hearing. It was the intention of Martin Marietta Aluminum Inc. to present at the hearings held May 3, 1974, and July 26, 1973, statements of the position of the company regarding aluminum industry regulations, the permit and the petition. This supplemental statement reviews only those subjects which the company feels require further emphasis.

In View of the Other Conditions in the Proposed Permit, You Should Not Include in the Permit a Condition Regarding Ambient Air Levels.

The record is clear that the emission control program at The Dalles is one of the most successful in the world. Your concern should be that the company continue its emission control program as efficiently as possible. The permit conditions require the plant to measure its emissions, in plant, and allow the Department and you to monitor the performance of the company. That is, the Department, you and the company are periodically informed as to whether the emission control program is operating as well as it should. If for some reason the measurements of emissions at the plant reflect elevated levels, steps will be taken to ascertain the cause and to take any appropriate corrective action.

A mandatory permit limit for ambient air levels at stations ranging from 1.75 to 4 miles from the plant is of no

additional benefit to the Department or you in monitoring the emission control system of the company. The control of the emissions is exercised at the plant. Factors such as wind direction and velocity which influence ambient air levels are obviously beyond the control of the company. Furthermore, as shown by the ambient air levels reported from the stations in The Dalles, the hydrogen fluoride levels are so low they are barely detectable.

Under these circumstances, no purpose would be served by imposing an ambient air standard as a condition in the permit.

Variation in Monthly Average Emission Results Are at a Minimum and Are Not a Reason for Stricter Regulation.

The inherent variability in both fluoride and particulate emission results was analyzed at great length by Amax, Reynolds and Martin Marietta Aluminum in the 1973 hearings and resulted in the monthly average, running annual average features of the regulations adopted in November 1973. Nevertheless, questions are still presented regarding the variability in emission test results. The following summary comments are offered to assure you that the variation in the test results of Martin Marietta Aluminum is inherently characteristic of the production and control processes and equipment.

Efficient cell operation is synonymous with stability, that is, it can be achieved only over an extended period of

continuous operation during which the optimum balance of all the process variables is established and maintained. The optimum balance and control of these variables yields the best production results and the best working conditions in the potlines, as well as minimum evolution of both gas and particulates from the cell. Therefore, pursuit of optimum plant operation on a year round basis also results in minimum emissions.

The successful operation of this process depends upon the optimum balanced control of a large number of dynamic parameters, all of which affect the operations of the cells and consequent amount of emissions. Among the more important operation parameters are: bath composition and temperature, frequency of anode effects, anode-cathode spacing, metal and bath depths, ore feed conditions, anode current distribution and many others.

The pursuit of stability in the dynamic balance of process variables is carried on concurrently in every cell of the 300 cells in the facility. Even though these changing conditions at each cell are controlled to the greatest degree that our skill allows, they do vary from cell to cell and from time to time. Because pot conditions are dynamic and changing, our operations involve constant adjustments all directed toward achieving the optimum balance on all 300 cells. Because of these variations the fluoride evolved at the cell inevitably varies at The Dalles from approximately 36 to 44 pounds per ton of aluminum.

This variation is about ± 10 percent from the average value. This variation coupled with very small differences (one or two percent) in the highly efficient overall control causes substantial differences in the emission values reported. In addition, any inaccuracy in the sampling and analytical methods adds to the variations in reported results.

It is inevitable that when emissions are reduced to the low level being obtained at The Dalles plant small differences in absolute values produce very high percentage differences in the emission values.

The table below lists the sources of variation in the results of emission tests by major process step for a typical situation at The Dalles. The table shows that the ± 10 percent variation in the evolution of fluoride at the cell and in the sampling and analytical procedures, together with the even smaller ± 2 percent variation in collection and removal efficiency, produces on a cumulative basis nearly fourfold percentage variation in the overall emission results. In absolute terms, the emission test results still remain low because the limits of the range and the average of the results are very low. These test result variations are not caused by operating better on one day than on another day, but are inherent in the normal and uncontrollable fluctuations of the reduction process, the control system and analysis of the sample.

TOTAL FLUORIDE EMISSION VARIATION

Typical Data--The Dalles

Source	Emission Variation		
	Range Pounds/Ton	Percent From Mean	Ratio High/Low
Production processes-- ±10% variation	36-44	±10	1.2
Collection-Removal processes-- ±2% capture	1.08-3.28*	+64* -46	3.0
Sampling-Analysis procedures-- ±10% accuracy	0.97-3.61*	+80* -51	3.7

*Data in each case represents cumulative variation.

In summary, you should not be concerned about the variation in emission tests. The percent variation appears large because the amount of actual emissions in absolute terms is very small. The variation in emissions in absolute terms is also small.

You Should Reject the Petition of the Growers Because There Has Been No Demonstration of Need for Designating The Dalles a "Special Problem Area."

As we expected, the growers making statements at the May 3, 1974, hearing were Donald Bailey and Walter Ericksen. Their presentations emphasized the history of the dispute between the growers and the company. While most of the disputes

of their neighbors with the company have long ago been resolved, these two men continue to dwell on past events and refuse to acknowledge, as Jack Thienes did, that there has been a "tremendous improvement" over the years in the emission control program of the company.

Walter Ericksen presented to you photographs of The Dalles taken April 4, through April 16, 1974. He told you that on April 4, 1974, "the smoke was as thick as any day I can remember for 14 years." On April 5, 1974, he said "we smelled fumes on everywhere we flew through The Dalles." On April 14, 1974, he said he has a picture "showing perhaps the lowest inversion cloud I have taken in over 14 years."

Mr. Ericksen wants you to believe that all of the white material shown in the photographs is emissions from the aluminum plant. He wants you to believe that natural haze and early morning fog are not the white material in the pictures. He wants you to believe there are no other sources of smoke in The Dalles except the aluminum plant.

Fortunately, the credibility of Mr. Ericksen can be tested. For each of the dates discussed above on which Mr. Ericksen observed unusual conditions in The Dalles, we have ambient air measurements of the gaseous fluoride measured at four different stations in The Dalles.

TWELVE-HOUR AVERAGE
CONCENTRATION OF GASEOUS FLUORIDE

Sampling Period	No. 19 4 miles		No. 26 1 3/4 miles		No. 30 2 miles		No. 31 2 3/4 miles	
	SE		SSW		S		SSW	
	0800- 2000	2000- 0800	0800- 2000	2000- 0800	0800- 2000	2000- 0800	0800- 2000	2000- 0800
4/3-4/4	0	0	0	0	0	0	0	0
4/4-4/5	0	0	0	0	0	0	0	0
4/5-4/6	.15	0	.14	.05	.05	.05	.15	.05
.								
4/13-4/14	.05	.05	.04	.44	.06	.06	.0	.10
4/14-4/15	0	.10	.04	.04	.00	0	0	0

These ambient levels confirm that, even on the days when Walter Ericksen claims there were high levels of emissions in the orchard area, the actual fluoride gas levels were barely detectable. These ambient levels confirm there is no need to designate The Dalles a "special problem area."

You should note that the Oregon State scientists who have been conducting the research did not appear at the hearing to support the contentions of Mr. Bailey and Mr. Ericksen.

We submit that you should restrict your consideration of the need for designating The Dalles a "special problem area" to existing conditions. We submit that on the basis of existing conditions there has been no demonstration of need for designating The Dalles a "special problem area."

In Considering the Permit and the Petition, the Environmental Quality Commission Must Consider the "Public Welfare."

At the May 3, 1974, hearing Commissioner Crothers inquired as to the extent to which the Commission was required to consider the public welfare in its action on the permit and the petition. Oregon Revised Statutes answer this question.

ORS 468.280 provides in pertinent part:

"(1) In the interest of the public health and welfare of the people, it is declared to be the public policy of the State of Oregon:

"(a) To restore and maintain the quality of the air resources of the state in a condition as free from air pollution as is practicable, consistent with the overall public welfare of the state.

* * *

"(2) The program for the control of air pollution in this state shall be undertaken in a progressive manner, and each of its successive objectives shall be sought to be accomplished by cooperation and conciliation among all the parties concerned." (emphasis supplied)

It is obvious that the Commission must consider the "overall public welfare." Donnell Smith, Mayor of the city of The Dalles, summarized the comments of some 100 or more people who had contacted him about the hearing. He stated these people "feel that both the farmer and the cherry growers of this area and industry of this area can work together to solve these problems. There is not need for a tougher law, but just make sure what is going on now is carried on through."

In contrast, Arden Shenker, by vacillation on his exact position and recommendations, has revealed his only real objective-- to have you label The Dalles a "special problem area." He wants The Dalles labeled because he thinks the label will serve the welfare of the six pending cases in Wasco County.

With few exceptions, witnesses agreed that the "overall public welfare" of The Dalles would not be served by your labeling the community a "special problem area."

Martin Marietta Aluminum Inc. respectfully submits that the "overall public welfare" would best be served by denial of the petition and issuance of the proposed permit with a January 1, 1977, compliance date.

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY
OF THE STATE OF OREGON

Public Hearing on the proposed issuance)
of an Air Contaminant Discharge Permit)
to Martin Marietta Aluminum, Inc.)

and)

Public Hearing on petition of)
Wasco County Fruit and Produce League)
requesting that The Dalles area be)
designated as a Special Problem Area)
relative to emissions from the)
Martin Marietta Aluminum, Inc. plant.)

) City Hall Council Chambers
) 313 Court Street
) The Dalles, Oregon

TRANSCRIPT OF PROCEEDINGS

Friday, May 3, 1974

MICHELET, SOWERS, JOHNSON & COMPANY
COURT REPORTERS

2620 Georgia Pacific Building, Portland, Oregon 97204

Phone 228-7201

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PROCEEDINGS:

1

2 CHAIRMAN McPHILLIPS: Good morning, Ladies and

3 Gentlemen. The meeting will come to order. This is a meeting

4 of the Environmental Quality Commission called for the purpose of

5 a public hearing to consider the issuance of an air contaminant

6 permit to the Martin Marietta Aluminum plant and/or lately to

7 consider the application of the fruit grower's association to

8 declare this a special area for purposes of air control.

9 Before we open the meeting for testimony, Mayor Donald

10 Smith has a statement he wishes to make. Mayor Smith.

11 MAYOR DONALD SMITH: Mine is not exactly testimony

12 but ----

13 CHAIRMAN McPHILLIPS: I thought you wanted to make

14 a statement in advance of the meeting.

15 MAYOR DONALD SMITH: No.

16 CHAIRMAN McPHILLIPS: All right. Before we start

17 the meeting proper I am going to lay down a few ground rules.

18 There are quite a number of people who wish to testify, and we

19 want everyone who does want to testify to have that chance.

20 We do ask in cases where you can consolidate the testimony

21 where it concerns an organization or a group, if possible, if you

22 designate one of your members to make the presentation, we are

23 hoping to get some new material, some new ideas, and this is the

24 purpose of the meeting, to develop public information and infor-

25 mation as far as the Commission is concerned for making what we

1 hope will be an intelligent decision. Sometimes this has been
2 questioned, but we do the best we can.

3 I would like to keep any emotion out of it and keep it
4 as nearly as possible on hard facts, and sometimes this is a
5 little bit difficult to do.

6 Those of you who have had their livelihood, their living
7 conditions affected by various things such as field burning, they
8 have become very emotional, which really doesn't add anything to
9 the information that we are trying to develop. So we ask you to
10 please remain calm.

11 We ask that anyone giving information come to the micro-
12 phone so that we will have them as a matter of record. Give your
13 name and your affiliation, if any. If it is for yourself, just
14 say so. If it is for an organization, please give us the name of
15 the organization so we will have a complete record of the testimony.

16 We will start the ball rolling with the staff presentation
17 of the proposed permit, which I imagine will not be complete but
18 will be summarized.

19 MR. F. A. SKIRVIN: My name is Fritz Skirvin. I
20 am the engineer for the Air Quality Control Division in Portland.

21 The Environmental Quality Commission at its regular March
22 22, 1974 meeting in Salem authorized this public hearing for the
23 purpose of considering the attached air contaminant discharge
24 permit proposed for issuance to Martin Marietta Aluminum, Inc.
25 A copy of the notice of public hearing is also attached.

1 Martin Marietta Aluminum, Inc. operates a primary aluminum
2 production facility located along West Second Street, The Dalles,
3 Oregon. The plant is composed of two pot lines of vertical-stud
4 Soderberg cells in five pot rooms. The anode paste, metal casting,
5 electrical transformers and maintenance facilities complete the
6 production activity. The rated capacity of this plant is about
7 90,000 tons of aluminum per year.

8 The area adjacent to the plant includes light manufacturing
9 and commercial operations. The area generally described by an
10 arc ranging from the southwest through southeast beyond 1 1/2 miles
11 from the plant contains fruit orchards, mainly cherries.

12 Air contaminant emissions from the production process are
13 controlled by wet electrostatic precipitators, which we consider
14 to be the primary system, and forced draft multispray tunnels,
15 which is considered to be the secondary system. These units are
16 considered to represent the highest and best practicable controls
17 technology for this type of plant.

18 The proposed permit contains those emission limits for
19 both fluorides and total particulates which are required for
20 existing plants by the Primary Aluminum Plant Regulation, Section
21 25-265, Chapter 340, Oregon Administrative Rules. The regulation
22 requires that compliance be achieved by no later than January 1,
23 1977. The proposed permit limitations equal to regulatory require-
24 ments will become effective upon issuance of the permit. The
25 aluminum plant is considered to be meeting the emission limits set

1 forth in the permit, therefore no compliance schedule is proposed.

2 An extensive program of monitoring and reporting emission
3 rates and ambient air contaminant levels is required by the
4 proposed permit. This program is considered to be consistent with
5 the aluminum plant regulation. The Company has already complied
6 with Condition 5 of the proposed permit by submitting a detailed
7 description of the monitoring program for review and approval.
8 The Department presently has this matter under consideration.

9 The proposed permit is scheduled to expire July 1, 1978.

10 The permit, as presently proposed, is in accord with the
11 emission limits, monitoring, reporting and other portions of the
12 aluminum plant regulation which apply to existing plants. Infor-
13 mation resulting from this hearing may determine the necessity or
14 desirability of modifying the permit prior to its issuance.

15 The petition, on behalf of the Wasco County Fruit and
16 Produce League, requesting that the Commission find that Martin
17 Marietta Aluminum, Inc. is located in a Special Problem Area as
18 allowed for in Section 25-270 of the regulation is integrally
19 related to the issuance of the proposed permit. Should the
20 Commission find that The Dalles is a Special Problem Area, and if
21 more strict emission limits than those set forth in the regulation
22 are established by this hearing, the proposed permit would be
23 modified accordingly prior to issuance.

24 The Department has received the attached letters from
25 The Dalles Chamber of Commerce representatives which indicate the

1 importance of both agriculture and industry for a balanced Wasco
2 County economy.

3 I might add that in addition since this report was prepared
4 we have received a third letter from the Chamber and a letter from
5 Mrs. Jim Ellett, and I would like to submit all four of these
6 letters into the record.

7 The materials described in the attached list have been
8 provided to the Commission as references in this matter. This
9 material includes correspondence relative to the petition received
10 since the Commission met in Salem on March 22, 1974, and, for
11 those in the audience, the reference material that the Commission
12 has is contained in these black notebooks which are four inches or
13 so thick.

14 It is recommended by the Director that the attached pro-
15 posed permit be issued, with such modifications as may be deemed
16 appropriate after consideration of information developed as a
17 result of this hearing.

18 CHAIRMAN McPHILLIPS: Thank you, Fritz.

19 Because of the fact that this hearing was specifically
20 called for the purpose of considering the proposed permit and
21 later we have received a petition from the Fruit Growers Associ-
22 ation to declare the area as a Special Problem Area, I am going
23 to take this meeting in two parts and first discuss the proposed
24 permit, and then we will take up the petition of the Fruit Growers
25 in a separate item.

1 Now, Martin Marietta, do you have someone who wishes to
2 make a formal presentation for or against the proposed permit or
3 discuss it from your angle?

4 MR. JACK P. DOAN: I would like to receive per-
5 mission to speak, Mr. Chairman.

6 CHAIRMAN McPHILLIPS: All right, sir.

7 MR. JACK P. DOAN: My name is Jack Doan. I am a
8 vice-president of Martin Marietta Aluminum, Inc. and responsible
9 for its overall conduct of its northwestern operations, the two
10 smelters, one at The Dalles and one at Goldendale.

11 I think I can speak for the entire community and residents
12 of the area in welcoming the Commission to The Dalles today.

13 Also present for Martin Marietta today but not necessarily
14 to make a statement but to answer questions if necessary, I would
15 like to point out we have Lars Rysdal who has overall operations
16 responsibility for these two smelters, and Bud Gibson, Plant
17 Manager of The Dalles plant, and Joe Byrne, Environmental Control
18 Manager for both facilities.

19 Before making Martin Marietta Aluminum's statement on the
20 proposed permit, we ask you to recall the several hearings last
21 year regarding, and leading up to Oregon's present emission, air
22 emission regulations for aluminum reduction plants. In those
23 hearings Martin Marietta Aluminum described in considerable detail
24 those plants' equipment, processes, and the operations techniques
25 for both aluminum production and control of emissions. We showed

1 you how through its 15 years history at The Dalles plant Martin
2 Marietta utilized the advancing technology combined with signifi-
3 cant development contribution by its own personnel and evolved an
4 eminently successful emissions control system and performance.
5 In spite of the importance of this story, time does not permit
6 repeating it for you here today. Instead, for your convenient
7 reference, we have summarized this material into an appendix and
8 included it in our written statement for the hearing today of
9 which I believe you already have a copy. In this portion of the
10 hearing, Martin Marietta Aluminum is only dealing with the proposed
11 permit. Later on the subject of the Growers' petition and depending
12 in part on what the proponents of that petition may say in its
13 report, Mr. Douglas Ragen will make our statement. After Mr. Ragen
14 I wish to summarize the Company's position.

15 The permit proposed by the Department of Environmental
16 Quality to be issued to Martin Marietta Aluminum is in accordance
17 with all aspects of the regulation for existing aluminum reduction
18 plants, except for the single item that is covered in Paragraph
19 2 of the permit pertaining to the effective compliance date on
20 the numerical limits of the regulation. We concur with and
21 support the conditions required by the regulation and as set forth
22 in the proposed permit. We feel these conditions assure achieve-
23 ment of the stated goals and purposes of the regulation to main-
24 tain the quality of the air resources of the state consistent with
25 the overall public health of the state.

1 The proposed permit has the following conditions of major
2 importance. Will you please bear with me for a few minutes while
3 I quote these items verbatim from the text of the permit. The
4 language is very precise and I assure you written by experts in
5 the profession of environmental control. I quote.

6 "Item 1. The permittee shall at all times maintain and
7 operate all air contaminant generating processes and all contami-
8 nant control equipment at full efficiency and effectiveness, such
9 that the emissions of air contaminants are kept at the lowest
10 practicable levels.

11 "Item 4. The permittee shall conduct an approved monitor-
12 ing program which shall include:

- 13 a. Prescheduled plantwide emission testing for gaseous
14 fluoride, particulate fluoride and total particulate,
15 b. Measuring of forage fluoride,
16 c. Measuring ambient air gaseous fluoride, particulate
17 fluoride, suspended particulate, particle fallout and
18 wind speed and direction.

19 "Item 5. Detailed descriptions of the sampling and
20 analytical methods, equipment, procedures and frequencies employed
21 in the monitoring program shall be submitted no later than June 1,
22 1974 for review and approval by the Department.

23 "Item 6. The permittee shall effectively monitor the
24 operation and maintenance of the primary aluminum production plant
25 and control facilities. A record of all such data shall be main-

1 tained and submitted to the Department of Environmental Quality
2 within (30) days after the end of each calendar month unless
3 requested in writing by the Department to submit this data at some
4 other frequency. Unless otherwise agreed to in writing the infor-
5 mation collected and submitted shall include, but not necessarily
6 be limited to, the following parameters and monitoring frequencies."

7 At this point in the permit are listed all the monitoring
8 parameters required by the regulation plus a few others deemed by
9 the Department to be appropriate in our situation along with the
10 respective monitoring frequencies for each parameter.

11 Now, it should be noted here that Martin Marietta has
12 already submitted a fully responsive report with respect to our
13 monitoring program, as required by the regulation and by the
14 permit by the date of June 1st as Item 5 in the permit. We do not
15 anticipate any difficulty in obtaining departmental approval of
16 this monitoring program. Martin Marietta Aluminum is currently
17 meeting with conditions of the regulation and the conditions of
18 the proposed permit, and expects to continue to do so.

19 We submit that the stated permit conditions insure that
20 the Company will continue to perform at least as well as it has
21 in recent years.

22 We do face one serious problem, however, and in that
23 connection we are requesting one modification be made in the
24 proposed permit. We request that the permit specifically provides
25 that numerical limitations set forth in Paragraph 2 become effec-

1 tive on June 1, 1977 instead upon issuance as presently proposed.
 2 Our compelling reason for this request is frankly this. Immediate
 3 compliance involves the possibility that an occasional spurious,
 4 inadvertent violation, a technical violation if you will, may well
 5 interfere with our prospects for a much deserved and long awaited
 6 peace with the growers. The regulations are designed as a reflec-
 7 tion of the strictest limits technology allows and are well below
 8 the level necessary to avoid the risk of any injury in the orchards.
 9 A technical violation as indicated above of the numerical limi-
 10 tations would not mean that any damage had occurred, but such a
 11 violation would interfere with our ongoing effort to resolve this
 12 case which remains pending in the Circuit Court of Wasco County.

13 The Company hopes and expects that by January 1st 1977
 14 and thereafter there will be no pending litigation against the
 15 Company by orchardists in The Dalles area. With the facilities
 16 we have and with our continued diligent operation we see no reason
 17 why our relations with the growers should not become peaceful and
 18 our respective operations be compatible.

19 There are additional good reasons for you to defer to
 20 January 1, 1977 our compliance with the numerical limitations.
 21 An earlier date would expose the leader in the industry to the
 22 risk of a technical violation while its competitor has no such
 23 risk. Certainly this inequity was not the Legislature's intent.

24 In addition to being inequitable, such action would hinder
 25 rather than foster effective limitation control and progress

1 towards lower emission levels by penalizing the progress and per-
2 formance of the leader.

3 For all these reasons the Company respectfully requests
4 that the Commission modify the provisions of Paragraph 2 in the
5 proposed permit to provide that the numerical limitations become
6 applicable January 1, 1977 instead of upon issuance.

7 Thank you.

8 CHAIRMAN McPHILLIPS: Thank you, Mr. Doan. Do you
9 have anyone else who wishes to elaborate on the permit as such?

10 MR. DOAN: Not at this time.

11 CHAIRMAN McPHILLIPS: All right, thank you.

12 Mr. Smith, we are going to call you and put you on so you
13 can get back to work.

14 MR. DON SMITH: Thank you.

15 CHAIRMAN McPHILLIPS: We don't want to stop the
16 wheels of progress here.

17 MR. DON SMITH: Thank you very kindly. I am Don
18 Smith, Mayor of the City of The Dalles. First what I would like
19 to do is basically summarize some 100 or more people that have
20 contacted me in the last week, and I am glad that the hearing is
21 today and not two weeks later because my phone is just about ready
22 to quit.

23 What I get from the people of The Dalles, the people of
24 The Dalles are very deeply concerned because they know what an
25 economic problem this would offer. They feel that both the farmer

1 and the cherry growers of this area and industry of this area can
2 work together to solve these problems. There is not need for a
3 Tupper law, but just make sure what is going on now is carried
4 on through.

5 The people of The Dalles are very concerned about the
6 pollution of the air, and are in no way wanting to do away with
7 it, but they understand that they pollute the air, and they under-
8 stand that the farmer who has to spray and has to smudge is
9 polluting the air, and we know that industry pollutes the air.
10 We are saying that all these things have to be solved so we can
11 live in harmony. We do not want something that would hurt, either
12 hurt the farmer or either hurt industry.

13 I also have a group of letters that were brought to my
14 attention, if you want me to read them I will read them, otherwise
15 I will give them to you, whichever way you wish.

16 CHAIRMAN McPHILLIPS: Give them to us, Mayor Smith,
17 and we will have copies for each one of the Commission so each
18 one will have a chance to read them and make individual judgments.

19 MR. SMITH: Okay, we will do that. Might I ask if
20 I could read, one man asked me special, he was the Mayor of The
21 Dalles for ten years before I was, and if I could read his letter
22 because he does speak for The Dalles for a much longer period than
23 I do. It is from Dr. ^{K ✓ (?)} Stirling.

24 CHAIRMAN McPHILLIPS: Go right ahead.

25 MR. SMITH: (Reading) "As a major taxpayer in

1 Wasco County and an investor in agriculture I am interested in the
2 welfare of the county.

3 I served the City of The Dalles for 21 years as either
4 councilman or mayor. It was during this time that we brought to
5 this community the Harvey Aluminum plant.

6 We need industry to stabilize the economic conditions in
7 the area of The Dalles. We need larger full-time employment so
8 that our citizens can find employment and so that the citizens
9 could move to this city to find jobs.

10 I now understand that this hearing is for the citizens of
11 The Dalles to discuss the emissions coming out of the Martin
12 Marietta Aluminum plant and the harm, if any, it may do to the
13 surrounding area.

14 I cannot believe that these emissions are hurting anyone
15 in any way. I further understand that the orchardists are the
16 ones instigating this hearing.

17 I would only ask this question: Why is it that for the
18 past several years they have had bumper crops which either set
19 records of tonnage or have come close to setting a record tonnage?
20 It does not make sense to me that if the air emissions are harmful
21 in a given industry that the industry can flourish each year as
22 supposedly guilty parties in the operation.

23 It is further my understanding that the emissions from this
24 plant have met the standards of the DEQ as set for 1977.

25 After many years of government service, I do know that the

1 time that an industry can meet, much less supersede the standards
2 that have been set by the DEQ for that industry. Industry is
3 making more than an honest attempt to clean the air we live in.
4 During my ten year tenure as Mayor of the City of The Dalles I
5 was one of the people that met with the people from Harvey to
6 bring this very fine industry into The Dalles.

7 There is no doubt in my mind that if the standards set by
8 DEQ are set so high that they cannot be met by the aluminum
9 industry, that the industry will move out of our community, and
10 with this, saying any more, it would certainly cause a depression
11 in The Dalles area that would take many many years to overcome.

12 The loss of jobs of our citizens, the loss of large employ-
13 ment in the entire county, can only be an economic severe setback,
14 a repercussion that would be felt by everyone from the merchant to
15 the farmer to the city school district, to the city government, to
16 the county and to the man on Main Street. I strongly urge that
17 you adopt a standard that is livable for all."

18 I would just like to close that your decision, I grant
19 you, is difficult, but just keep one thing in mind. We have people
20 of all interests. They want to live in this area as much as the
21 farmer or the worker, and let's make it possible for all of them
22 to exist in our community, not one segment, be it the farmer, be
23 it the industry. Thank you.

24 CHAIRMAN McPHILLIPS: Thank you, Mr. Mayor.

25 Who would like to lead off for the Fruit Growers Association

1 in discussing the proposed permit.

2 MR. SHENKER: Mr. McPhillips, members of the
3 Commission, if you please, I am Arden Shenker, an attorney in
4 Portland. I have appeared before the Commission on several
5 occasions previously.

6 Those who will be representing the Wasco County Fruit And
7 Produce League today have not been able to prepare their remarks
8 in such a way that they can divide them for their support of the
9 Air Contaminant Discharge Permit and their support for the
10 petition. Therefore, the remarks we make will in fact speak to
11 both issues at the same time. If the Commission wishes therefor,
12 we can defer the substantive comments of the Wasco County Fruit
13 and Produce League until such time we call for the proponents of
14 the petition. I may say only a few things in summary form with
15 respect to the permit itself.

16 The air contaminant permit proposed by the Department in
17 the memorandum that attaches itself to the meeting of March 27,
18 1974 Agenda, Item K, called for a 3.0 and 2.0 respective monthly
19 and annual average discharge permissible from this aluminum
20 reduction plant. The present proposal of the Department retreats
21 to a 3.5 and 2.5 standard. We believe that the original proposal
22 made by the Department will certainly support that.

23 It was the position of the League in our petition in which
24 we addressed ourselves to the discharge permit, and it remains the
25 position of the League that we at this time with respect to the

1 discharge permit ask nothing more than acceleration of the date
2 for compliance that would otherwise be required of the company in
3 1977.

4 The Company's position, as we view it, is to ask this
5 Commission to do absolutely nothing, and to have the Department
6 do absolutely nothing; that the effective date of the discharge
7 permit would not be until the year in which the regulation would
8 have come into effect in any event in 1977, and because we believe
9 it was to be the intent of the regulation that was adopted in
10 November 1973 and based upon the statement issued by the Director
11 at that time and statements made by the members of the Commission
12 that it would be the thrust and position of the Commission that it
13 would not sit back and do nothing but it would instead implement
14 the regulations in their spirit and intent and therefore move as
15 quickly as possible as reasonably possible technological feasibility
16 would permit, and therefore it seems to me that the position
17 suggested by the Department is absolutely without fault and that
18 the position we support in behalf of the League is similarly well
19 taken.

20 I want to address myself to only one additional point.
21 In support of the Company's position that they not be compelled to
22 do anything until 1977, they nevertheless state their willingness
23 to comply with the conditions of an air contaminant discharge
24 permit that will not be in effect until 1977. As this Commission
25 is well aware this particular hearing in this particular place at

1 this time has engendered a lot of public controversy, comment,
2 not all of which is based upon the issues before this Commission,
3 and I will address myself to those aspects of it that we have in
4 the petition of the League.

5 Time and again we are told that this company is in com-
6 pliance with all state and federal regulations. Let the story be
7 told that the reason that the company is in compliance with state
8 and federal regulations as to their fluoride emissions is that
9 there are no state and federal regulations as to gaseous and
10 particulate emissions effective right now at this time. It is not
11 a difficult matter to be in compliance with regulations that are
12 not yet effective. Well intentioned citizens supporting the
13 Company's position have stated what they have been told by the
14 company, and those statements have been made and advertisements
15 taken out in newspapers which will not print advertisements by the
16 members of the Wasco County Fruit and Produce League. Those
17 statements have been made through the Chamber of Commerce which is
18 an apologist of its committee for Agriculture, and those statements
19 have been made in editorials in the local newspaper, in advertise-
20 ments over the local radio, and through telephone channels as
21 well.

22 If in fact it is true, as we believe it to be true, that
23 this company has more than adequate capacity to comply with the
24 present regulations, then let them comply with the regulations now
25 as the Department proposes. We will then have a standard which

1 will test their capacity to accelerate their protection of the
2 environment from the harmful emissions, albeit it is a level
3 which we believe to be inadequate yet a level within the regulations
4 established for 1973, and we ask for no more with respect to the
5 discharge permit.

6 The Company's final argument for not adopting any discharge
7 permit effective prior to 1977 is that they wish to have a period
8 of time in which to develop harmony with respect to pending
9 litigation. That is precisely the same argument in another guise
10 that the company advanced on March 27, 1974 over in Salem in the
11 hearing in which Vice-Chairman Crothers presided. They said,
12 "You should not hold this hearing, number one, because you do not
13 have the jurisdiction to do so and because there is pending
14 litigation which might be influenced." As a result of the setting
15 of this hearing on the 3rd of May in The Dalles, the case that
16 was set for trial in April was reset, and so long as the Company
17 is able to prevail upon the courts and the Commission to play one
18 off against the other then none of the controversies that are up to
19 the jurisdiction and authority of the Commission and the Courts
20 are going to be resolved. Both the Courts and the Commission have
21 their responsibilities, and I know that this Commission won't
22 shirk from its responsibilities because of some assumed desire to
23 rid itself of litigation.

24 The Company is well aware of how one resolves disputes.
25 One way to do so is to protract them in courts. The Company has

1 that legal right which it has exercised now for some 12 years, and
2 the Company continues to exercise that right as it wishes to do
3 so, but to assert that now 15 years after the litigation would be
4 commenced the Company wishes to conclude all of the problems with
5 the growers and therefore wait until the end of that conclusion
6 period 15 years from its commencement before you would require them
7 to abide by the laws and regulations you have adopted is an absurd
8 affront to the responsibilities which this commission has.

9 There is only one issue before this commission with
10 respect to the air contaminant discharge permit. On that issue
11 there is no disagreement. The only issue is: Can the Company
12 comply with the regulations that you would impose upon them
13 effective June 1, 1974? The Company concedes that it can comply
14 but wishes not to do so. Your department memorandum of the staff
15 says that the company can comply, and we support the air contaminant
16 discharge permit as proposed by the Department.

17 There are a number of witnesses here today who will
18 address themselves in part to the permit, but their testimony
19 cannot be separated from the petition so we will await further
20 opportunity to speak in favor of the petition before we proceed
21 further.

22 CHAIRMAN McPHILLIPS: Are there any questions from
23 any members of the Commission? Thank you, sir.

24 Carrying on, still talking about the proposed permit, we
25 have Joseph Schulein, a consulting engineer from Vancouver, who

1 wishes to discuss both items, which I will confine at this time
2 to the proposed air contaminant discharge permit, and he may
3 discuss designation of The Dalles as a special problem area when
4 it comes up.

5 MR. SHENKER: Mr. Schulein is one of the three
6 gentlemen to whom I have referred that I had attached to my list
7 of speakers at this hearing.

8 CHAIRMAN McPHILLIPS: Thank you. Walter Ericksen.

9 MR. SHENKER: That is the second one.

10 CHAIRMAN McPHILLIPS: Mr. Bailey.

11 MR. SHENKER: He is in the same category.

12 CHAIRMAN McPHILLIPS: John Thienes, County
13 Extension Agent.

14 MR. JOHN THIENES: Members of the Commission, I
15 wish to speak to the question of the designation of a special
16 problem area.

17 CHAIRMAN McPHILLIPS: We are going to hold up on
18 that. Would you defer your discussion and we will call you again
19 when we bring that up. We are restricting the discussion to the
20 issues of the permit.

21 MR. THIENES: Excuse me. I indicated on my note I
22 was going to talk on the emissions.

23 CHAIRMAN McPHILLIPS: I'm sorry. I thought they
24 were both checked.

25 Mr. Keith representing the Chamber of Commerce wishes to

1 talk on both problems, and if he will confine himself to the
2 proposed air contaminant discharge permit.

3 MR. B. M. KEITH: Mr. Chairman, members of the
4 Commission, mine is rather short but it covers both.

5 CHAIRMAN McPHILLIPS: All right, go ahead, give us
6 your name and your affiliation.

7 MR. KEITH: My name is B. M. Keith. I am Chairman
8 of the Governmental Affairs Committee of The Dalles Chamber of
9 Commerce. On the 15th of April the Board of Directors of the
10 Chamber of Commerce directed Governmental Affairs Committee, the
11 Economic Development Committee, and the Executive Committee of the
12 Chamber to consider the provisions outlined in your notice of
13 public hearing set for this date in The Dalles, Oregon to determine
14 whether or not the Chamber should take a position on the subject
15 matter involved in the notice. The Board of Directors further
16 directed that if the three committees determined that the Chamber
17 of Commerce should take a position that they be authorized to
18 act for and in behalf of the Chamber of Commerce.

19 On April 18th the three committees met and decided to take
20 a position and, since I chaired the meeting, directed me to present
21 their views at this Commission Hearing.

22 During their deliberations the Committee considered the
23 subject matter in two parts: One, the question of air contaminant
24 discharge regulations, and, two, the request that The Dalles Area
25 be designated a "Special Problem Area."

1 As to the question of air contaminant discharge regulations
2 the Committees recognized that they had inadequate information
3 and lacked the technical expertise if information had been
4 available for them to arrive at a definitive technical decision.
5 However, based on the information available, they felt that
6 Martin Marietta Aluminum, Inc. has taken reasonable action to
7 improve the air contaminant discharge problem, has bettered the
8 minimum regulation requirements now in force and appear to have
9 a program of continuing improvement. On that basis The Dalles
10 Chamber of Commerce feels that the Wasco County Fruit And Produce
11 League request is excessive.

12 As to the request that The Dalles is designated a "Special
13 Problem Area", The Dalles Chamber of Commerce strongly opposes
14 such a designation. The effect of such a designation goes far
15 beyond the welfare of the parties directly involved in this
16 hearing. The Chamber of Commerce feels that such a designation
17 cannot be justified, cannot help but have a detrimental effect on
18 the public image of the community and will tend to inhibit new
19 industrial and business interests when considering The Dalles Area
20 as a desirable operating location. Thank you.

21 CHAIRMAN McPHILLIPS: Thank you. This proceeding
22 has pretty well wrapped up the discussion regarding only the
23 proposed air contaminant permit. We have one more, and then I
24 think we will go on the Special Problem. Mickey Tom has asked to
25 be heard.

1 MRS. MICKEY TOM: Members of the Commission, my
2 name is Mickey Tom. I am a member of The Dalles City Planning
3 Commission, but I testify today as a private citizen and as a
4 farmer's wife.

5 I have lived in The Dalles since 1957. I served as my
6 husband's secretary during the legislative years of 1953 through
7 1957 when he represented counties other than Wasco County, but at
8 that time we were familiar with the legislators from this area
9 who were working diligently to facilitate establishment of Harvey
10 Aluminum locally for the future economic benefit of the community.

11 At that point in our history, smog was a word which applied
12 only to Los Angeles.

13 In 1961 and 1962 I was a flight student flying out of
14 The Dalles Airport which is across the river from The Dalles.
15 There were at that time frequent periods when for days at a time
16 the combination of low ceiling, smoke from the plant and other
17 smoke producing factories in The Dalles made local flight dangerous
18 to impossible. It was not uncommon to be unable to see the
19 Klickitats from the Scenic Drive in The Dalles.

20 This situation has been virtually eliminated with install-
21 ation of smoke removal and particulate emission devices. Contin-
22 uing research is necessary, but according to all information made
23 available to me progress has been continual and encouraging.

24 In 1972 on behalf of The Dalles Beautification Commission
25 of which I was then chairman, I wrote to Lloyd McKay who was then

1 General Manager of the Martin Marietta Aluminum Plant a letter
2 which said in part Industry today finds itself in an unenviable
3 position, expanding its facility to meet the needs of modern
4 technological and population growth, and it is running into very
5 real crisis of environmental pollution, and when a corporation
6 such as yours voluntarily takes measures to eliminate insofar as
7 possible its share of pollutants from our atmosphere, it deserves
8 the attention and the approval of the citizenry. A copy of this
9 letter was sent to the Governor, and we received a favorable
10 response which agreed with the attitude represented by the
11 community.

12 Some years back my husband and I learned that a power line
13 from the John Day Dam was to bisect our ranch in Sherburne County.
14 I have yet to meet a farmer who is pleased with this sort of
15 encroachment upon his land. Fortunately for our peace of mind we
16 did not have to learn the whole story at once. When engineering
17 for that project was completed we wound up with a substation and
18 five giant line towers. We thrashed around a good deal during the
19 planning. And dug in our heels when we felt unnecessary damage
20 was being inflicted, and it was not a period of liking and joy for
21 either the Bonneville officials with whom we conversed or ourselves,
22 but we did work together and I think to the ultimate satisfaction
23 of both parties.

24 There are permanent disadvantages to having those towers
25 in our fields, but society has to have electricity and the lines

1 have to go some place.

2 We believe that co-operation between agriculture and
3 industry is an absolute necessity and capable of achieving livable
4 results for all of us.

5 In closing I would like to refer to the recent population
6 and employment study by John Brose which has emphasized the fact
7 that educational and job opportunities for people beyond high
8 school in this area are exceedingly low. Out of its total
9 payroll of 467 people, Martin Marietta in The Dalles plant employs
10 143 men and women between the ages of 18 and 30 on a permanent
11 basis. Each summer 15 college students are hired providing them
12 with an income for the summer of from \$1,500.00 to \$2,100.00.

13 Thank you.

14 CHAIRMAN McPHILLIPS: Thank you, Mrs. Tom.

15 Are there any questions or comments from the members of
16 the Commission. Dr. Crothers?

17 DR. CROTHERS: I don't know how you intend to
18 proceed disposing of these, but certainly in this first one there
19 seems to be only one real question, and that is the date at which
20 the numerical standards are to be applied. My question to the
21 legal people is what is the significance of an air contaminant
22 discharge permit that does not have a ceiling on it? How can
23 such a permit be enforced until it does have numerical figures
24 on it? Does the discharge permit without numerical figures mean
25 any more than a sermon to people to be a good fellow?

1 MR. ROBERT L. HASKINS: To answer that question,
2 I think that you also have to look at the rules and regulations.
3 I think one term that occurs to me is requiring the highest and
4 best use of treatment and control, and I think in fact putting the
5 numerical limits is as to the specificity of that particular
6 provision, but as an enforcement matter I think your point is
7 well taken that it is much better to enforce something specific
8 rather than a term of using the highest and best practicable
9 treatment and control, but that is always in the background, and
10 that is the requirement in this case and in all other cases.

11 CHAIRMAN McPHILLIPS: Does that answer your
12 question, Doctor?

13 DR. CROTHERS: Yes.

14 CHAIRMAN McPHILLIPS: As far as the ultimate dis-
15 position of this question, unless there is questions from the
16 Commission, it has been the custom to leave the record open for
17 ten days following this hearing for additional testimony which
18 might be presented in written form to be given to the members of
19 the Commission, and the decision would normally be made at the
20 next regular meeting which I think is May 24th. We may not have
21 time. This is the 3rd, and we are holding the record open for
22 ten days to get the material put together and in our hands. I
23 would not know for sure whether we might be able to have a decision.
24 Hopefully we will be able to give a decision on May 24th.

25 With your permission, without any dissenting voice from the

1 Commission, we will take up the question of the Special Problem
2 Area. I think probably because it is proposed by the Fruit
3 Growers, that you present your petition, if you wish.

4 Mr. Shenker, are you going to be the lead-off man on this?

5 MR. SHENKER: In effect I will present the people
6 who will present testimony on behalf of the Wasco County Fruit
7 And Produce League.

8 Let me say this by way of introduction. When we speak to
9 the Special Problem Area, I think that the only issues there
10 presented are whether the Company has the capacity to restrict its
11 emissions to 1.0 pounds of fluoride per ton of aluminum produced
12 on a weekly average, and, secondly, whether the Company can
13 restrict its emissions so that the concentrations of fluorides in
14 the ambient air would not be more than .6 micrograms per cubic
15 meter, measured, as we requested, on a six-hour basis. Having
16 said those are the only issues, it makes it difficult for me to
17 understand why there has been so much controversy engendered as if
18 this were an attempt to close the plant. No one has suggested
19 that. No one has suggested that this plant be closed, nor has
20 anyone suggested that non-fluoride emitting industries should be
21 operating in The Dalles area or any place else, nor are we
22 suggesting fluoride emitting industries should not operate so long
23 as they do not emit more than 1.0 pound of fluoride per ton of
24 aluminum within the extent of the growing season.

25 Now, as to the only issues that are therefore to be

1 presented, first we will proceed with the testimony on the
2 technique of whether the Company can restrict its emissions to
3 1 pound of fluorides per ton of aluminum produced, and then
4 present testimony on the issue of whether the Company can restrict
5 its pollution to the extent of .6 micrograms per cubic meter in
6 the ambient air is something achievable by them and then necessary
7 because it is a special problem area. Whether this is a special
8 problem area is still a remaining issue before this Commission,
9 and it is a special problem area if the work of the Mid-Columbia
10 Experiment Station of the Oregon State University over the last
11 15 years has not been for nothing, and it is a special problem
12 area if the work brought before the State Sanitary Authority, the
13 predecessor of this Commission, was of some value and importance.

14 First, to explain to the Commission our concern with the
15 misstatement of the issues and our intent to address ourselves
16 only to the issues of whether this is a special problem area, we
17 would like the record to be explicit and clear that this hearing
18 was not requested by the attorneys for the Wasco County Fruit And
19 Produce League as to this date and this town despite the fact that
20 that was the lead editorial in the local paper to that effect.
21 When the lead editorial also said that such request made is unfair,
22 I should like you to know that requests made in compliance with
23 the regulations cannot be unfair. It was in fact the request of
24 the Wasco County Fruit and Produce League that this Commission
25 make a finding at the time that the presentation was made of the

1 petition on February 19, 1974 because the record was adequate at
2 that time to find that this was a special problem area in The
3 Dalles. We repeated that same position on March 22nd, 1974 that
4 the Commission then make a finding that this was a special problem
5 area. Since we have requested that that finding be made prior to
6 May 25, 1974, obviously it had to be made by that time if we were
7 to protect during the growing season, that is, the vulnerable
8 period for which we sought the special problem relief, that is,
9 from March 22nd to July 15th.

10 Let me first present the witness that I think can best
11 describe the total position of the Wasco County Fruit And Produce
12 League, Mr. Donald Bailey.

13 MR. SOMERS: Mr. Shenker, in reviewing the minutes
14 of the March 22nd, 1974 meeting at which I was not present, it
15 appears you did specifically request a hearing to be held at this
16 time. It appears you also wanted it to be held in subsequent
17 communication with the Commission over the objection of counsel
18 because of a previously scheduled lawsuit.

19 MR. SHENKER: I didn't understand, Mr. Somers. Are
20 you suggesting that I suggested this hearing be held here in The
21 Dalles on May 3, 1974?

22 MR. SOMERS: There was a request that this hearing
23 be postponed, and you requested that it be held immediately.

24 MR. SHENKER: I think, Mr. Somers, that you agree
25 with me, do you not, Sir, that I had requested that this Commission

1 make a decision on March 22, 1974 when I was present at that time?

2 I appreciate that you were not present at that time.

3 MR. SOMERS: I wasn't, and I am looking at the
4 record of the minutes of the meeting.

5 MR. SHENKER: There should be a transcript of that
6 meeting, sir.

7 MR. SOMERS: There is, and you asked that it be
8 held immediately, and subsequently there was a discussion over the
9 lawsuits that were pending, and you held that it would be in-
10 appropriate for the Commission to hold a meeting one week or less
11 than a week prior to the time that the lawsuits were commencing,
12 and you said you wanted the problem considered immediately.

13 MR. SHENKER: That is right, on March 22nd. That
14 is absolutely true, sir, on March 22nd we wanted to have consider-
15 ation made and a decision made on that date. At the same time I
16 might say that Dr. Crothers directed a question to Mr. Underwood
17 whether it would be appropriate for the Commission to proceed,
18 given the fact of the pending lawsuits, to which Mr. Underwood's
19 response, I believe, was recorded in the minutes.

20 MR. SOMERS: So it appears that you wanted the
21 meeting held at this time.

22 MR. SHENKER: How do you draw that conclusion, Mr.
23 Somers? I am sorry, I do not follow you.

24 MR. SOMERS: It appears from your statement that
25 you made here today that you wanted it deferred.

MR. SHENKER: I beg your pardon?

MR. SOMERS: It appears from your statement you made here today that you wanted it deferred. You didn't ask to have it held at this time?

MR. SHENKER: No, no.

MR. SOMERS: From the minutes I read, and I just wanted to clarify from my understanding, and I may have misunderstood.

MR. SHENKER: I am glad you did bring it up, sir, because there was a misunderstanding. It was and is the position of the League that the record has been sufficient for a finding that this is a special problem area as of the time of the filing of the petition in February, and as of the time we made our request before the Commission in March. Since our request was that this should be made prior to March 25, 1974, as soon as a finding could be made we wanted it to be made. Since we wanted to have a hearing we wanted to have a hearing, we were eager to have a hearing just as soon as it could be held. It is not my request that this hearing be held some six weeks after March 22, 1974. It should have been held considerably sooner. It should have been held, it was the original discussion at the Commission that perhaps it could have been on April 17, 1974 in LaGrande.

There was some general discussion at the hearing on March 22nd. That was later than I would like to have had it. That was after March 25th, 1974, therefore, we were unhappy that the date

1 was postponed to as late as May 3, 1974. My statement, Mr.
2 Somers, was with respect to the editorial in The Dalles Chronicle
3 that the attorneys for the Wasco County Fruit and Produce League
4 set this hearing in The Dalles on May 3, 1974. I think that date
5 was incorrect. I think our position is clear that we have sought
6 a hearing since February, 1974 and prior to the March 25th
7 beginning date of the vulnerable growing season.

8 MR. SOMERS: Thank you.

9 CHAIRMAN McPHILLIPS: Do I understand, Mr. Shenker,
10 that this hearing being held this late, it is more or less beside
11 the point and it is too late to do you any good; is that correct?

12 MR. SHENKER: It would do us less good now than if
13 it were held prior to March 25th, Mr. McPhillips. We did request
14 the special problem designation to run through the period of July
15 15, 1974.

16 CHAIRMAN McPHILLIPS: You do understand that we do
17 have other commitments.

18 MR. SHENKER: I quite understand, sir.

19 CHAIRMAN McPHILLIPS: And sometimes it is impossible
20 for us to put things together.

21 MR. SHENKER: I quite understand, Mr. McPhillips,
22 and the Commission knows I am not being personally critical of the
23 time schedule necessary to get the work done. I am, however,
24 speaking to the fact that the growing season has commenced on
25 March 25th of this year and it will end on July 15th of this year.

1 Today is the 3rd of May, approximately halfway through the growing
2 season. It would have been preferable from the standpoint of my
3 client, the petitioner, that the special problem designation should
4 have been given prior to March 25th. It is still preferable that
5 such designation be made prior to the July 15th.

6 CHAIRMAN McPHILLIPS: This is better than nothing;
7 is that right?

8 MR. SHENKER: Yes sir. Shall I call Mr. Bailey?

9 CHAIRMAN McPHILLIPS: Yes.

10 MR. DONALD BAILEY: Gentlemen of the Commission,
11 my name is Don Bailey. I am representing the committee of the
12 Wasco County Fruit and Produce League, and I am chairman. I so
13 appeared representing the same committee some 14 years ago before
14 the State Sanitary Authority.

15 CHAIRMAN McPHILLIPS: 14 years ago I think you were
16 14 pounds lighter than you are today.

17 MR. BAILEY: It has been quite a long period, and
18 at that time, as of now, a great misunderstanding existed, and I
19 will try to present the position of the Fruit and Produce League
20 again as best I know it.

21 The Fruit and Produce League of Wasco County does not now,
22 and never have asked for a regulation which would close the plant
23 if a reasonable attempt were made to comply with those regulations.
24 We only ask for pollution control to the best of Martin Marietta's
25 technical and economical ability. We also understand this is also

1 the legal limitation of the DEQ. We base our request for the
2 special problem area on the regulations as we read them, and I
3 think this is incorporated in the notice of the meeting of which
4 many of the people here have a copy. Under their designation
5 their proposal that a primary aluminum plant under 25-255, Item
6 1 it says required, this is rules of operation under the DEQ,
7 require, in accordance with a specific program and timetable for
8 each operating primary aluminum plant, and we understood this to
9 mean that special consideration will be given to conditions in
10 each area for each plant, there being only two in Oregon, for the
11 highest and best practicable collection, treatment and control of
12 atmospheric pollutants emitted from primary aluminum plants through
13 the utilization of technically feasible equipment, devices and
14 procedures necessary to attain and maintain desired air quality.

15 Later under Item 4, it was our understanding that basically
16 we asked for a special problem area, that the Commission would
17 establish standards which, based on presently available technology,
18 are reasonably attainable with the intent of revising the standards
19 as needed when new information and better technology are developed.
20 We understand that to mean that applies to a special problem area
21 when the plant has special technology and there is a special
22 problem in the area they can be further restricted to meet the
23 best technical standard that can be met by that particular plant.
24 Again there will be technical testimony on what their capabilities
25 are in that respect, but the misunderstanding that the total intent

1 of the League in applying for a special problem area designation
2 would be to close the plant we think is beside the point. Neither
3 the League or the DEQ proposes to close any plant which makes an
4 effort to comply and use the best technical equipment available.
5 But these have been statements that have been made locally, very
6 emotionally, and I can understand the position. The workers of
7 the aluminum plant have been told their jobs are in jeopardy.

8 I want to refer back to history a little bit again.
9 Chairman McPhillips remembers in 1961 that a large delegation of
10 workers came down to the Sanitary Authority because they were told
11 that their jobs were in jeopardy, that the request for additional
12 controls by the Fruit Growers would cause the plant to be closed.
13 The same argument was used in 1962 when we had a large public
14 hearing at The Dalles of the Sanitary Authority, that the intent
15 of the Fruit Growers was to close the plant, putting all businesses
16 in jeopardy, that we are trying to take away bread from the mouths
17 of the workers of the aluminum company. This is not the position
18 of the Fruit and Produce League. Again, when the federal suit
19 resulted in a consent decree with the arbitration board setting
20 up limits -- incidentally, practically identical with what had
21 been requested here -- the concern there was these limitations
22 would cause the plant to close.

23 Historically we have seen that not one hour of work has
24 ever been lost due to the efforts of the Fruit and Produce League
25 to get better pollution controls where certainly there has been

1 much better control which is because of the efforts of the League
2 both through the courts and through the federal and state agencies.
3 In fact, it might be stated that we have no doubt created quite a
4 few jobs in the pollution control department at the aluminum plant.

5 But we understand the whole issue today is this special
6 problem area for which special seasonal restrictions could apply
7 if the plant is technically able to comply if it wishes.

8 I would like to go into the history of the fruit growing
9 here and the reason why this caused it to be a special problem
10 area.

11 Concentrated in the immediate three or four mile area
12 around The Dalles is the most concentrated sweet cherry growing
13 district in the world. Many thousands of acres of cherries,
14 including some apricots, peaches, apples and so on, are grown in
15 this immediate close in area.

16 In 1955 Stanford Research Institute was hired by Harvey
17 Aluminum to conduct a site survey. I have a copy of that site
18 survey here. I think it is in your record of the previous
19 testimony. But this site survey was made by Stanford Research,
20 and Dr. Thomas headed a team in which he determined in a report
21 made to the aluminum people that after studying the meteorology
22 and the agriculture of the area that the site that they did choose
23 was very hazardous and that they would definitely have pollution
24 problems if they chose that site, and they recommended two sites
25 east of The Dalles Dam because of the hazard to agriculture in this

1 site. They rejected this site survey, it was suppressed, and they
2 went ahead and built it knowing they were located in a problem
3 area. Therefore, the report 19 years ago designated this as a
4 problem area on a site survey made before the plant was built.

5 The next decision by impartial people that this was a
6 special problem area was made under the consent decree procedure
7 in the federal court. As you will recall, after the first week
8 in April 1961, the Sanitary Authority indefinitely postponed
9 action against the aluminum plant, and in the latter part of May
10 1961, a group of some 20 some growers went together in a federal
11 court injunction action to provide themselves protection from
12 pollution damage. This case came to trial in 1963. It was
13 appealed and returned in 1965 when a consent decree was entered
14 in which a basis for working out the difference between the
15 growers was made on setting up two arbitration boards. One of
16 these was an independent panel of plant pathology experts, one
17 was chosen by the aluminum industry, and one was chosen by the
18 growers, and the third was chosen by those two. There was also an
19 arbiter panel of experts who monitored the levels of fluorides in
20 the field. Both the people who were on that panel, Mr. Schulein,
21 and Mr. Byrne on the latter arbitration panel, are present here
22 today.

23 The main experts, though, the independent plant patholo-
24 gists, did find that it was necessary to set up limits to the
25 atmospheric levels that did exist in the orchards to try and

1 prevent damage. They also had the job of arbitrating damage
2 claims. When the arbitration committee was set up under the
3 consent decree, several of the growers did not wish to have their
4 claims arbitred, but I think 15 did and left their claims in the
5 hands of the arbiters for determination. These plant pathologists
6 studied this area with frequent visits during the bloom season,
7 the fruit season and so on for each year for about five years
8 during the term of this consent decree. They had a unanimous
9 decision based upon their findings, and those findings, I think,
10 are very pertinent to the issue of the special problem area. They
11 found that, in a specially entered decree in the federal court,
12 that all the claimants, the 15 who had made claims in that period
13 from 1960 through 1969, had proper cause for claim, and they were
14 all awarded claims for damages to apricots, peaches, pears, prunes,
15 cherries, and pine trees. Now, there has been questions raised
16 about whether there were or ever have been damages to the area.
17 The total of those claims, including interest, when paid, was
18 over a million dollars. This could be called trivial by some,
19 but this was the unanimous decision, including the decision of the
20 representatives of the aluminum company. Furthermore, they state
21 in their legal findings, and I read from the findings in federal
22 court, that the defendant, the aluminum plant, conceded it had
23 damaged plaintiffs' peaches, apricots, prunes and grapes, but the
24 point of being a special problem area, they further found that the
25 aluminum reduction plant at The Dalles, Oregon, was inappropriately

1 located. Now, I don't see how you can interpret that other than
2 it was a special problem area. It was inappropriately located
3 just as the Stanford Research found many years before, and that
4 is that the air emissions control system was inadequate consider-
5 ing the relative susceptibility to fluorides of some native and
6 cultivated plant species in the area, that is, pine trees and the
7 orchards. So here clearly is a determination by an independent
8 body of experts in a federal court proceeding that this is a
9 special problem area.

10 Furthermore, after the improvements were made in 1969 and
11 '70 in the plants to the present state of efficiency, there were
12 five growers who had claims for the 1970 and 1971 seasons in which
13 the newest system was then in operation.

14 The five growers' claims came to over a hundred thousand
15 dollars. Each of these growers was awarded claims for damages in
16 those two years, and it is important to note that in some of the
17 periods of time where they were awarded claims they did not
18 exceed by measurements in the orchards the limits that were set
19 by the arbiters, and yet damage claims were awarded. Those are
20 the same limits that are being proposed for the air limits under
21 this special problem area, and so the growers expect that they
22 would still have damage. The arbiters unanimously again, including
23 the findings of the plant pathologist from the aluminum company,
24 found damage even after the period of time in which the better
25 pollution control system was installed.

1 Again, we are not asking that the plant be closed. We
2 are asking that they do the best job they can. Unfortunately, the
3 last finding of another federal court finding of the arbitration
4 committee clearly shows the damages continuing and that, therefore,
5 we have a special problem area.

6 Again to the current point, we are six weeks into the
7 1974 growing season and we need protection now, as we have been
8 asking for protection from every agency that we could get at for
9 14 years. The peach and apricot sensitive season is approaching.
10 Peach soft suture has been generally found in June, for instance.
11 I might note this protection was asked for July 15th, and the
12 newspaper noted it that we asked for July 25th.

13 I would like to summarize again the League's position.
14 It is similar to what the consent decree arbiters recognized and
15 determined. We request a special seasonal limitation under the
16 special problem rule. These arbiters found that during the spring
17 of the year that there should be a special limitation on these
18 levels admissible in the air measured in the orchards. This is
19 what we have operated under, and it didn't close the plant. We
20 are asking those same limitations. The only addition to that is
21 that the proposed new regulation include a pound per ton limitation
22 also in addition to the orchard limitations. We just wish that
23 the limitations could be to the utmost extent technically and
24 economically possible as we understand the proposed rules. We are
25 not asking that all damages be eliminated but only the maximum

1 protection feasible. We understand that Martin Marietta's own
2 tests, information of controls as submitted, show it can be done
3 without the plant being closed down if they really want to make
4 the effort. Thank you.

5 CHAIRMAN McPHILLIPS: Are there any questions?

6 MR. SOMERS: Mr. Bailey, how many of the growers
7 in the area here are members of the Wasco County Fruit and Produce
8 League?

9 MR. BAILEY: I think 90 some percent of the growers
10 are members of the Fruit and Produce League, probably 99 per cent.
11 The Fruit and Produce League has probably spent through the con-
12 tributions of those growers a quarter of a million dollars on
13 this problem, research and otherwise.

14 MR. SOMERS: I appreciate that, but Mr. Cannon
15 asked me the question and I didn't know the answer to it, and I
16 thought perhaps you did.

17 CHAIRMAN McPHILLIPS: No more questions? Thank you.

18 MR. SHENKER: We will call our next witness, but I
19 might state that Mr. Bailey has been the chairman of the Research
20 Committee of The Wasco County Fruit and Produce League since the
21 inception of the pollution problem here. My next witness is Mr.
22 Josph Schulein.

23 MR. JOSEPH SCHULEIN: Mr. Chairman, I am Joseph
24 Schulein, a consulting professional chemical engineer. I am
25 registered and licensed in Oregon as well as Washington and

1 California. I appeared before this Commission on June 29, 1973
2 at its hearing on the adoption of proposed revisions for the
3 primary aluminum plant regulations. At that time I stated my
4 professional qualifications and my absolute conviction that given
5 the state of the art today in instrumentation and technology
6 available for controlling the emissions of pollutants from
7 aluminum plants, the then proposed regulations were clearly
8 technologically feasible. It was also my view, which I expressed
9 at that hearing, that a pollution source which does no damage at
10 relatively high levels of emissions should be regulated differently
11 from a pollution source which does substantial damage at low
12 levels of emissions. I then urged upon the Commission the
13 adoption of regulations which would require even more restrictive
14 limitations on emissions when necessary to solve special problems.

15 I am pleased that the Environmental Quality Commission
16 of the State of Oregon adopted regulations which were consonant
17 with the views that I expressed at that hearing on June 29, 1973.
18 I appeared at that hearing having then served as a consultant to
19 attorneys for one of the aluminum plants in Oregon and having also
20 served as a consultant to agriculturists affected by the other
21 then operating aluminum plant in Oregon.

22 I now appear at this hearing at the request of counsel for
23 the fruit growers affected by the operations of the Martin Marietta
24 Aluminum, Inc. aluminum reduction plant at The Dalles. I have been
25 familiar with the operations of that aluminum reduction facility

1 over the last 13 years, during which time I have continued to
2 serve as a consultant for those counsel representing the affected
3 fruit growing interests. For example, I testified in federal
4 court in 1963 that it would be possible and desirable to install
5 electrostatic precipitators to control emissions from that
6 aluminum plant. The court's decree subsequently required the
7 installation of those electrostatic precipitators, but that decree
8 was superseded by a subsequent Consent Decree which called for
9 arbitration. I served as one of the arbitrators to determine the
10 concentrations of fluorides in the ambient air surrounding that
11 aluminum plant for several years following the entry of that
12 Consent Decree in 1966. I now have seen the operation of the
13 electrostatic precipitating equipment which was installed by the
14 aluminum plant some ten years after my original testimony about
15 the desirability and feasibility of that installation.

16 I wish to speak to two issues today:

17 First, I speak in support of the proposed Air Contaminant
18 Discharge Permit described in the memorandum of the staff of the
19 Department of Environmental Quality for Agenda Item "K" for the
20 March 22, 1974, meeting of the Environmental Quality Commission.
21 I had reviewed that memorandum, the petition, response and reply,
22 which are the subject of this hearing on special problem area
23 relief and compliance schedule relief, the letter of March 21,
24 1974, from Joe Byrne, and the Department staff memorandum on that
25 letter and the aluminum company's response to the petition for

1 special problem area and compliance schedule relief. I personally
2 have inspected the pollution control system in the aluminum plant
3 at The Dalles, and I have testified in court on the control levels
4 achievable in that aluminum reduction facility; that testimony has
5 been given over a period of 14 years, most recently some six months
6 ago.

7 At the hearing on June 29, 1973, before this Environmental
8 Quality Commission, I stated my opinion that a pollution source
9 which demonstrates the capacity, from time to time, to reduce its
10 emissions to a level below that which is proposed now, for example,
11 in the Air Contaminant Discharge Permit, certainly can keep its
12 emissions below the proposed levels. Plainly the data that has
13 been submitted to this Commission by the staff of the Department
14 of Environmental Quality and by the staff of the environmental
15 control management of Martin Marietta Aluminum make clear that the
16 aluminum reduction plant at The Dalles can operate at levels below
17 those now proposed for adoption as Air Contaminant Discharge
18 Permit levels. Those levels, in turn, are even lower than those
19 requested by the Wasco County Fruit and Produce League in its
20 petition now pending before this Commission. In my judgment there
21 is no technological reason which would bar the Martin Marietta
22 Aluminum reduction plant at The Dalles from complying with those
23 proposed emission levels on the compliance schedule set forth in
24 the staff memoranda before this Commission at its March, 1974,
25 meeting. It was my opinion at that hearing in June of last year,

1 and remains my opinion, that it may be economically more efficient
2 for the aluminum plant at The Dalles to operate a technologically
3 improved pollution control system, rather than to expend the man
4 hours necessary properly to manage their existing pollution control
5 system. This is an economic, not a technological, decision.

6 Secondly, addressing myself to the special problem area
7 relief requested in the petitions pending before this Commission:
8 I can make no professional judgment on whether the The Dalles area
9 is a special problem area within the meaning of the current
10 regulations: That judgment is beyond my professional expertise.
11 However, it is apparent to me merely as an interested observer
12 that there certainly has been a substantial body of professional
13 and judicial opinion which continues to assert what I would regard
14 as obvious; even relatively low levels of emissions from the
15 aluminum plant at The Dalles have caused continuing problems for
16 the fruit growing area surrounding that aluminum plant. That
17 strikes me as constituting the fruit growing orchards as a "problem
18 area."

19 I do know from my experience in monitoring the gaseous
20 emissions from the aluminum plant in The Dalles that it is well
21 within the capacity of that aluminum plant to maintain its
22 emissions at less than the .6 of a microgram per cubic meter
23 requested in the petition. I certainly would agree with that
24 judgment made by the staff of the Department of Environmental
25 Quality for the March meeting of the Commission this year, that the

1 aluminum plant is capable of meeting the petitioner's requested
2 .6 of a microgram of fluoride ion per cubic meter on a 12-hour
3 sampling basis. Instrumentation is available today which can
4 make this measurement on a six-hour basis as well.

5 Finally, as to the request that emissions level be set
6 at 1.0 pounds of fluoride ion per ton of aluminum produced, as a
7 weekly average, during the growing season, it is plain to me that
8 that emission level also is technologically feasible for the
9 Martin Marietta Aluminum plant at The Dalles right now. Indeed,
10 there have been substantial periods of time during the last year
11 and one-half in which the company demonstrated its capacity to
12 reduce its emissions to that level. Moreover, those periods of
13 time in which the company has demonstrated its ability to control
14 its emissions to not more than 1 pound of fluoride ion per ton
15 of aluminum produced are by far the majority of the reporting
16 periods which I have examined.

17 In conclusion, it is apparent to me from my professional
18 experience that there is no technological reason preventing the
19 aluminum company from complying with the proposed emission
20 restrictions both from the plant source and from the ambient air
21 monitoring during the growing season. Therefore, the question is
22 not whether the aluminum company can achieve those emission
23 restrictions. The question is whether the aluminum company will
24 choose to achieve those emission restrictions. The question to
25 this Commission, accordingly, is whether it will require the

1 aluminum company to do what it can do, but what it may not choose
2 to do. I am of the firm technical opinion that all air pollution
3 is in general a highly localized phenomenon -- it should be dealt
4 with on a localized basis. I support the special problem area
5 relief requested in the pending petition, and I support the
6 compliance schedule relief both as requested in the petition and
7 as proposed for an Air Contaminant Discharge Permit by the Depart-
8 ment of Environmental Quality. Thank you.

9 CHAIRMAN McPHILLIPS: Are there any questions?

10 DR. CROTHERS: I want to be sure I understand in
11 my own mind. Do I understand you to say that with the present
12 equipment properly operated, it is your opinion that they can
13 meet both the .6 microgram ambient air standard and the 1 pound
14 weekly average?

15 MR. SCHULEIN: Yes sir.

16 DR. CROTHERS: Without any additional equipment?

17 MR. SCHULEIN: That is my opinion based on this
18 particular area.

19 DR. CROTHERS: What does this particular area have
20 to do with whether they can meet the standard?

21 MR. SCHULEIN: You mean the localized area?

22 DR. CROTHERS: Yes.

23 MR. SCHULEIN: Well ----

24 DR. CROTHERS: I mean, if this plant were located
25 in a different area it couldn't meet the standard?

1 MR. SCHULEIN: Can I take a couple minutes to
2 answer your question this way?

3 DR. CROTHERS: Yes.

4 MR. SCHULEIN: As I look at it, over every square
5 mile of earth and sea from ground level to the outer reaches there
6 are about 29 million tons of air.

7 DR. CROTHERS: Well, I can understand that the area
8 is related to the ambient air standard, but how about the pounds
9 per ton, put it that way, what has that got to do with the area?

10 MR. SCHULEIN: What I am saying is that, if I can
11 explain, this means that over Oregon you have twenty-five hundred
12 thousand million tons of air, a reservoir that could absorb all
13 of man's effluvium, but we have a condition where these excrescences
14 normally stay in the lower areas. They are wafted by the winds;
15 they are hemmed in by the terrain; they are ceilinged by inversions
16 and, worst of all, a localized area may have horticulture that is
17 particularly sensitive to some of those contaminants. To my mind,
18 if we could get the stuff out into all the air in the world there
19 would be no problem anywhere. To my mind then, it is a question
20 of the actual location as to what the damage does. Now, I would
21 have no objection to a much greater tonnage allowance, poundage
22 allowance, if the locality was such that no damage would be done
23 by anything. I see no particular magic in the particular numbers
24 that are mentioned, and I think those particular numbers must be
25 associated with the localized area so as to be fair to the people

1 who have to operate farms or live in that area and be fair to the
2 plant in that area. Does that answer your question?

3 DR. CROTHERS: Well, it doesn't answer my question
4 about the 1 pound per ton. That hasn't anything to do with the
5 location of the plant. The ambient air does.

6 One other question. Is it of any concern to the growers
7 what the pounds per ton is as long as the ambient air standard is
8 as safe as possible? Isn't that the thing that concerns the
9 growers, how much fluoride ions is in the air, not how much comes
10 out per ton, how much is in the ambient air in those orchards?

11 MR. SCHULEIN: I think this is the gist of it as
12 far as the orchardist is concerned, is the thing that is growing,
13 but everything has to be tied together for ease of regulation of
14 one kind or another. I see nothing magic in one pound. I would
15 not object to another area if you set it at 2 pounds or five
16 pounds.

17 CHAIRMAN McPHILLIPS: Mr. Shenker?

18 MR. SHENKER: Mr. McPhillips, our last witness on
19 behalf of the League is Mr. Walter Ericksen. Before Mr. Ericksen
20 is asked to testify, I would like to hand up to the Commission the
21 statement of Mr. John C. Capell who is unable to be here today.
22 Mr. Capell, as the Commission may know, suffers from a neurological
23 disorder and is unable to be here today.

24 CHAIRMAN McPHILLIPS: It will be made a part of
25 the record.

1 MR. SHENKER: Mr. Ericksen has been the chairman
 2 of the Meteorological Committee of the Wasco County Fruit and
 3 Produce League since 1961, I believe.

4 MR. WALTER ERICKSEN: Mr. Chairman, honorable members
 5 of the Commission, ladies and gentlemen, friends. I am Walter
 6 Ericksen. I was born and raised in The Dalles. I am an orchardist
 7 and have been working with cherries for over 50 years. I have
 8 been a claimant in federal court and received some compensation.
 9 However, it took 14 years to get my first case completed. You
 10 recall I was, too, before this Commission in 1961 and asked to go
 11 the other route.

12 What alternatives do I have when my average production in
 13 the 1950s was five to eight ton per acre, and on the same orchard
 14 since 1959 I have failed to produce more than one to three ton
 15 per acre?

16 The Wasco County Fruit and Produce League appointed me
 17 Chairman of the Wind and Weather Committee in 1960. In an effort
 18 to keep a fair and factual record of the problems, Mel Olmstead
 19 and I began photographing the plant emissions during bloom in
 20 1961. Crop losses correlate accurately to the extent and location
 21 of the fumes in the orchard each and every year. My best year has
 22 not been 50 per cent of what used to be normal production in the
 23 cherry area. I speak for myself and as a member of the League.
 24 My wife and I received arbitration awards rendered by three plant
 25 pathologists for damages to our crops by the aluminum plant

1 following the ordinance adopted in 1971 and 1972. Unfortunately,
2 unless my wife and I receive a little bit of assistance from a
3 Commission such as yours we will have no alternative other than
4 to initiate further legal proceedings against the aluminum plant
5 located in The Dalles.

6 For over 14 years I have served as an official weather
7 observer. I also received training in meteorology while a B-17
8 pilot in World War 2. I might add that most of the photographs
9 I have in these stacks of albums that I have here from 1961 to
10 1964 were taken from my airplane. There is a good many thousands
11 of dollars of photographs here.

12 The Commission has already received a statement from Mr.
13 Jack Capell regarding inversions and stagnant air conditions in
14 The Dalles during bloom periods. I would like to amplify Mr.
15 Capell's comments regarding weather conditions in The Dalles and
16 invite your attention and review of the photograph albums I have
17 brought with me today.

18 Generally I think it is fair to state that inversions
19 exist most frequently during the bloom period and shortly there-
20 after than the rest of the year. It also has been proven to a
21 jury's satisfaction that damages occurred during bloom periods as
22 a result of exposure to fluorides from the aluminum plant. Every
23 case ever submitted for determination to a jury or to arbitrators
24 has resulted in substantial awards to the plaintiffs. Although
25 the aluminum company denies damages to anyone for obvious reasons,

1 when it has been time to go to court they have been badly beaten
2 every time.

3 The weather pattern in The Dalles is the same every year
4 on a general basis. Generally it can be said that when fumes from
5 the plant are not transferred to the orchard areas we tend to get
6 better fruit set and better crops. Crops like we had before the
7 plant came have not been experienced since the plant commenced
8 operations because there is some exposure to fluorides every year.
9 It is during the inversion periods or stagnant air periods that
10 the pollutants do their damage as the conditions are such as to
11 allow their presence in the orchards.

12 Harvey's fumes, now Martin Marietta, have been in the
13 orchards every year. Of course, when wind conditions have kept
14 the smoke from the plant from the orchards during the blooming
15 season on some occasions there have been better crops. In 1961,
16 seven days of the prime bloom period, six days had a west wind
17 and the orchards were clear of pollution. The orchards closer to
18 the plant had one of the heaviest crops that year.

19 Weather conditions in 1974 most nearly repeat 1961. Still
20 in 1974 we have damage as a result of the aluminum plant's
21 garbage they are dumping into the air every minute of every day.

22 The photo albums for which I am responsible cover the
23 years since 1961. I have attempted to show on each page a tree
24 which was representative of the stage of bloom when the photograph
25 was taken. The photos covering each year the time that the bloom

1 first comes out white and then when the petals begin to fall and
2 generally the Mill Creek area was assumed to be past prime bloom.
3 The photos show inversion clouds which accumulate mostly at
4 elevations of 500 to 1,000 feet above sea level and have a depth
5 in the cloud of one to two hundred feet. These inversion clouds
6 are the danger most feared by the orchardists in this area. Fumes
7 from the plant and this kind of inversion clouds cause visible
8 damage to the bloom within one hour after it gets into the orchard.
9 They seem to build and hang over the plant, and occasionally they
10 drift into the orchards during the night and usually they begin
11 to move about daybreak with the prevailing air currents.

12 A short explanation for the cause of damage to our
13 blossoms should be helpful at this point. For 14 years I have
14 closely observed the effects on blossoms of the aluminum plant's
15 fumes immediately following their movement into the orchards. It
16 has been the observation that blooms opening during days of west
17 wind and clear air have the petals always remain pure white in
18 color and the pollen naturally fluffy, yet within one hour following
19 the drift of the fumes into the orchard brown burns begins on the
20 tip of the petal and the pollen on the stamen turns to a hard
21 lump of brick. Puckering shows at times of lighter fumigations
22 but always when burns begin when the fluorides from The Dalles
23 plant come into the orchard during the bloom period the orchards
24 and their crops suffer. These are some of the conditions that
25 cause the failure to pollenize, and the customary fruit set is

1 4, 6, 7, 13 per cent of the blossoms making cherries. This is
2 county records that the wife and I have made on certain years.
3 13 was about the highest percentage until last year I think we
4 had 18 per cent. My percentages of fruit set compared to 75 per
5 cent plus or minus prior to Harvey and something in the neighbor-
6 hood of 55 to 75 per cent set in the outer areas of The Dalles
7 five miles from the plant. This you can see today. If you will
8 go with me I will show you my orchard.

9 I have a sample here. I didn't bring this for any
10 specific factual record, but it does show something.

11 At the match head and pea stage, a term that we have come
12 for ten years to study, at this stage I can tell you how many
13 cherries are going to make fruit and how many stems are going to
14 fall on the ground. A cherry that reaches the size of those in
15 a couple more days would be a good pea size, but there are many
16 cherries and a few on this limb that are no bigger than a match
17 head and never will be. One of these limbs has more cherries
18 than the other. I got them in an average, and if you will go with
19 me you can see the orchard this way. One of these limbs is two
20 miles from the plant, and one of them is five miles from the plant,
21 and this limb should be two to three days later in pollenizing,
22 but there are cherries and I will have a crop on this limb, it
23 will not be a good one, but this was the purpose that I brought
24 these to show you. You happen to be here today when the match
25 head and pea stage is out there to look at the damage. Now, an

1 accident happened. When I was on the way home I got to thinking
2 about these limbs, and when you talk about the production in The
3 Dalles and where it is affected, I got to thinking this limb
4 looked pretty fresh. Some place down two years ago it started
5 growing and it grew to here. It grew this much more during a
6 dry year last year. That, gentlemen, is two years of growth five
7 miles from the plant. I didn't take this limb to show you this,
8 but it came to me afterwards. Two miles from the plant it grew
9 that much four years ago and that much more three years ago and
10 that much more two years ago and that much more last year, and
11 that will pretty well tell you why we are not getting a crop of
12 cherries. We can't grow the wood to grow the cherries on. This
13 is typical, it can be seen, and that was an accident.

14 CHAIRMAN McPHILLIPS: Did both those come from
15 your orchards?

16 MR. ERICKSEN: Both came from my orchards, the one
17 in Upper Mill Creek which I am leasing. This sample here is what
18 I can't get anybody in town to go out and look at. I will gladly
19 take anybody from the aluminum company or anyone and treat them as
20 a friend, and I would appreciate them looking. I didn't mean to
21 ad lib, but this is what hurts.

22 The Chamber of Commerce which has a Martin Marietta man
23 on the board with the aluminum plant all rave about record crops.
24 Never do they tell you that the yield per acre is way below what
25 it was before the plant arrived. Even without irrigation which

1 was installed in 1965 in most orchards, it is a shame when the
2 Chamber of Commerce or the town newspaper becomes a mouthpiece
3 for a polluter, but that unfortunately is what has happened in
4 our community.

5 Of course, the opponents of the orchardists never tell you
6 that they know that many many more acres are now in production
7 than before the aluminum plant started operations and that the
8 increased acreage countywide is the reason for the increased
9 production, not better conditions.

10 I might add here that with the advent of irrigation it was
11 a general assumption that production should build with the water
12 on all the orchards, but there is another thing. Under these
13 orchardists that got water in 1965 -- I had better rephrase that,
14 but it is a general practice of the orchardists to interplant one
15 more tree in between every tree, and now you have twice as many
16 trees with the additional tonnage so you should have an awful lot
17 more cherries.

18 Even now the untrained eye can see very obviously the
19 difference in the shape of the trees within two miles of the plant
20 as compared with the shape of those trees further away. Prior to
21 Harvey in the close in areas, the trees had never been under a
22 full set of fruit, stand erect and tall like poplars. Further
23 away, I think in the 3-Mile area, the trees are bent with their
24 load and carry a weeping willow look even into dormancy. They
25 hang like that, and you can see it out there all year around. They

1 get that way and they don't straighten up. My trees on Cherry
2 Heights, if you would like to look at them; I have trained them
3 to the best of my ability to both widen them and stop them from
4 growing up, and they are just tall and slender. The leaves are
5 more narrow from the later period after July, the growing season.
6 The fluorides affect the size of the leaf and because the leaves
7 are smaller the sunshine can reach the leaves in the tree and they
8 don't need to grow.

9 This set of leaves here in this orchard are more prolific
10 because the leaves are twice the size they are here on Cherry
11 Heights. It is my opinion that the tree in an effort to get the
12 sunlight for all these leaves broadens out. It is a very obvious
13 thing for anyone to observe.

14 Everyone has heard the results of Wilson Myer's trial, but
15 the Chronicle only came to listen when witnesses for the aluminum
16 plant testified. I say that, and it may be checked. Testimony
17 was given in that trial at Hood River that fumigation by fluorides
18 of as little as one-half part per billion affected fruit set in
19 cherries. At any given distance from the aluminum plant the
20 damage to fruit crop is somewhat paralleled by the damage to pine
21 trees. Our stately pine trees in their natural habitat are no
22 longer a thing of beauty in the westerly part of The Dalles.

23 I don't think the Chamber of Commerce has told you the
24 number of pine trees killed or removed from the park or even
25 commented on the high level of fluorides contained in the needles

1 in The Dalles area.

2 Now, these albums I would like to have you see. I have
3 two that were taken in 1974 and so that you may compare with the
4 wind conditions and the records that I have taken I am going to
5 briefly as possible explain, and if you will start at the beginning
6 I will talk about just a sentence or two about each day.

7 MR. SOMERS: Mr. Chairman, I think they should be
8 marked as an exhibit so that we will know what we are facing. Are
9 they already marked, Mr. Ericksen? Perhaps they are already
10 marked as exhibits. All the rest of the documentation that comes
11 in before the Commission ----

12 DR. CROTHERS: This has a date of 1974.

13 MR. SOMERS: Can you give us an idea of how many
14 pictures are in the books, roughly?

15 MR. ERICKSEN: Yes, there were a roll of ten films.
16 There is no more than ten films per day, and the days are the days
17 that the cherries were in bloom, and with these it was the third
18 to the 16th of April.

19 MR. SOMERS: Excuse me, they should be marked
20 Petitioner's Exhibits 1 and 2.

21 MR. ERICKSEN: Can you mark one of them, and then
22 I thought if you would like to look at them briefly there is a
23 picture of what this plant is putting out during the bloom period.

24 MR. SOMERS: I would like to see them, but the only
25 problem we have is on the record so that there is a record kept

1 of what we are doing. Is that right, Mr. Shenker?

2 MR. SHENKER: Yes, they are identical, but one of
3 them should be marked as an exhibit.

4 MR. SOMERS: Right. The record would indicate it
5 is marked Petitioner's Exhibit A. I am sorry to interrupt you.

6 MR. SHENKER: That is quite all right.

7 MR. ERICKSEN: If you want to follow through, the
8 dates are on the pictures, and I might explain just quickly there
9 are two of the ten pictures that showed something a little bit
10 more pertinent that were enlarged, and the other four on each
11 side are the regular print size.

12 Photos were taken starting on April 3rd, 1974. Mel
13 Olmstead and I took off at 7:30 as shown on Lower Mill Creek,
14 and we observed that all the fumes are out of the orchard area
15 and up the river. Since we found the battery from the camera was
16 dead we had to take the photos on the ground.

17 On April 4th, to follow on, we took off at 7:30 at 400
18 feet above Cherry Heights we both smelled fumes from Martin
19 Marietta. We saw an intense cloud of smoke extending from 7-Mile
20 Hill up the Deschutes River, and up the Deschutes Canyon 15 miles,
21 and it may be seen, I think, up the canyon on the second page.
22 This cloud extended from the Klickitats to Boiden Lake. We climbed
23 to 4,000 feet and determined that there was no other source of
24 pollution in either Mosier or Hood River. However, the smoke was
25 as thick as any day I can remember for 14 years. It was a very

1 light west breeze. You may note that the bloom was not over
2 10 per cent open in the early stage. That was the last photo-
3 graph on the 4th.

4 On April 5th we smelled fumes on everywhere we flew
5 through The Dalles. A low fog prevented an extended trip. On
6 the ground there was a 10 per cent burn observed on the perimeters
7 of the white petals. The wind was calm. This was not a frost
8 burn. There was no frost this year. No orchard heaters were
9 used that I know of. There was no reason to use those. This is
10 1960, 1962, and 1974. We got the burn from something besides
11 frost.

12 On April 6th the wind was moderate from the west all day.
13 Bloom was about 15 per cent. There was very little smoke visible
14 anywhere, but what there was was going up the river. Blossoms
15 that opened on the 6th appeared large, smooth, and white.

16 On the 7th we had a light west wind and variable, smoke
17 up the river, no fumes from the plant in the orchards. We made
18 observations all day and plant emissions appeared much lighter than
19 average today for some reason. I took these out of notes that I
20 made at the flight. They are made up afterwards.

21 April 8th was calm. An unusual inversion layer of 50 feet
22 plus or minus from the highest irrigation bank from the ^{Stoddard}Austin
23 Davis orchard out here on Cherry Heights connected with the same
24 elevation as the Martin Marietta plant, and then also up
25 Chenowith Creek and then back to Mill Creek and spreads down the

1 creek on that point into Mill Creek Canyon. Thinner fumes than
2 this inversion cloud could be seen and smelled in the orchards for
3 a period early in the morning, and then they cleared out. The
4 bloom was approximately 40 per cent.

5 On April 9th we had a west wind all day going up the river
6 and the bloom 50 per cent. The later blooms were large, smooth,
7 and pure white. The only perimeter burns so far had been on the
8 first 10 per cent of the blooms which had opened before April 6th.

9 On April 10th we had the same west wind as the 9th, smoke
10 up the river, bloom approximately 60 per cent.

11 In photos 5 and 6 on the second page show a typical
12 blossom cluster from the Knob Hill property. There is two
13 pictures on the 10th there that show white blossoms. If you will
14 notice, you can see what I am talking about visually, the round,
15 smooth petals and no burn on them. Those are the way they used
16 to be. Those were the way they are when they open when it is
17 clear and no smoke in them, and they will stay that way until the
18 smoke comes in.

19 On April 11th an east wind drifted the fume cloud out of
20 town, no smoke in the orchards at 7:00, but between 7:30 and 9:45
21 a very thin haze throughout the orchards. On 9:45 we had a strong
22 west wind and then throughout the rest of the day. This set of
23 photos very clearly shows the inversion cloud missing Cherry
24 Heights and going out Chenoweth Creek. For those of you that know
25 the area, it went out west of town.

1 On April 12th we had a hard west wind that lasted all
2 day. Smoke was going up the river and we were unable to find
3 perimeter burn of the blossom other than as noticed on that first
4 10 per cent.

5 Jack Thienes, the Wasco County Extension Agent agreed that
6 the 3-Mile area was 15 per cent in bloom. I called him on the
7 phone to see if we see it the same way. You can see it in the
8 photos there but he felt this was the closest percentage figure,
9 and we also talked about 75 per cent which I suggested, and he
10 agreed that we were about 75 per cent bloomed out.

11 On April 13th it was calm, the wind was light to moderate
12 from the east. Smoke over the river east of town to 7-Mile Hill.
13 We could see a high bank of inversion against 7-Mile Hill. A thin
14 smoke drifted from 7:00 to 9:30 across Lower Mill Creek area from
15 an inversion cloud that was out east of town here, but the main
16 cloud that was built over the plant went up Chenowith Creek.

17 We observed a little perimeter burn and puckering after
18 the cloud in photo number 6 passed over the area.

19 On April 14th, a picture showing perhaps the lowest
20 inversion cloud I have taken in over 14 years. This is strange
21 that after 15 years one day we had the highest inversion we have
22 ever seen this cloud go through, and that on another day, the 14th,
23 it was very low. If you are on the large photograph, the 14th,
24 in fact I recall the second page, is it not Eagle Point on the
25 second page?

1 MR. SOMERS: Yes, in here, April 14th.

2 MR. ERICKSEN: Yes, Eagle Cave is right here. It
3 is right level. The aluminum plant is right here. This is Eagle
4 Point. This is the cloud way down on the ground. This eddy
5 cloud moved up Chenoweth from a nice accumulation which again
6 crossed Cherry Heights between 7:30 and 10:00 and then with an
7 east wind almost clear again at 10:00.

8 I observed at this time more perimeter burn.

9 On April 15th we had a west wind all day, and Mel and I
10 took ground pictures that day. I cultivated all day and observed
11 more perimeter burn showing even on the petals that had just been
12 open on the past two days during the full bloom.

13 On the 16th smoke from the plant was going up the river.
14 On also the 16th, Mel also took a series of pictures to show a
15 typical cluster of blossoms in my Knob Hill Orchard after a mild
16 dose of fumes. I call your attention to the burned edges. You
17 can see the puckering that I am talking about. The petals are
18 puckered. This is what I observed over the years within a few
19 hours after every inversion cloud.

20 As you can see, the blooming and fruit ripening period is
21 the time when our crops are the most vulnerable from pollution from
22 the plant. It is protection that we seek during these periods so
23 that we too can be given a fair chance to earn a living for our
24 efforts in this community.

25 Now, this is a little bit more follow-up of where those

1 clouds hit.

2 MR. SOMERS: These pictures on April 16th, the
3 branches have been removed and brought into the building; is that
4 it?

5 MR. ERICKSEN: Yes, it was an average branch the
6 same as these.

7 Thank you very much.

8 CHAIRMAN McPHILLIPS: Are there any questions?

9 MR. ERICKSEN: These will give you the same story,
10 you have kind of got it, if you want to go through here every
11 year shows the smoke, and if you want to compare how much it was
12 before with the inversion clouds now, it is for the record. It
13 was taken to be fair to both sides and as impartial as possible,
14 but it is certainly a wonderful history we had with the beginning
15 bloom date every year, why, it is there, when in bloom.

16 CHAIRMAN McPHILLIPS: Has your smoke cloud
17 increased or decreased over the years the pictures have been
18 taken?

19 MR. ERICKSEN: Well, but then when you go back and
20 look at the pictures for that one day there on the 4th or 5th,
21 beginning of the 5th, the smoke was as solid as Mickey Tcm told
22 you in 1960, 1961 she couldn't see the airport. Even at that, if
23 it is any different from 7-Mile Hill up here clear to the Deschutes
24 River, it even swings 15 miles up the Deschutes River halfway up
25 the hill. It didn't go out over the hill. It just went out and

1 fed up the river. We flew to 14,000 feet to determine that it was
2 that heavy and where it was from, and all the way around the
3 cloud that we took there was no other source of pollution but
4 this smokestack that comes up here. It did creep over the hills
5 as it went east a few miles out of town and covered the lower
6 wheat fields from Boyd out of Dufur and over to the pit.

7 As I stated, I cannot recall that it was any heavier than
8 that.

9 MR. SOMERS: Mr. Ericksen, what seems to make some
10 of the blossoms in this cluster on the photograph in April 16th
11 different. Some of them seem to be affected and some of them are
12 not.

13 MR. ERICKSEN: I think somebody once said if
14 fluorides have just one characteristic that is consistent, it is
15 inconsistency. My apricots that were taken out in 1960 and 1961
16 I had to take out, where the nursing home is, one tree would have
17 one limb that was just burnt like fire, and the rest of the tree
18 you couldn't find a perimeter burn on it. One tree would sit
19 without any burn, and the next tree would be half, the limbs were
20 bare, the leaves would fall to the ground and it was bare like
21 dormancy. Then it would shoot out again. With the action of this
22 fluoride it seems like with some people with disease it strikes
23 some places and some it doesn't. It does not brown all the petals.
24 I don't want to leave with you that impression, but one hour after
25 that smoke moves across a white blossom and there has not been any,

1 obviously if you will look at it you can see it, and I can show
2 you perimeter burn that came within an hour in the orchard. It
3 has done it for 14 years. Every time it was clear it happened.
4 I no longer need to be a scientist or a specialist. It happens
5 the same every time.

6 Bob Smith made a special study when he was here when Jack
7 Thienes was getting further education, and took photographs and
8 they are available for the record. They are in the report, and
9 he found this to be so.

10 Further, to answer your question, Mr. Somers, we took
11 photographs early as we did here on a couple of days early burn
12 and the petals were brown. We went over and marked the limbs
13 that didn't have any blossoms open. They were in the bud, and he
14 watched for three days that the west wind blew and those petals
15 were all white. He was there when the smoke came in. He said
16 let's go in at 7:30, and at 8:00 o'clock when Mel and I were
17 flying when I got there it come in, and you could see it then. It
18 is a long and hard thing to ferret out. My friends don't believe
19 me. They won't come and look. They won't go through the orchard.
20 I have invited Wasco County Judge Hunt. I have invited anybody
21 from the Chamber of Commerce, businessmen up and down the street
22 and a doctor yesterday was needling me at Kiwanis, but he is too
23 busy to come.

24 It is in your hands, Gentlemen. The facts are in the court,
25 are right there, and I would be glad to show you. Today is a

1 beautiful time to do it.

2 When I get two ton to the acre and I used to get six, it
3 reminds me of Bill Morrison, the attorney for this company in one
4 deposition during this trial he was going over my federal income
5 tax, and he looked down there and he said, "What is this, you got
6 an income of \$80,000.00. That looks pretty good." He said, "How
7 do you account for that?" Which was a mistake for an attorney to
8 make because I answered the question, "If you will turn to the
9 other side of the page and look at my expenses for raising this
10 \$80,000.00 crop, my expenses were \$88,000.00. The two ton will
11 get me \$80,000.00 and the other four ton that I should have would
12 get me \$160,000.00 net income.

13 I thank you.

14 CHAIRMAN McPHILLIPS: Mr. Shenker, does that con-
15 clude your team?

16 MR. SHENKER: Yes, those are all the live witnesses
17 we brought today and the written statements that we have. I don't
18 know what the Commission wants to do about all these photograph
19 albums. I note that the Commission called upon Mr. Thienes, who
20 is the County Extension Agent, earlier. There was some confusion
21 about whether he was going to speak for the affirmative for the
22 petition, and Mr. Erickson talked about him a number of times.

23 What I would like to do, with the permission of the
24 Commission, is to make some summary comments after you have heard
25 from Mr. Thienes who does deal with the specific agricultural area

1 itself as the County Extension Agent. He is not, however, a
2 witness for the League.

3 CHAIRMAN McPHILLIPS: It is now time to recess for
4 lunch, and we will recess and reconvene at 1:30.

5 (NOON RECESS TAKEN.)

6
7
8 1:30 Proceedings resumed.

9 CHAIRMAN McPHILLIPS: Good afternoon, ladies and
10 gentlemen. We will reconvene the meeting, and I believe, Mr.
11 Shenker, was John Thienes a member of your crew?

12 MR. SHENKER: No, he is not a member of our crew,
13 Mr. McPhillips. He is a member of the public. He is the Wasco
14 County Extension Agent. You recall he spoke this morning.

15 CHAIRMAN McPHILLIPS: Yes.

16 MR. SHENKER: I want to make a summary statement,
17 but I thought it would be better after ----

18 CHAIRMAN McPHILLIPS: If you can make it fast.

19 MR. SHENKER: I will be happy to.

20 CHAIRMAN McPHILLIPS: All right, then you go ahead,
21 and we will start with the rest of it.

22 MR. SHENKER: I thought it might fit best after Mr.
23 Thienes had made his statement to the Commission, but if you prefer
24 I will make it before Mr. Thienes makes his statement.

25 CHAIRMAN McPHILLIPS: That is all right. Go ahead.

1 MR. SHENKER: Do you want Mr. Thienes to make his
2 statement or do you want me to speak?

3 CHAIRMAN McPHILLIPS: Go ahead. Are you ready to
4 report now?

5 MR. SHENKER: I am ready to hear Mr. Thienes'
6 statement.

7 CHAIRMAN McPHILLIPS: All right.

8 JOHN THIENES: I don't know whether I am ready,
9 Your Honor. My name is John R. Thienes. I work here as County
10 Extension Agent. I am a representative of Oregon State University
11 and so speak today.

12 In dealing with the question of whether this is a special
13 problem area, I would like to refer you back to the early 1950s
14 when Oregon State University initiated studies here in this area
15 in anticipation of the problem when it was learned that an
16 aluminum company was going to be here, and this was what caused
17 Oregon State University to do this.

18 The thought was there likely would be a problem, and there
19 has been a problem. The elements that make up the problem area
20 are, first that there has to be an aluminum company with fluorides
21 in this case, and there has to be meteorological conditions that
22 would take the fluorides into a sensitive area, and there have to
23 be sensitive crops of economic importance. All those conditions
24 would have existed had the aluminum company come in 1950, which
25 it did, and all these elements are still here plus we now have

1 additional knowledge which is more complete now than it was
2 before the factory began.

3 Let's review very briefly where we stand today on the
4 elements that make up this problem. First the fluoride emission
5 data, you folks have literally bushels of it, I suppose, and I
6 simply want to point out that we now have at our disposal infor-
7 mation relative to fluoride emissions. I believe the aluminum
8 company has provided much information; the DEQ has provided much
9 information with their own staff, and Oregon State University has
10 provided much initial type or field initial type information.

11 It is my opinion that the DEQ and the OSU sampling data
12 is more reliable because there is no motive to falsify or bias
13 the data of these agencies. Meteorological conditions, speaking
14 of condition number two, are the best documented of any area in the
15 nation I suppose.

16 CHAIRMAN McPHILLIPS: If they are, why can't they
17 tell us when it is going to rain? Pardon me. Go ahead.

18 MR. THIENES: You didn't want me to answer that
19 question?

20 CHAIRMAN McPHILLIPS: Pardon me. Go ahead. I am
21 sorry about that.

22 MR. THIENES: Area number 3, sensitive plants. We
23 knew ahead of time there were some sensitive plants that grew in
24 this area. I say "we," the Oregon State people and other folks in
25 this field of knowledge. In addition we now have new information.

1 First let's review some of the sensitive plants. Ponder-
2 osa pine was recognized many years ago as a sensitive plant.

3 Since the aluminum company arrived, about, in my esti-
4 mation, about 50 per cent or more of the pine trees that grew in
5 the Chenowith, lower Mill Creek, Cherry Heights district are now
6 dead and gone, and the effects of fluoride was the cause. Those
7 trees are out of the picture now. They don't bother us anymore
8 because they are dead. There are some left. They happen to be
9 the more tolerant individuals. They remain and they continue to
10 be indicators that some fumigation continues to occur.

11 Take some of our minor fruit crops first, prunes, peaches,
12 and apricots, we knew ahead of time that those plants were sen-
13 sitive. The effects on those crops in this area were violent and
14 severe during the early part of the plant's operation, but I wish
15 to make it very clear to you that those conditions have tremendous-
16 ly improved since the improvements in the fume control system that
17 have been put into the aluminum company plant, a tremendous improve-
18 ment over what it was back in the late fifties and early sixties.

19 A few remarks about sweet cherries, our major crop. They
20 were not established as sensitive plants when the aluminum company
21 came here, but research of Oregon State University has established
22 that fluorides do affect cherries, and they now take their place as
23 one of the sensitive plants.

24 So to summarize these remarks, let me say whether the
25 DEQ designates this area as a special problem area or not, it does.

1 not alter the fact that the area really is a special problem area.
2 We have all the elements to make it a special problem area and
3 it will remain so whether designated so or not.

4 I want to make just a couple other comments. I had a
5 chance to read one of the inputs the aluminum company prepared
6 for this hearing, and it bothers me a little bit.

7 The company noted that I and OSU researchers do things
8 which would tend to be biased, which would make us biased, and I
9 don't agree with that statement. They have in this document
10 which you folks will review, I presume, indicated, taken state-
11 ments that I have made out of context and put them into this
12 document, and they quote me extensively also in things I have said
13 that appear to be favorable to the aluminum company's side of the
14 question. I am not sure whether they consider me biased only part
15 of the time or for which, but I wish, if you use these statements,
16 I would like to have you review the entire statement rather than
17 the parts that have been lifted out.

18 Thank you.

19 CHAIRMAN McPHILLIPS: Are there any questions?

20 DR. CROTHERS: Could you give us, not necessarily
21 off the top of your head, but supply us with some figures of how
22 many acres of cherries there are around here, what the tons per
23 acre have been over a few years, and how many of these acres do
24 you consider are in the area affected by the effluent from the
25 plant.

1 MR. THIENES: You ask real good questions. The
2 acreage in the county is now around 6,500 acres of sweet cherries.
3 That is not all here at The Dalles. About 800 acres or so are in
4 the Mosier district.

5 The average yield is about three tons per acre countywide.
6 This would vary from nothing to 10 or 11 tons per acre on any
7 given block of fruit.

8 In recent history our production countywise has been
9 around 16,000 tons per year with the exception of 1973 when it was
10 about 20,000 tons per year.

11 DR. CROTHERS: What accounted for that large in-
12 crease?

13 MR. THIENES: Favorable weather, and irrigation as
14 was pointed out before, an irrigation project began in the mid
15 sixties and has increased our potential for production, and as
16 a result of that irrigation program, we plant additional trees on
17 that same acreage. Our acreage has not changed that much, but
18 our ability to produce has changed.

19 DR. CROTHERS: 1973 was the best year you ever had?

20 MR. THIENES: Yes.

21 MR. SOMERS: What is the average life of a cherry
22 tree?

23 MR. THIENES: There is really no average life,
24 Ron. Trees have been known to be three or four hundred years old.
25 Here in Wasco County we have good producing trees, good producing

1 blocks that are 50 or 60 years old. We have many good producing
2 blocks that are 20 years old, but there is no good answer to your
3 question.

4 MR. SOMERS: Well, I noticed periodically that
5 trees seem to be taken out of the orchard and new trees put in.
6 What is the reason for that?

7 MR. THIENES: One may simply wish to change
8 varieties. Perhaps old trees have died away and the original
9 block becomes not economic or uneconomic, and you wipe out the
10 whole thing and start over, which would be a matter of economics
11 primarily on the orchard. When a block became unproductive the
12 usual practice in the orchards is to replace individual trees as
13 they become unproductive or as they die or whatever happens to
14 them.

15 MR. SOMERS: What would cause them to become un-
16 productive?

17 MR. THIENES: Most recently we have had very severe
18 damage, winter damage.

19 MR. SOMERS: You mean frost?

20 MR. THIENES: Freeze.

21 MR. SOMERS: Freeze, does that affect, where the
22 orchard is as to whether or not it is affected by frost, location
23 of the orchard?

24 MR. THIENES: That is one factor.

25 MR. SOMERS: Do different varieties of trees produce

1 different capacities of crops? For example, say, that a Bing tree
2 produced ----

3 MR. THIENES: There is no recognized difference that
4 I know of between varieties.

5 MR. SOMERS: But some of the cherries are bigger
6 than others. Do they provide a different ----

7 MR. THIENES: Well, in tons per acre, Ron, is the
8 way you measure yield. There is no recognized difference between
9 the potential production of Bings or Royal Anns, and those are
10 our major varieties.

11 DR. GRACE PHINNEY: When effects such as climate
12 and water that effect plant growth vary from one season to the
13 other, so tremendously how do you determine the loss of crops that
14 is due to fluoride damage?

15 MR. THIENES: It becomes a matter of judgment and
16 a matter of records, I would say.

17 If one anticipates, and in my judgment a good fruit grower
18 can estimate what he thinks he should get in terms of yield, and
19 if you fail to reach that anticipation and there is no cause, you
20 have to assign it to something. In this case there is disagree-
21 ment over whether there is a cause or not, I guess.

22 MR. SOMERS: Let me ask you this, Jack. In the
23 tests that you have run have they been controlled to the extent
24 that it determines what the amount of fluoride that it takes to do
25 damage to the trees. I mean ----

1 MR. THIENES: The answer to your question is yes.

2 MR. SOMERS: What is that amount?

3 MR. THIENES: I really cannot quote you that re-
4 search. I would suggest to the Commission, and I know they have
5 already done this so it is easy to suggest it, and that is to have
6 your staff visit with the Oregon State University Research staff.
7 They have done this, I think they have, and that information is
8 in your hands or at least in your staff's hands, Ron.

9 MR. SOMERS: I didn't notice it was in the report
10 that I have. Oregon State University really controls the
11 experiments; is that right?

12 MR. THIENES: They have run a number of them.

13 MR. SOMERS: And from that we could determine --
14 do you remember when that was done?

15 MR. THIENES: They have been done continuously since
16 1953 was the beginning before the plant was even here, Ron.

17 MR. SOMERS: Well, in setting standards that is im-
18 portant. That is why I'm asking the question.

19 MR. THIENES: Absolutely, and I certainly recommend
20 that you pay attention to your staff's visits with the Oregon State
21 University research people.

22 CHAIRMAN McPHILLIPS: Does anybody else have
23 questions? Thank you, Mr. Thienes.

24 I might have just a word of condolence for you. You seem
25 to be a little irked because you said that someone had questioned

1 the studies of yours or Oregon State that seem to be biased. Mr.
2 Thienes, in some 30 years of this traveling show I have not seen
3 a study yet that I didn't consider was biased one way or the other
4 or I have not made a decision on this Commission that has not
5 been questioned as being biased. Do not feel badly.

6 MR. THIENES: Thank you. I agree with you.

7 CHAIRMAN McPHILLIPS: We just do the best we can.
8 That is all we can do.

9 Mr. Shenker, I am going ahead, we have some independent
10 witnesses, and I think as a climax we will leave you and Mr. Doan
11 to fight it out at the end and let these independent people have
12 their say, and they can get back to their respective businesses,
13 if so wishing.

14 MR. SHENKER: Yes. You had in mind at the end of
15 the proponent's ----

16 CHAIRMAN McPHILLIPS: We will get these independent
17 people. We have a number here, and then we will call on you and
18 Mr. Doan.

19 Mr. Olmstead.

20 MR. OLMSTEAD: Thank you, sir. Commissioners, my
21 name is Mel Olmstead. I have a photograph camera shop. I have
22 lived here in The Dalles since 1932. I opened my business at its
23 present location in January 1946. I am the author of this 14 years
24 of photographic compilation that has been presented to you. How-
25 ever, that is not why I am here. I am not here before you in that

1 behalf. I am actually here as a frightened, concerned, downtown
2 merchant.

3 In the past few days we have seen a splitting, or I should
4 say a further splitting of the townspeople into factions, and as
5 a merchant this polarization really scares me. To be faced with
6 the problem of having to choose sides or take an apathetic do
7 nothing, say nothing direction seems a choice that none of us
8 should have to make.

9 Now, please, if you will, this was brought full face to
10 me the day before yesterday. Al, a very close friend of 40 years,
11 came into my shop and began a conversation with, "Gee, isn't it
12 too bad that the growers of the area are trying to run manufacturing
13 out of our town."

14 Now, by golly, that is a real shock when you hear a man
15 that you have known and admired for all those years making a
16 statement that you knew to be positively not true. I have friends
17 from both sides in both areas of the community, grower and manu-
18 facturer alike, and I have never heard either group advocate the
19 removal of the other.

20 There is no doubt, there is no doubt that there is a
21 problem. So I ask Al if he would give us an opinion on an
22 analogy that I might draw. Now, my neighbor, Dick, decides to
23 paint his garage and he wants it to be barn red. He has allotted
24 a weekend to do the job so he rents a spray gun to do the work
25 quickly. Dick is well into the painting when the typical The

1 Dalles wind comes up, and the red paint is now drifting onto my
2 wife's freshly hung laundry. I run out and call with caution,
3 "Dick, Dick," and we both agree that the kind of thing to do was
4 to wait until the wind stops blowing or the wife's frillies are
5 off the line.

6 While we wait, we have a cool refreshing drink; we gossip
7 a bit; the wind subsides; the wife gathers the laundry; the painting
8 is completed, and everyone lives happily ever after.

9 However, the story could have had a much different ending.
10 If my good neighbor had ignored my plea and continued to paint
11 all sorts of complications could arise. First of all, I would
12 have to deal with a very irate spouse. She would have split the
13 neighborhood over the back yard fence. I could call the police
14 and complain of trespass. I could have had the option of appealing
15 to courts for compensation. All of these could only result in
16 the loss of neighborhood understanding and togetherness, loss of
17 money and time in the fighting to gain satisfaction, and absolutely
18 no one has won anything.

19 After asking my friend Al which of the two solutions he
20 thought best handled the problem, the compromise or the eagerness
21 to fight, his answer was, "It just don't apply."

22 Well, perhaps this is an oversimplification, but is it
23 really any different in essence? It would occur to me that this
24 rather small town should not have to choose sides. As a merchant,
25 I would regret losing customers or friends. Why is it not possible

1 to seek a middle ground of compromise that no one has to be totally
2 wrong?

3 In the 14 years that I have worked on this study it has
4 been well established that the damage to the cherries happens
5 during the blossom season, which seems to fall between the first
6 and the 15th day of April. Now if this is fact, and I think it
7 can be shown to be so, we then are talking about only 15 days,
8 not the closing of plant permanently, not the grubbing up of long
9 established orchards, not the loss of many jobs, no major sacrifice
10 in payroll that no thinking man wants to see lost to the area, but
11 curtailment of the effluent for 15 days, 15 short days.

12 Now, certainly, I do not presume to know how this could
13 be accomplished, but wouldn't this be a good place to start? Can
14 we not explore this possibility to see if a compromise could be
15 reached? The letters to the editor, the Second Street Coffee
16 Klatches and bar talk can only cause greater polarization each
17 day if allowed to continue. This would seem a fitting place to
18 quote the Constitution, something about how each man is created
19 equal and that sort of thing, but as of this hour quoting that
20 great document seems redundant, doesn't it. Instead, may I quote
21 a simple carpenter of 2,000 years ago who really said it all when
22 he taught those around him to do unto others as you would have
23 them do unto you.

24 CHAIRMAN McPHILLIPS: Thank you, Mr. Olmstead. Did
25 I gather that you think they could settle this around a couple of

1 small drinks. If they are, I am all for it, and I would like to
2 sit in.

3 MR. OLMSTEAD: Why don't we try.

4 CHAIRMAN McPHILLIPS: Thank you, sir.

5 MR. VIRGIL ALLEN: Mr. Chairman, Commissioners,
6 I am Virgil Allen representing the Wasco County Farm Bureau. The
7 Wasco County Farm Bureau whose membership represents over two
8 hundred farm families in Wasco County asks the Environmental
9 Quality Control Commission to recognize the The Dalles area as a
10 special problem area. The unusual history of fluoride problems
11 in The Dalles area dates back to the inception of the aluminum
12 plant at The Dalles. Through aerial trespass of fluorides
13 recognizable damages have been done in the past to pine trees,
14 some vegetables, hay and livestock and several stone fruits,
15 including peaches and cherries. Soft suture in the peaches due
16 to fluorides has for all practical purposes eliminated The Dalles
17 as a major peach producing area and destroyed a once thriving
18 horticultural product.

19 Economic losses to farmers by air contaminants have been
20 tremendous. The topographical area is such that the plant site
21 in the bottom of the basin with surrounding hills traps aerial
22 contaminants in the basin, which includes The Dalles and surrounding
23 farm lands. The aluminum plant uses a tremendous amount of our
24 dwindling and scarce supply of energy which is supplied by the
25 Bonneville Power Administration, a non-taxpaying government body

1 at a cost incredibly less than to private citizens. This low
2 cost of energy should create capital to invest in pollution
3 abatement equipment by the aluminum company. Some progress has
4 been made in the pollution abatement.

5 Scientists have testified previously as to the acceptable
6 limits of air contaminants needed to prevent damage to farms and
7 horticultural crops, trees and shrubs.

8 The scientific expertise is available to reduce the
9 fluorides and other air contaminant particulates to an acceptable
10 minimum in the aluminum plant so that farmers too can survive.
11 The clean sparkling area we all feel, sense and breathe and to
12 which many of us have become accustomed must not be desecrated.

13 The Wasco County Farm Bureau asks the Environmental
14 Quality Commission to designate The Dalles area as a special
15 problem area and that the aluminum plant be required to adhere
16 to the strictest application of the regulations and the fullest
17 extent of the regulations be used to protect Wasco County citizens
18 and industries from aerial trespass of fluoride and other con-
19 taminants.

20 CHAIRMAN McPHILLIPS: Thank you, Mr. Allen.

21 Mr. John J. Geer, President of Local 8141.

22 MR. JOHN J. GEER: John Geer, President of Local
23 8141. On June 21, 1973, Lee Caldwell, Virgil Baker, and Jim
24 Bunker, President of Reynolds Aluminum, and myself, had a meeting
25 with Governor Tom McCall. We discussed the Aamax proposed 1 pound

1 per ton of aluminum by the new plant. I want to state now at
2 this time it is only on paper.

3 At that time we were reassured that it was the intent of
4 the state and the government -- it was not the intent of the
5 state and the governor to shut down plants that could not reach
6 these standards so-called but to keep pressure on them to use
7 the latest technology available and to keep making gains in air
8 quality. I added something here I believe that the Fruit Growers
9 testified this morning, that there is times when we do not, and
10 a lot at other times.

11 I do not believe that anyone can dispute the fact that
12 Martin Marietta has continuously made great gains in this area
13 and are still searching for even newer technology if it can be
14 found. When it is found you can bet we will be among the first
15 to install it in our plants, if not the first.

16 I will try to summarize right there people say like the
17 man's statement about doing unto others as you do unto yourselves.
18 The citizens of this town have never looked out in the morning
19 and couldn't see our streets because of the smudge pots, and we
20 do not want to put the orchardists out of business. We want to
21 work together on this issue. We do not complain when they spray
22 at night and we try to sleep, but this is also a form of pollution.
23 We know this is also a part of living in a community where you
24 have agriculture and industry, so I rest my case. Thank you.

25 CHAIRMAN McPHILLIPS: Thank you, Mr. Geer.

1 Virgil Baker, United Steel Workers of America.

2 MR. VIRGIL BAKER: Members of the Commission, my
3 name is Virgil Baker representing the United Steel Workers of
4 America. The United Steel Workers represent approximately 400
5 employees of the Martin Marietta plant in The Dalles. It is the
6 welfare of these employees, who are also neighbors of yours, that
7 the union is trying to guard.

8 The Department of Environmental Quality of the State of
9 Oregon and the Federal Environmental Protection Agency recognize
10 the aluminum plant in The Dalles as having the best practical
11 technology for emissions control to set standards of fluoride
12 emissions in this area that no plant in the world has achieved,
13 and no technology today exists, to our knowledge, and it is a
14 very blatant attempt to close the Martin Marietta plant. To
15 establish a special problem area in The Dalles that would have
16 unattainable emission levels for any period of time would result
17 in the Martin Marietta Aluminum plant being unable to operate
18 economically. Shutting down this operation at a loss of 500 jobs
19 and a payroll of five million directly affects approximately
20 2,000 people and indirectly affects thousands more people in the
21 area, would create a very special problem economically in The
22 Dalles and in Oregon.

23 In closing, it is our position that the air around our
24 place of employment must be kept as clear as technology will allow,
25 that the closure of a plant that is attempting to do its very

1 best along these lines is unnecessary and a disastrous hardship
2 on the employees and their families. It also benefits the
3 citizens of The Dalles and Oregon. I thank you very much for
4 hearing our feelings.

5 CHAIRMAN McPHILLIPS: Thank you, Mr. Baker.

6 Mr. Norman Sootz of The Dalles Chronicle.

7 MR. NORMAN SOOTZ: My name is Norman Sootz, pub-
8 lisher of The Dalles Chronicle. I felt for a while this morning
9 that maybe we should have been included in the hearing.

10 It was alluded to by one speaker that I did not have
11 pencil and paper at the time to copy and that we covered the trial
12 in Hood River only when there were witnesses for Harvey Aluminum.

13 I offer no apologies for that coverage, but I would remind
14 that speaker and recall to his memory that the day I went down
15 there was just after a visit from him in the office.

16 If I may go back a little, at the federal trial I was
17 asked the question that said that the cherry growers could not
18 put advertising in our paper even though they had the money in
19 their hands. I bring to you now pictures, this one was May 19,
20 1969 by the cherry growers, this one by an individual cherry
21 grower. I also have copies of letters to the editor which we
22 carried to tell their story.

23 Last Monday Mr. Bailey was in the office and gave us a
24 slip of paper which said that our, or my editorial of the Saturday
25 before was in error. We carried a correction or what we thought

1 was a correction, on Tuesday, April 30th. Mr. Bailey was also
2 in the office Wednesday and said that he didn't think that would
3 cover it so we did cover it again and carried the story saying
4 that we were in error and that this was called by the commission
5 and not at the request of the attorney for the Fruit Growers, and
6 we thought that corrected it.

7 That afternoon I got a call from a cherry orchardist who
8 wanted to know if we would carry their story, and I said, "Cer-
9 tainly, get it into us," and we did not receive it. At 4:00
10 o'clock I got a call from the cherry orchardist who wanted to
11 know if he could come down and see me, to which I said certainly,
12 I would wait for him. We chatted because I hope we are friends,
13 and he said, "Would you take money for an ad," and I said, "Cer-
14 tainly but I would rather take a letter to the editor because I
15 think that you have it coming to you." And we had a letter on the
16 other side, and that letter appeared in last night's paper. So
17 when it says we are a mouthpiece or mouth organ, I just cannot
18 stand for it. I stand on our editorial that this need not be
19 made a special problem area. I base it on the fact that the story
20 that appeared in the June 30, 1973 paper, and it says harvesting
21 in this area is an extremely heavy cherry crop. It is now past
22 and will compete well, so I say still that we do not need desig-
23 nation as a special problem area.

24 CHAIRMAN McPHILLIPS: Thank you.

25 MR. SOMERS: Mr. Chairman, I am concerned about

1 the number of documents that we have marked. The photo albums
2 are Exhibit A, and the record should indicate that the rest of
3 them should be enumerated in sequence, and the other documents
4 that are periodically handed to the Commission probably should
5 have exhibit numbers attached to them so that if we could ask
6 the secretary to do it momentarily so we can get it in chrono-
7 logical sequence.

8 CHAIRMAN McPHILLIPS: Okay, we will have that
9 handled.

10 That appears to take in all of the people who have indi-
11 cated a desire to be heard, and we have a summing up by Mr.
12 Shenker and Mr. -- we have another one? Okay, sir, you are on
13 right now.

14 MR. JOHN MEREDITH: Mr. McPhillips and members of
15 the Commission, my name is John Meredith and my position is
16 Superintendent of Schools of School District No. 9.

17 I would like to address my remarks regarding impact of a
18 curtailment of the present operations of Martin Marietta on
19 District 9 schools.

20 The patrons of School District No. 9 realize they have
21 very limited technical knowledge regarding emission standards
22 proposed and the emission controls currently in existence at
23 Martin Marietta, but we will present very exact figures regarding
24 the financial impact, population trends, and the impact on staff
25 and student progress in District No. 9 schools if curtailment of

1 the present operations of Martin Marietta results from the
2 requirements proposed by the DEQ permit.

3 Of the present 471 employees of Martin Marietta, 110
4 reside in District No. 9. 85 per cent of the 110 employees have
5 students presently enrolled in District No. 9 schools. The loss
6 of parent and student population could curtail many current
7 school programs, but the area of greatest significance would be
8 the financial impact in lieu of taxes levied and paid by Martin
9 Marietta to support District No. 9 schools.

10 Currently the 1973-1974 District No. 9 total assessment
11 valuation is \$54,700,000.00. Martin Marietta's 1973-'74 assessed
12 valuation is \$31,700,000.00 or 56 per cent of the total tax
13 burden paid in District 9. Including ID reapportionment money
14 and the present district taxes, over 60 per cent of the tax base
15 for District 9 schools came from one source.

16 This type of financial loss would result in the reduction
17 of the current staff from 120 to 50 or 60. Thus our payroll would
18 be reduced by 60 or 65 per cent.

19 It becomes apparent to the patrons of School District
20 9 that the loss or curtailment of Martin Marietta's current
21 operation would have a disastrous multiplied effect on the
22 economy not only in District No. 9 but would be felt throughout
23 Wasco County and the State of Oregon.

24 We support the contention that with co-operation the
25 cherry growers and the aluminum industry can live together and

1 both prosper in a dynamic American economy.

2 In closing I would like to say both groups of students,
3 and we do have students from both areas, have had some serious
4 discussions in our classrooms. Sad to say, but again we are
5 split along party lines, and rightfully so. Both groups of
6 students will suffer severely from any curtailment in any area,
7 thus curtailing educational opportunities in this area. Thank you.

8 CHAIRMAN McPHILLIPS: Thank you, Mr. Meredith. I
9 would like to take this opportunity, as long as you are bringing
10 in the young people, to comment on the fact that in some 30 years
11 of working in this thing the first 25 years were pretty much
12 public apathy, but the last few years we have seen quite an
13 enlightened interest in our young people, and I was very pleased
14 when one of your students came up today and asked if they might
15 take over and record the proceedings today for the use of the
16 students. I think nothing but good could come out of it. Sure,
17 they are split along what we call party lines, but they might as
18 well start learning that they are going to have to make some
19 hard decisions, and I think it is good that they are starting at
20 this stage.

21 MR. SOMERS: Mr. Meredith, I have a question to
22 ask of you. Everybody realizes their need for co-operation, but
23 what specific steps would you recommend that the Commission take
24 at this time to bring about the co-operation or the results to
25 resolve the issue we have here before us today?

1 MR. MEREDITH: Resolving the issues regarding the
2 permit per se; is that right?

3 MR. SOMERS: We have two, the permit and the special
4 problem area.

5 MR. MEREDITH: Being very new to the area, which
6 is only about nine months, I cannot base any decisions on past
7 history or any knowledge I might give you on past history or what
8 has taken place. I would just like to refer to one comment that
9 Mr. Thienes did make earlier that it has or will go on record
10 whether or not it is included as a high impact area. It is, but
11 I have no solution.

12 I think one of our, hopefully I think one of the things
13 that we can do and one of the things that we are trying to do as
14 Mr. Chairman did so eloquently allude to, was that we do have an
15 opportunity with our young people, and hopefully we are attempting
16 to inform and allow those students to make unbiased decisions on
17 what is best on the way that they would like to live in their
18 generation as well as what future generations may hold. If this
19 is not the answer, then I am in the wrong business.

20 MR. SOMERS: I appreciate your comment.

21 CHAIRMAN McPHILLIPS: Is there anyone else now
22 before we summarize this. Yes, we have a hand up back there.

23 MR. ED FITZGERALD: Mr. Chairman, I am Ed Fitz-
24 gerald, a resident of this community for 38 years. I was in
25 business here in town for several years, worked for Standard Oil

1 Company, and the last 13 years in my life worked for Martin
2 Marietta, and am now retired so I am speaking as a concerned
3 citizen.

4 I think, as it has very eloquently been stated here today,
5 that the community needs both the growers and the aluminum plant,
6 and I sincerely feel they can accomplish the end which they hunt
7 without having this made a special problem area.

8 The plant has gone a long way to improve conditions, as
9 has been stated here today, and they will continue to do so if
10 given the opportunity.

11 That is what I have to say, and I think that they can.
12 We have all got to live here, have all got to make a living. I
13 have raised my family here in The Dalles. I have got boys working
14 here in town. They have got families to raise, and they are
15 dependent on the work that is available in this community to do
16 so.

17 I think without making it a special deal that they are
18 asking for that they can still accomplish the same end without
19 being tied down to too close a tolerance.

20 CHAIRMAN McPHILLIPS: Thank you, sir. Is there
21 anyone else now who has not been heard from? Okay, give us your
22 name, please.

23 MR. PAT RICE: Pat Rice, high school student.
24 Naturally I am real nervous.

25 As a student, I think it is about time that something,

1 well, I know something has been done, the cherry growers have
 2 been doing something for quite some time, but I hope that they
 3 get everything they want done this time because time and time
 4 again I have read of big operations, big companies coming in,
 5 polluting, and just taking over and polluting places, and the
 6 little guy is always lost. I am for the little guy, and I hope
 7 the cherry growers benefit in every way they can, and if Martin
 8 Marietta threatens to close down, tough, let them.

9 CHAIRMAN McPHILLIPS: I think that is a good note
 10 for you, Mr. Shenker, to summarize.

11 MR. SHENKER: I would like to meet that young man.
 12 I wish I had the fighting spirit he has, I think that we need.

13 The fact is that the Environmental Quality Commission
 14 does not have to fight us. All it has to do is stand up for the
 15 laws and rules and regulations it has already adopted. Dr.
 16 Skirvin had a letter read by the, by the Mayor in the beginning
 17 of these proceedings. We have already testimony as to the number
 18 of lawsuits against the company, and the issues that they see that
 19 a number of people addressed themselves to are just not the
 20 issues. I think they are just not interested.

21 I think Jack Thienes put it in nutshell when he spoke to
 22 the issue that they have here. Whether the Commission chooses to
 23 call this a special problem area or not it is a special problem
 24 area.

25 There is a statute on the books, regulation, if you will.

1 The regulation speaks to special problem areas that was enacted
2 with respect to aluminum plants and their fluoride operations.

3 I put to you the question where else in the state is there
4 a substantial exposure of sensitive fruit crops representing
5 substantial economics in the presence or in the vicinity of an
6 aluminum plant.

7 Where else in the state is there that kind of natural
8 climactic conditions combined with meteorology and topography in
9 the presence of an aluminum plant? Where else in the state is
10 there an aluminum plant which has, according to the testimony,
11 the technological capacity to do what we ask and doesn't yet?

12 Now, if the statute as enacted is to mean anything, then
13 this here is the special problem area, if you recognize that and
14 make that finding that it is a special problem area.

15 I am really not concerned and I don't think you should be
16 concerned and I don't think in fact the Commission is equipped to
17 be concerned with the magic numbers that are applied. It is true
18 that we ask for magic numbers. If you read the statute regulations
19 carefully from March 22, it is the Department that has a respon-
20 sibility to come up with magic numbers in effect after this
21 Commission finds there is a special problem area. The kind of
22 questions Mr. Somers put and Dr. Crothers put and Mrs. Phinney
23 put earlier, those are questions, it seems to me, that require
24 a great deal of evidence taking as in courtrooms that has gone on
25 over the last 14 years where scientists can bring in all their

1 work in the laboratory and depositions can be taken for days and
2 days and days, and you can find out exactly what parts per billion
3 is injuring what quantity of fruit under experimental conditions.
4 That is not really what is being asked of this commission. This
5 commission is being asked to designate a special problem area.

6 You may ask why did we in the petition ask for 1.0 pounds
7 per ton of aluminum produced and .6 micrograms per cubic meter.
8 It was precisely for the reasons to which Mr. Bailey addressed
9 himself. It is not the position of the League that it asks for
10 an ironclad guaranty for all kinds of possible damages in the
11 future. It asks only for the maximum protection which you can
12 afford practically and reasonably today. The 1.0 figure was
13 chosen because the company's operating records shows it can meet
14 the 1.0 pounds per ton of aluminum produced. They have had
15 months on average, average, mind you, for an entire month where
16 they are considerably less than 1.0 pounds.

17 Your own staff department memorandum has indicated that
18 their measurements show that the company in all but three cases
19 out of hundreds and hundreds of samples meets a .6 microgram per
20 cubic meter measurement. Now, I believe it was the question that
21 Dr. Crothers put at the March 22nd meeting that the company is
22 prepared to hit the kind of levels that we are talking about in
23 the ambient air, if the company has the capacity to restrict its
24 limitations at the level that we are talking about, then why are
25 we talking about those things? Why don't we just let the company

1 do what it is prepared to do?

2 I suppose that if you were to answer that question in
3 favor of just letting the company do what it is prepared to do
4 that we have all been wasting a lot of time, and this Commission
5 should be dispensed with and there is no need for regulations,
6 there is no need for imposing requirements on companies. But the
7 history of what this company has done when it has been required
8 to do it and not before is the same kind of history that is
9 referred to, for example, in that relatively new book brought out
10 by Professor William Rogers of Washington University entitled
11 Corporate Country. I commend to you Chapter 7 of that book. It
12 may be an interesting fact that is recognized in Chapter 7 he
13 calls for aluminum alloys and he describes the history of
14 aluminum plant regulation primarily in the State of Oregon because
15 of the history of what has been going on here for all of those
16 years. I think the position of the company in effect is, "You
17 should ignore past history because this used to be a special
18 problem area and it isn't anymore. We have paid most of the
19 damages. We have restricted our emissions to some extent, and
20 therefore you should not consider this a special problem area
21 anymore." That raises the issue on the same level that Dr.
22 Crothers and Mr. Somers were addressing themselves to earlier.
23 That really asks the question: How special is this special
24 problem area? And that is not the issue in the regulations. It
25 is for other determiners and other determinants and other days to

1 find out how intense the problem is.

2 To deny that this is a special problem area is to deny
3 the work done by Oregon State University, to deny the work now
4 being done by the University, to deny all the work that the
5 Commission has had in this area. This is a special problem area.

6 I therefore urge this Commission to make that finding,
7 then to instruct the Department of Environmental Quality to set
8 such levels of restricted emissions during the vulnerable growing
9 season as will require the Company to do everything that it can
10 right now. We ask for nothing more than that. We ask that the
11 Commission exercise its function simply in calling this a special
12 problem area.

13 And I am sorry to say that this is not new. Mr. McPhillips,
14 your point obviously is extremely well taken this morning when
15 you asked for mercy in that the Commission was not able to act
16 immediately. Of course, it can't act immediately, but immediacy
17 is a relative term. Immediacy between February 22, 1974 when you
18 had the petition received in your office and today is one thing
19 now, but immediacy between 1961 and 1974 is something else.

20 This is the same special problem area that it always has
21 been. In fact, people knew that it was going to be before the
22 aluminum company ever came here. It is not for this Commission
23 to determine whether that problem is going to disappear. It is
24 for this Commission to recognize the problem that exists and then
25 direct the Department to adopt those most restrictive limitations

1 within the vulnerable period to do the job with maximum protec-
2 tion without endangering anybody's job or closing anybody's plant
3 unless for their own economic reasons they make plant closure a
4 fact. The record of the earnings of the company over the first
5 quarter of 1974 were published in this week's newspaper only the
6 day before yesterday, fifteen hundred per cent increase in this
7 quarter over this quarter in 1973. The economics of control are
8 matters to which Mr. Schulein addressed himself, but they are not
9 the matters which are before us today because this Commission
10 adopted regulations in November that assumed economics of control
11 as well.

12 I think that if the Commission can, as it has, require
13 orchardists to stop their smudging of the pots to the extent that
14 they must no longer pollute, that the Commission similarly can
15 require aluminum companies to do their jobs within the localized
16 phenomena of the areas in which they are found. We have one now
17 that is in this special problem area. You can look at petitioner's
18 Exhibit A in this hearing today, look in vain for the smudge pot
19 smoke coming in the orchards. Smoke coming out of the aluminum
20 plant, as you know very well, is not the smoke that does damage.
21 The invisible hydrogen fluoride does the damage. The extent of
22 damage is not for you to determine. It is for other courts,
23 other bodies, other organizations to perhaps determine and work
24 out among themselves. To recognize the smoke is to recognize the
25 problem, and to recognize the presence of fluoride and the

1 presence of sensitive species of vegetation is to recognize the
2 problem; therefore, we ask that you recognize that fact and
3 designate this by your finding of a special problem area. Thank
4 you.

5 CHAIRMAN McPHILLIPS: Are there any questions?

6 DR. CROTHERS: Yes. Mr. Shenker, it seems to me
7 you have changed your position because your original petition here
8 asked specifically that the Commission direct the Department, that
9 the Department require more restrictive limitations requested in
10 this petition, and you specifically have limitations. Now you
11 are saying you just want us to declare a special area with no
12 figures at all, and those are to be left up to the Department
13 staff.

14 MR. SHENKER: Well, we live and learn, Dr. Crothers.
15 Mr. Underwood educated me somewhat at the March 22nd meeting. I
16 am not convinced, I may say, that it is only the Department that
17 may speak to the issue of what more restrictive emission limitations
18 are. I know that only the Commission can adopt a finding. I
19 would still favor that the Commission not only make a finding that
20 this is a special problem area but also direct what cannot require
21 any more expertise than is already in the record prior to November
22 of 1973 that the company be required to do what it has demonstrated
23 that it can do. I assume that the Department will exercise its
24 own discretion as to whether it would adopt the recommendations
25 of the Commission on what those more restrictive limitations would

1 be. I still ask this Commission to direct the Department to
 2 adopt specific emission requirements as we requested in our
 3 petition in February. But it is true that the only pristine
 4 function that this Commission has is to make the finding. The
 5 Department cannot do that. The Department can enjoin you to
 6 determine what the more restrictive emission limitation is. To
 7 the extent that is a change, I quite concede it.

8 MR. SOMERS: You are petitioning then to amend
 9 your petition?

10 MR. SHENKER: I don't know, Ron, this is too much
 11 for me. If you consider it an amendment on the basis of what I
 12 said to Dr. Crothers, you may so consider it.

13 CHAIRMAN McPHILLIPS: Any other questions?

14 MR. SOMERS: One other one. How did the limits
 15 on page 4 of your petition of .6 microgram per cubic meter come
 16 up. I haven't heard any testimony.

17 MR. SHENKER: There has been testimony on it at
 18 the previous hearing, testimony before the joint Commission, and
 19 in the Department's memorandum for the March 1974 meeting, the
 20 Department staff indicates its measurements show .6 microgram
 21 per cubic meter is the level at which the Company operates when
 22 measured on a 12 hour basis. The Department memorandum of the
 23 staff says it is not necessary to take six hour measurements.
 24 Mr. Schulein's testimony today/^{is,} as it was in June last year, with
 25 instrumentation now available, six hour measurements can be taken.

1 We have years of records, of the actual records out of the or-
2 chards, and those have been by the experiment station, by the
3 arbitration panel, by the university, and by your own staff.

4 All that we are asking for is that the level at which the
5 Company operated, been able to operate, be the level of restricted
6 limitation for a special problem area.

7 Let me say very candidly, I said it before somewhat
8 obliquely perhaps, we are not asking for an ironclad guaranty of
9 damages. This is the question that you, Mr. McPhillips, asked
10 Dr. Facticeau, the chief researcher, when he appeared at the June
11 meeting in Portland. You said, "Dr. Facticeau, what is the level
12 of emissions from the plant source at which there will be what
13 level of concentration in the ambient air and what damage in the
14 orchard?" That was your question. His answer was, "I don't know,
15 nobody knows, and nobody can know because of the peculiarities
16 of the meteorology here." Therefore, I don't know if, when you
17 set a level of .6 microgram per cubic meter there will still be
18 damage. There may be. I don't know whether when you set a level
19 of 1.0 pounds per ton of aluminum fluoride ion restriction there
20 will still be pollution, and if we really wanted to be unfair I
21 suppose we should say shut the plant down during the blossom
22 season altogether. Then we would not have damage because there is
23 no emission coming out. But we are not asking for that. We are
24 asking that the actual measured levels be the imposed levels. Now
25 we are not asking for the highest actually measured levels but for

1 the lower actually measured levels at which the company designated
2 it could operate at. So we say that in order for the company to
3 show its good faith during this period of time while it is
4 working its way down to the 1.0 average anyway, which is required
5 by you under your regulations eventually, during that time let
6 them so operate their pots that they can reduce their emissions.

7 Mr. Schulein addressed himself to that. They have those
8 functions. They can operate their present equipment in such a
9 way as to reduce emissions. It may take more man hours. It may
10 take more people on the pots during the particular pot time during
11 the vulnerable season. They may have to change the bath ratios
12 of the pots, may have to change the temperature at which they
13 operate some cells, may have to change some productive capacity
14 during some part of the day. These are all variables which they
15 use and change anyway based on economic reasons in the production
16 of aluminum.

17 We are asking that they operate at that level where they
18 have the capability to operate for that period of time.

19 MR. SOMERS: If they violated the levels set by
20 the Commission, there seems to be a deadline of 1977, but if
21 these limitations were immediately put into effect for the 80
22 days that you requested in your petition would that not impose
23 strict liability on the plant, or do they already have strict
24 liability. That seems to be your position.

25 MR. SHENKER: Yes, I think they already have strict

1 liability within the Oregon contemplation under the Martin versus
2 Reynolds case, an announced trespass law in 1960. What they are
3 afraid of is a sort of litmus paper test that if they once had a
4 technical violation and you have set a level where anybody after
5 that can walk into court and say, "Ah-hah, they have a technical
6 violation, give us lots of damages." But you still have to prove
7 the amount of your damages. The fact of trespass is the easiest
8 part to prove. If you have smoke coming into your orchard you
9 have trespass, those pictures show that you have a trespass.
10 Whether they violate your regulations or not does not impose
11 strict liability.

12 MR. SOMERS: I see, but the problem is when you
13 have smoke you do not always have fluorine; is that correct?

14 MR. SHENKER: Right.

15 MR. SOMERS: So the fact that the smoke is in the
16 orchard does not mean that there is some fluorides in the orchard.

17 MR. SHENKER: Right, but it is not going to help
18 us nor orchardist X for you to determine that there is a violation
19 two and a half miles away from orchardist X a half a mile from
20 the company fence. He has to show that he has fluorides in his
21 cherry orchard, which is the traditional kind of proof we have
22 had to put on over the last 11 or 12 years of actual seeing of
23 symptoms, decrease in crops, the explanation for the causation,
24 the experts' testimony of what the levels are, what the proxies
25 are. There are really two separate considerations.

1 If there is a violation here that is your problem to show
2 that the company is not in compliance with the regulations which
3 you think ought to be in effect. It doesn't really help damage
4 cases just as the company has asserted for many years that they
5 really should not be sued at all because the DEQ fills the field,
6 you have all the jurisdiction necessary to worry about air
7 pollution and that people should not sue the company. They still
8 assert it as affirmative defenses in all cases we have had
9 defended. Fortunately they do not prevail on that argument, but
10 you know what we would have had over that period of time if it
11 were true, those years and years of damages without any redress,
12 without any compensation.

13 Well, the courts rejected that argument. They said, "We
14 have got our job to do. We have got to allow an injunction and
15 then a consent decree." And I think the DEQ has a job to do that
16 is separate from the judicial function of assessing damages for
17 past harm.

18 CHAIRMAN McPHILLIPS: Any other questions?

19 Mr. Doan, would you like to take the floor?

20 MR. DOAN: Mr. Ragen will sum up our position on
21 the petition, and I would like to summarize.

22 CHAIRMAN McPHILLIPS: Mr. Ragen, you will never
23 take the place of Max Elliott.

24 MR. DOUGLAS M. RAGEN: I never met Mr. Max Elliott.

25 I would like to clear the smoke screen, if I may, because

1 we are going to try to address you as you have requested with
 2 some facts, and I find myself a little bit uncomfortable as I
 3 start out here because I do have some prepared remarks, and they
 4 were prepared in light of what I thought was Mr. Shenker's position
 5 as set forth in their original petition.

6 As I characterize it today, he has left it to Mr. Somers
 7 to characterize it, it appears to be that what he wants today is
 8 merely that you label this area a special problem area. I am
 9 going to attempt to respond to the petition rather than to his
 10 remarks today.

11 For the record, I am Douglas Ragen. I am a partner in
 12 the firm of Miller, Anderson, Nash, Yerke & Wiener, a Portland
 13 law firm. I represent Martin Marietta Aluminum. When I complete
 14 my remarks I would like to have the opportunity for Mr. Doan to
 15 make a few concluding remarks.

16 I am here to present the Company's objections to the
 17 petition. The petition seeks extraordinary restrictions applicable
 18 to The Dalles. It is our position that the petition should be
 19 rejected because there has been no demonstration of a need for
 20 such extraordinary regulations because, as was shown to you in
 21 1973 and as shown in the statement that we have presented to you,
 22 such extraordinary restrictions are neither practicable nor
 23 reasonably obtainable in light of presently available technology.

24 Under these circumstances, candor requires that we
 25 advise you that any action by you designating The Dalles a special

1 problem area is completely unacceptable. Unless the Commission
2 rejects the petition, Martin Marietta will have no choice but to
3 challenge such action in court.

4 I would like to present to you in detail the reasons which
5 dictate why you should reject the petition. We submit that to
6 take the drastic action called for by the petition requires that
7 a very clear case be shown that such action is needed. There
8 simply has been no demonstration made for any need for designating
9 The Dalles a special problem area. The need for such regulation
10 should be evaluated by you on the basis of existing conditions,
11 not on prior operating history of the plant.

12 The management of Martin Marietta take pride in recording
13 there were at one time approximately 50 growers who had formally
14 filed complaints against the Company. There remain only six
15 pending cases in Wasco County. These cases are now set for
16 trial. In large part these remaining cases involve damage claims
17 for the early years of the plant's operation.

18 Careful consideration was given by the Department and
19 the Commission to treat each of the existing plants separately
20 in the regulatory scheme proposed in 1973. The approach of
21 separate treatment was rejected in 1973. In lieu of that the
22 existing regulations were adopted following recommendation of
23 Director Diarmuid O'Scannlain in which he stated based upon
24 Department staff experience, public testimony, and information
25 received, the proposed regulations have been revised to allow

fluctuations in monthly sampling and to provide a reasonable time for existing plants to achieve compliance of the proposed regulations, and I emphasize, and yet insure protection from adverse effects on plant and animal life.

The Department has the responsibility of furnishing you technical information. Your Department has not made a recommendation that The Dalles be treated as a special problem area, despite the fact that it has as a part of its normal duties aimed at full supervision of the emission control program in The Dalles.

In evaluating whether there is a need for a special problem area designation you must rely on facts, not on a lawyer's efforts to generate publicity for his clients' cases in a small community. Lawyers drafting complaints do not establish a need for a special problem area. Litigation is not a substitute for scientific facts. Making The Dalles live under the label of a special problem area has not been shown to serve any fruitful need.

As we did in 1973, we are again prepared to report to you on what the existing facts are. Upon conclusion of this hearing we believe you will be convinced the aluminum and orchard industries have been for some time, and will be in the future, compatible with each other in The Dalles.

We call your attention to recent statements of Jack Thienes, and I include those which he made today. I think it is important that you know that Mr. Thienes is a former member of the

1 Wasco County Fruit and Produce League. He is the County Agent in
2 The Dalles. He works closely with the growers. He has acknow-
3 ledged that he considers it to be a part of his job to help the
4 growers fight the aluminum company in The Dalles. In his depo-
5 sition taken September 27, 1973, Mr. Thienes stated with respect
6 to the orchard of Wilson Myer when asked in 1973, "Did you note
7 any symptoms in the orchards, either his apricot or his cherry
8 orchards, which you attributed as being caused by emissions from
9 the aluminum plant?

10 A No.

11 Q Did you see in 1972 anything in the Wilson Myer orchards
12 which you considered to be caused by emissions from
13 the aluminum plant?

14 A No.

15 Q Do you have an opinion as to whether or not there was
16 an adverse effect on the sweet cherry production of
17 Wilson Myer in 1973 caused by an aluminum plant? Do
18 you have an opinion?

19 A Yes, I would have to say I really would not expect
20 any effect in 1973."

21 That was Mr. Thienes' testimony when under oath.

22 It is interesting to note, I think, that some of the views
23 of Mr. Thienes and the growers are based upon reports of studies
24 conducted by the Mid-Columbia Experiment Station. That work is
25 presently funded by the League. In 1968 at the request of the

1 League the federal government entered into a contract with Oregon
2 State University to investigate, and again I emphasize, the
3 economic effects of the emissions from the aluminum plant on the
4 fruit industry in The Dalles. Over a hundred thousand dollars
5 was spent on this project. To date there is not one report
6 developed from all those studies on the cherry crop which con-
7 cludes that there is an adverse economic effect.

8 Dr. Timothy Facteau has performed most of the fluoride
9 studies conducted by the Mid-Columbia Experiment Station on which
10 the growers rely for their opinions. Dr. Facteau took on this
11 assignment as his first professional task after obtaining his
12 degree in Florida and with no prior experience in research on the
13 effects of pollutants on plant life. His opinions are dependent
14 upon statistical analyses of data collected. These statistical
15 analyses have been provided to Dr. Facteau by Dr. Kenneth Rowe.
16 By a miraculous coincidence Dr. Rowe is a friend of the attorney
17 for the growers, Arden Shenker, and served as a paid consultant
18 to the growers. Dr. Facteau did not report that he has an opinion
19 for the 1973 crop. Dr. Facteau has not stated that the impact
20 on prior crop years was economically significant. Furthermore,
21 Dr. Facteau has never stated that emissions must average below
22 .6 milligrams fluoride gas per cubic meter in order to ensure
23 protection of the crop. In this respect I disagree with Mr.
24 Shenker who told you that there was testimony in the record that
25 such a standard was needed. I don't believe that is true.

1 Martin Marietta Aluminum has engaged scientists to evalu-
2 ate the question of whether emissions from the plant have caused
3 damage to the orchards and to evaluate the experiments conducted
4 by Dr. Facteau and analyzed by Dr. Rowe. I present a brief
5 summary of the qualifications of these scientists because I think
6 it is important for you to evaluate who is it that is involved in
7 this dispute amongst the experts.

8 The first, Dr. O. C. Compton. He is a horticulturist.
9 He is the man from Oregon State University that commenced evalu-
10 ating The Dalles area in the early fifties, and did so through
11 1967.

12 Dr. Delbert McCune is a plant physiologist at Boyce-
13 Thompson Institute for Plant Research. Boyce-Thompson Institute
14 is the institute which Oregon State University approached to come
15 to its campus this last year. He received his undergraduate
16 education at Cal-Tech and a doctorate from Yale University. His
17 research has involved experimental exposure of plants to hydrogen
18 fluoride under controlled conditions.

19 Dr. Melvin W. Carter is a statistician with extensive
20 experience in biological analysis. Since 1961 he has been on the
21 faculty at Brigham Young University teaching in Consultative
22 Statistics.

23 Dr. Michael Treshow is Professor of Botany at the Uni-
24 versity of Utah. He has done extensive work sponsored by Public
25 Health grants on the effects of fluorides. His publications in-

1 clude a book entitled Whatever Happened to Clean Air.

2 Dr. Merrill Pack, plant physiologist at Washington State
3 University since 1963. He has conducted several research projects
4 on the effects of fluorides on vegetation.

5 Dr. David MacLean, the plant physiologist at Boyce-
6 Thompson Institute. He, too, has been involved in environmental
7 ecology programs.

8 Dr. Earl Blodgett has a degree in Plant Pathology, had
9 several assignments with the United Nations. Most of his career
10 has been with the State Department of Agriculture at Prosser,
11 Washington.

12 Mr. William Luce has a Bachelor of Science degree in
13 Pomology and has spent his lifetime in agriculture extension
14 service work.

15 I submit that these men represent the best expertise
16 available anywhere in the world on whether emissions from the
17 aluminum plant are causing problems in The Dalles. They have
18 searched the various orchards for evidence of fluoride caused
19 damage and have found none. These scientists compared the con-
20 centrations of fluorides and doses of fluorides used in laboratory
21 experiments and controlled field experiments with those measured
22 in the field. Based upon their experience, their studies and
23 observations, each has concluded that the levels of fluoride in
24 the orchards are low enough so that there is no damage in the
25 cherry orchards.

1 The dispute between the scientists I have just described
2 and Dr. Facteau centers on whether or not there is a level of
3 exposure below which no damage is caused.

4 Mr. Somers asked this question of Mr. Shenker: "Does
5 anyone know what the answer to this is?" The position of the
6 Martin Marietta scientists that I have referred to here, those
7 men are of the view, considered view, that the level now prevailing
8 in The Dalles are certainly in the safe range. The laboratory
9 and field experiments of Dr. Facteau involved quantities of
10 hydrogen fluoride in concentrations and doses which are simply
11 not comparable to those measured in the ambient air in recent
12 years. Only a very few samples measured as high as the lowest
13 treatments in Dr. Facteau's controlled experiments.

14 The record of measured fluorides in recent years in The
15 Dalles area shows that these levels are well below the concen-
16 trations involving any risk of damage to cherries. The outstanding
17 emission control program of Martin Marietta has been reflected in
18 the levels of fluoride measured in the ambient air and the foliage
19 in The Dalles area. Of 2,655 samples taken in 1972 and 1973 --
20 incidentally some of those samples were taken by the aluminum
21 company, some of those samples were taken by, I believe, Oregon
22 State University Mid-Columbia Experiment Station, at the same
23 four stations which the company will be required to contract under
24 the proposed permit 97.3 per cent were below one-half micrograms
25 gaseous fluoride per cubic meter. These stations are located in

1 areas that reflect the highest exposure from the plant. They are
2 the stations designated by the Department in the permit. These
3 levels are at the limit of detection. They are very very low
4 levels, and the Department of course has those records.

5 The Mid-Columbia Experiment Station has measured the
6 fluoride content of foliage in The Dalles area. It has an un-
7 published paper which reports observations in The Dalles area.
8 That paper states that the leaf fluoride levels in The Dalles
9 remained at a fairly constant level during the years 1968 through
10 1972. The range and average have remained fairly constant since
11 1966 and -- I think this is a key point -- are similar to pre-
12 aluminum plant levels. What they are saying is that the levels
13 measured since 1966 are approaching the normal background levels
14 measured in the time frame prior to the commencement of the
15 plant's operation. We submit that the remarkably low foliage
16 levels confirm the plant's emissions control program is more than
17 adequate to protect The Dalles area.

18 Furthermore, there appears to be no significant relation-
19 ship between fluctuation of measured emissions at the plant site
20 and fluctuations in air levels two or three miles away during the
21 same time period. In part this is because the hydrogen fluoride
22 levels are so low they are barely at the detectable levels.

23 In a 1973 background report the staff concurred as to
24 this lack of relationship. Factors such as wind direction,
25 velocity as well as the above mentioned natural background, analy-

1 tical procedure limitations over which we have no control make
2 ambient air levels an unsatisfactory and impractical control
3 measure under the plant initial level limits required by the
4 recently adopted regulations.

5 Obviously, the record in these proceedings and in the
6 recent trial reflect a conflict of expert testimony on the
7 effects of hydrogen fluoride on sweet cherries. Martin Marietta
8 Aluminum has done everything it can to attempt to resolve this
9 conflict. It has initiated meetings with the representatives of
10 Oregon State University who are involved with fluoride research.
11 The first meeting was held in May 1973. Because of pressure from
12 the growers, Dr. Facteau, Dr. Rowe, and other representatives of
13 Oregon State University were unwilling to discuss the scientific
14 issues openly and frankly. After considerable effort and per-
15 sistence, a second meeting was held February 7, 1974. Fred
16 Skirvin of the Department attended that second meeting.

17 Now, prior to this meeting where these scientists who
18 hold these conflicting views got together and at that meeting
19 Dr. Facteau and Dr. Rowe were furnished with the comments and
20 criticisms of their experiments and analyses by Dr. Carter, Dr.
21 McCune, Dr. Compton, Dr. Pack, and incidentally we have learned
22 from some of their own colleagues. Since February 1974, Dr. Rowe
23 has reported that he has done no further work. Dr. Facteau has
24 recently reported that he is performing again the experiments on
25 sweet cherries which he performed in 1970 and 1971, and which have

1 been criticized by these scientists. I think the question was
2 asked when were these studies being conducted. They are being
3 conducted again the second time at this time.

4 Martin Marietta Aluminum has informed the administrators
5 directing the Mid-Columbia Experiment Station research of the
6 comments and criticisms of the station's fluoride research. At
7 the request of Martin Marietta Aluminum and again after sub-
8 stantial delays, Oregon State University has agreed to join in
9 funding the hiring of an independent statistician to examine the
10 procedures and research findings.

11 Dr. Jerry Warren, director of academic computing at the
12 University of New Hampshire, has agreed to undertake this task
13 and is expected to commence his work in June of this year.

14 Martin Marietta initiated these joint meeting swith the
15 scientists, and Martin Marietta initiated obtaining an outside
16 statistician to review the findings of Dr. Rowe and of the
17 scientists engaged by Martin Marietta.

18 Now, you may wonder why it has taken us so long to
19 establish that the interpretations of Dr. Facticeau and Dr. Rowe
20 are invalid. You should be aware that it has been the policy of
21 Oregon State University to refuse to allow us to openly discuss
22 with them the findings that Dr. Rowe and Dr. Facticeau have made
23 except by depositions. We have been required to go outside the
24 state to obtain expert assistance. We have confronted Dr. Facticeau
25 and Dr. Rowe on several occasions with criticisms, only to find

1 that they shift to a different opinion.

2 We mention our experience with representatives of Oregon
3 State University because we want to assure you that it is not
4 Martin Marietta Aluminum which has caused the delay in resolving
5 the differences of opinion between the experts who have analyzed
6 this question.

7 I might also add that I think that your Department can
8 support that Martin Marietta Aluminum has co-operated with the
9 Department in all respects in furnishing data and that that co-
10 operation has been going on for a long time.

11 I would like now to make a few comments concerning some
12 of the statements that were made earlier today first by Walter
13 Ericksen. Mr. Ericksen is a grower who has been personally,
14 perhaps emotionally, involved in this confrontation with the
15 issue in The Dalles for a number of years. He gave you in a some-
16 what dramatic way photographs of the period from April 3 through
17 April 16. I would point out to you that scientists tell us that
18 the compound we ought to be concerned about is hydrogen fluoride.
19 Hydrogen fluoride is a gas, it is not visible, and it does not
20 show up in those pictures. Now, those pictures are taken, they
21 show clouds, and I submit to you that those of you who have been
22 in this area before the aluminum plant was built here recognize
23 that in the spring time you are going to see fog in the Columbia
24 valley, but let me just point out to you -- and this is so critical
25 -- let me point out to you what the ambient air data was. Your

1 staff has it, and I'm not going to go through it day by day and
2 in detail, but they have been measuring during this period of
3 April 3 to April 16 what the hydrogen fluoride content of the
4 air is out in the orchards at four different stations, twice a
5 day each station, 12 hour samples. If you examine that data, you
6 are going to find, I believe, the highest measurement was, I
7 believe, .28 of a microgram during that period, where Mr.
8 Ericksen is telling you that things are as bad as they have been
9 in the last 14 years.

10 The day he referred to was April 14th. Station 19,
11 which is four miles southeast of the plant, on that day registered
12 0.1. Station 26 which is one and three-quarters miles away in
13 a south-southwest direction and is in the Martin Marietta orchard,
14 registered .04 micrograms on both time periods.

15 Station 30, two miles from the plant, the measurements
16 were below detection. This is the date which Mr. Ericksen
17 referred to as having the worst inversion he has seen in 14 years.

18 Mr. Ericksen talked to you about tonnage. We will be glad
19 to talk to you about tonnage. His memory fails him. He testified
20 last fall that prior to the aluminum plant going into operation
21 he had an orchard that produced considerably less than one ton
22 to the acre. We would give you some information about tonnage. We
23 have an orchard, 1962 is the first year the company had it, and
24 it produced 19 tons of cherries that year. In 1974 it produced
25 120 tons.

1 If you want to talk about yield per acre, I think that is
2 the common denominator, we brought this type of information to
3 your attention in our presentation to you July 26, 1973. I don't
4 want to be overly redundant, but a point has been made about it
5 here. In that report we give you the Curtis Mumford economic
6 analysis conducted in co-operation with the growers as a part of
7 this hundred thousand dollar plus study. Page 3 of that report
8 states -- what this agricultural economist did was to take the
9 production figures from various orchardists as furnished to him
10 by Mr. Bailey and other representatives of the League and compare
11 the production during that time frame 1951 through 1958 and the
12 production figures after that period 1959 through 1967. His
13 conclusion was that the 1959-1967 overall average percentages
14 yields on the sector study was 19 per cent higher than in the
15 1951-1958 period.

16 The comment has been made here, "Well, how can one tell
17 how much of a loss of production is attributable to the climate,
18 to changes in irrigation, that sort of thing," and this study
19 points out that those factors are prevalent and make it virtually
20 impossible to draw any conclusions. The point is no one has
21 drawn a conclusion on any scientific basis that there is an
22 economic impact from emissions from the fluoride industry and
23 particularly in recent years -- I should have said the cherry
24 industry.

25 Mr. Erickson talked about blossoms. He forgets that it

1 is normal to see blossoms brown. We have seen this in the
2 Willamette Valley and have seen it in other parts of the state.
3 This is a normal aspect of the cherry blossoms. Wind causes
4 blossom browning. He has dramatically brought to you here some
5 branches which he cut somewhere and tried to tell you that this
6 is something peculiar about this.

(?)

7 MR. SOMERS: Would you call that senescence?

8 MR. RAGEN: Yes. Match heads are conditions to
9 which many growers have testified that they have been there long
10 before the plant.

11 I would like to comment on the historical comments by
12 Mr. Bailey. Most of them were historical. We think that your
13 focus ought to be on the present. He discussed arbitration and
14 awards. He did not indicate to you that the members of the Wasco
15 County Fruit and Produce League who were involved in that arbi-
16 tration agreement terminated it. He did not discuss with you
17 that the arbitrators came up with a standard which they thought
18 was appropriate, 3.7 micrograms per cubic meter as compared to
19 the .6 micrograms per cubic meter for a 12 hour period which you
20 were discussing.

21 There is one other disturbing fact, disturbing to me at
22 least. Recently we took the deposition of one of the directors
23 of the Wasco County Fruit and Produce League. It was at a time
24 considerably after the filing of the petition, but that director
25 was not aware of the petition.

1 Now, we believe that the lack of need for classifying
2 The Dalles as a special problem area is best known by the recent
3 sweet cherry production records. In 1965 the irrigation district
4 in The Dalles provided irrigation to a number of farms which
5 previously had inadequate or no irrigation. Prior to the
6 installation of the irrigation, ten thousand tons of cherries was
7 considered a good sweet cherry crop in this area. Since 1965
8 Jack Thienes and leaders among the growers in the area predicted
9 that the harvest would double in ten years. In 1973, eight years
10 later, despite damage from the 1972-73 winter kill and a serious
11 infestation of San Jose Scale, Wasco County production exceeded
12 twenty thousand tons. This record crop was achieved two years
13 sooner than predicted and followed previous record setting crops
14 in 1966, 1969, and 1970.

15 In summary, we recognize that a few growers continue to
16 make complaints. We also recognize that no relationship has been
17 shown between the proposed findings of a special problem area and
18 elimination of complaints by the growers. By their petition the
19 attorneys for the growers are asking you to influence the out-
20 come of our litigation with the growers. We urge you to deny
21 their petition. The fact that the growers complained may be a
22 sufficient reason for you to conduct these hearings, but the
23 complaints and the petition should not be used to sidestep the
24 failure of anyone to demonstrate that there is presently a need
25 for designating The Dalles as a special problem area. There are

1 simply no facts in the record before you to justify such a
2 determination.

3 I have now given you our views on the facts as we see
4 them with respect to the need for designating this area a special
5 problem area. Additional restrictions are obviously much
6 stricter than numerical limitations in the existing regulations.
7 By that I am talking about the .6 standard and the 1 pound
8 standard. Nothing has occurred since the adoption of the existing
9 regulations in November 1973 which allows imposition of stricter
10 standards. At four separate hearings in 1973 the Commission
11 thoroughly evaluated alternative regulatory schemes with the
12 aluminum industry. The Commission received technical reports on
13 the problem of testing the proposed modifications in operations
14 and in comparison of the performance of Reynolds Metals and
15 Martin Marietta with other reduction plants. The Department
16 furnished the Commission with several reports on the various
17 aspects of alternative regulations. That was all done in 1973.
18 The Commission adopted the regulations for the aluminum industry
19 only after completion of this intensive fact finding effort.

20 Statutory regulatory guidelines continue to limit your
21 authority to adopt standards. The standards, whatever you impose,
22 must be practicable and reasonably attainable in light of the
23 presently available technology.

24 In the discussion which follows we update previously
25 furnished data on the technical aspects of emission controls. You

1 will see that Martin Marietta Aluminum continues to have one of
2 the best emission control programs in the world. There has been
3 no significant change in any of the facts since the adoption of
4 the regulations in November 1973.

5 For example, it was suggested in 1973 Martin Marietta
6 Aluminum might adopt a dry scrubbing system. As a part of its
7 continued effort to keep abreast of the technology, the company
8 has been investigating the possibility of a dry scrubber for its
9 primary fume control system at The Dalles. In the course of this
10 investigation over the past 18 months preliminary engineering
11 and budget estimates have been received from vendors on the con-
12 tinent and from Europe. Vertical stud Soderberg plants equipped
13 with various types of dry scrubbers have been visited. Neither
14 the plans submitted by vendors nor vertical stud Soderberg plants
15 operating with dry systems demonstrate any improvement in the
16 fluoride removal over that being achieved at the present in The
17 Dalles.

18 In the 1973 hearings, various witnesses have compared the
19 emissions of Martin Marietta Aluminum with those of the Reynolds
20 plant at Troutdale. In part, because of Reynolds' use of an
21 additional pot line, the performance of Martin Marietta Aluminum
22 in recent months compares even more favorably with that of
23 Reynolds' performance as reported last year.

24 We have presented you with a chart with our written
25 submission, and it can be easily calculated from that chart that

1 the total fluoride emissions at The Dalles are less than one-
2 sixth those at Troutdale. We believe this comparison should
3 convince you that to single out Martin Marietta for special
4 regulation would be unreasonably discriminatory. It would create
5 a bad precedent, that is, it would penalize an industry facility
6 for leadership in emission controls.

7 Martin Marietta Aluminum has one of the best emission
8 control programs in the world. Recently, Montana has examined
9 emission controls in the aluminum industry in evaluation of the
10 air pollution variance requested by the Anaconda Aluminum Company
11 for its aluminum reduction plant at Columbia Falls, Montana.
12 That plant is a vertical stud Soderberg plant that is similar in
13 design to the one at The Dalles. The Department of Health and
14 Environmental Sciences for Montana has prepared a draft of an
15 environmental impact statement which compares reported data on
16 emissions from several different types of emission control systems.
17 Martin Marietta was included in the systems compared along with
18 systems in other American and European facilities. The Montana
19 Environmental Impact Statement findings confirm the representations
20 made to you that Martin Marietta Aluminum has one of the best
21 emission control programs in the world.

22 Today you have heard again from Joseph Schulein. He
23 spoke to you in June of last year. Mr. Schulein emphasized, and
24 I think this was candid of him, that his views were from his
25 professional experience. I would like you to be reminded as to

1 what that professional experience is.

2 Since he left Oregon State University many years ago he
3 has spent most of his time inventing scientific gadgets of one
4 sort or another in his home. He is well known for his burglar
5 alarm system. He is well known for a scientific device which he
6 has developed to scare away rodents, but he does not have
7 sufficient experience to tell you what an aluminum plant can or
8 cannot do, and particularly the plant at The Dalles.

9 Mr. Schulein's experience with the aluminum industry is
10 primarily one of analyzing field samples collected from areas
11 outside of the aluminum plant. He has never designed an aluminum
12 plant, participated in the construction of one, participated in
13 the operation of one, and he has never worked in an aluminum plant.
14 I submit to you he simply is not qualified to tell you what this
15 plant can or cannot do. Martin Marietta Aluminum's plant here
16 at The Dalles is the only vertical stud plant we are aware of
17 that he has visited. He has not examined in any detail the
18 present installation equipment.

19 He talked to you about electrostatic precipitators. He
20 failed to mention to you that the electrostatic precipitators
21 that we have are the first ones ever anywhere in the world to
22 successfully operate on our type of plant. He failed to mention
23 to you that the electrostatic precipitators at The Dalles were
24 the outgrowth of a recent invention by a man named Herman Werner
25 modified by Martin Marietta for application here.

1 In summary, the Wasco County Fruit and Produce League
2 seeks extraordinary restrictions for the period March 25 to July
3 15. Martin Marietta Aluminum cannot comply with these extra-
4 ordinary restrictions. As we have repeatedly explained, emission
5 control is not a matter of "trying a little harder." There are
6 presently no practicable means to improve the performance of
7 Martin Marietta Aluminum. The only way we can comply with the
8 proposed extraordinary restrictions would be to shut down the
9 plant. It is simply impossible to operate an aluminum plant by
10 shutting it down for a three month period at some part of the
11 year.

12 That concludes my prepared remarks. I would like to make
13 two additional comments. There has been reference made to the
14 delay in the trial of some of the cases by the growers. You
15 should know that that delay was caused in part by the attorneys
16 filing the case in Multnomah County, the wrong venue, and its
17 transfer to Wasco County, caused in part by the failure to pursue
18 in the Oregon courts a theory of recovery which the Oregon
19 Supreme Court deemed to be inapplicable in this case. It is in
20 part due to conflicts in their own schedules with commitments
21 which they have in Montana and in Washington.

22 In response to you, Dr. Crothers, why is it that this
23 company comes to you asking for a permit which does not now impose
24 specific numerical limits, let me just say this, that the first
25 paragraph of that permit probably is the strictest in that it

1 requires that the company do everything practicable to control
2 emissions, and I think you are seeing here a company which has
3 not operated under that permit but which I believe it is acknow-
4 ledged has complied with the terms of that strict sanction.

5 Now I would like to give Mr. Doan an opportunity to
6 complete the presentation which the company makes.

7 MR. SOMERS: Mr. Ragen, if no standards were set
8 in Paragraph 2 of the proposed regulations, were eliminated, how
9 would Mr. Skirvin or one of the people in the enforcement depart-
10 ment have any standards to go by to determine if you were using
11 all practicable methods?

12 MR. RAGEN: I think that the Department is well
13 aware of what is available. They would have as well our operating
14 history in the last 24 months measured by monthly measurements.
15 We would be continued to be required to report those monthly
16 measurements. They would also have ambient air data coming into
17 them periodically that they could easily be able to determine
18 whether or not there was any unusual condition which would be a
19 change from our current, I think, satisfactory performance. The
20 permit requires us to report not only the emissions as measured
21 in the plant by these tests, but it also requires that we report
22 any unusual conditions so the Department would be well informed
23 of anything that was unusual.

24 MR. SOMERS: I understand that the control pro-
25 cedures are fair but there is no standard for control if that is

1 taken out, is there?

2 MR. RAGEN: Well, I think that paragraph 1 covers
3 that.

4 MR. SOMERS: That is kind of at the mercy of
5 whoever the enforcement officer is to decide what is practicable,
6 isn't it. If we had a month that went down to .6 per cent
7 emissions and the next month it made a jump up to 2 or 3, then
8 who determines which is practicable?

9 MR. RAGEN: I think the Department has adequate
10 history on the plant emissions to be able to tell when the figures
11 were getting out of line or not.

12 I think that the flip side of that problem is one that
13 the Department needs to consider very carefully, and that is
14 what happens if you get into a situation where the monthly average
15 goes up on particulates to 13.1. Then what does the Department
16 do? Does it issue penalty procedures?

17 MR. SOMERS: I understand that, but what is the
18 real concern, I asked Mr. Shenker for the effect on lawsuits. You
19 alluded to the fact that it affects your lawsuits or would breed
20 a whole new set of lawsuits. Is that what the principal concern
21 of the Company is?

22 MR. RAGEN: That is absolutely correct.

23 MR. SOMERS: Strict liability from the regulatory
24 standpoint; is that right?

25 MR. RAGEN: Not only the strict liability phase

1 but the legal phase. In other words, we have reached what I
2 consider to be a rather sensitive period here. We have resolved
3 one way or another disputes with all but six growers here in
4 Wasco County cases.

5 MR. SOMERS: There are no new lawsuits filed?

6 MR. RAGEN: There are none to my knowledge, but,
7 of course, anyone, as you know, Counsellor, can file a lawsuit.
8 The merits of it of course are something else which will have to
9 be determined later. What we are telling you is that we do have
10 a concern that anything you do which might label this area will
11 only serve to make it more difficult to resolve those cases.

12 CHAIRMAN McPHILLIPS: As a practical matter, it
13 looks to me like you say that you are able to operate this within
14 these certain limits, but you don't want to have to. Is that
15 right?

16 MR. RAGEN: We will be operating them within these
17 limits. There is no question that we will continue to do that.
18 What we wish to avoid is a spurious technical violation which
19 might cause an unwarranted confrontation, another confrontation
20 between ourselves, you, and the Department.

21 I indicate that you have in your records a great deal of
22 information, statistical information, about standard deviations
23 and the range within which one can be confident that past testing
24 programs will allow you to represent what your future performance
25 will be. I think the Company's technical people, they probably

1 should speak to this better than I.

2 MR. SOMERS: What would be your definition of what
3 a spurious type of violation might be?

4 MR. RAGEN: I think there is a great deal of con-
5 cern that the three tests conducted in one month that might not
6 come up with a number which would not be truly representative
7 of the overall plant's performance.

8 MR. SOMERS: You mean it might go up and down in
9 a given day in each 12 hour period? After all it is the purpose
10 to set standards over the average.

11 MR. RAGEN: Three tests, yes.

12 MR. SOMERS: So if one test was out of whack in
13 three, you are saying in Paragraph 3 you would impose liability?

14 MR. RAGEN: Three for the one month, one of three
15 tests could possibly do that.

16 MR. SOMERS: This is a monthly average though.
17 Now it says in one out of three, monthly average.

18 MR. RAGEN: Of course, one number could throw the
19 monthly average out of whack, obviously. Again I say you are
20 getting me into a technical area perhaps which I should not be
21 involved in myself, the merits of these tests and their accuracy.

22 Let me just say that it is our very deep concern that
23 you not impose a regulation which might result in a violation
24 which is not going to have any impact on protecting the public
25 welfare. The existence of that is going to be an after the fact

1 sort of thing. It is not as though you can let up your foot on
2 the accelerator and keep within the speed limit. You find out
3 that you have gone over the speed limit perhaps a few days after
4 the event, and by that time you may well be back underneath the
5 speed limit. It is that kind of concern for a technical violation
6 which does not have, in our judgment, any relationship in the
7 current situation with our acknowledged history of outstanding
8 performance for protecting the environment.

9 CHAIRMAN McPHILLIPS: This current violation does
10 discharge more contaminant into the air, though; is that not true?

11 MR. RAGEN: At least as measured on that particular
12 test.

13 CHAIRMAN McPHILLIPS: How else would you measure
14 it?

15 MR. RAGEN: This is acknowledged as being the best
16 way. That is why I say there is concern that you may get an
17 unusual result which would put us into a technical violation.

18 CHAIRMAN McPHILLIPS: Mr. Doan is sitting on the
19 edge of his chair. Let's get him up here.

20 MR. SOMERS: Let me ask Mr. Ragen, how does this
21 permit stack up with Reynolds permit?

22 DR. CROTHERS: Reynolds is emitting two or three
23 times as much just at present.

24 MR. SOMERS: When does their permit come up?

25 DR. CROTHERS: That is a good question.

1 Mr. Chairman, I had one thing on my mind I would like to
2 have -- I can't find it here right now, but in looking at the
3 statutes you come across over and over this phrase "reasonable,
4 practical." The Commission does not have the authority to require
5 somebody to absolutely eliminate pollution. We have to be
6 reasonable, but there is also a phrase in there that I want clari-
7 fied. Maybe Counsel can. It says, "Consistent with the general
8 public welfare." Now, I came across that some place, and I
9 want to know whether that indicates that the Commission has to
10 balance economic considerations one against the other, and so
11 forth? What does the phrase, general public welfare, mean in
12 this context about controlling pollution? I don't want an answer
13 now, but I would like one when we come to a decision. I would
14 like to think about it.

15 CHAIRMAN MCPHILLIPS: Mr. Doan.

16 MR. DOAN: Mr. McPhillips, members of the Commission,
17 before I forget there is a young lady in the audience whom I
18 don't know. She has asked to speak.

19 I would like to sum up the position of Martin Marietta
20 Aluminum Company on the two issues before you today. These
21 issues involved in your consideration, the permit and the petition,
22 were really exhaustively analyzed regularly throughout 1973.
23 This analysis lasting almost throughout that year led to the
24 adoption of the regulations we are talking about today on November
25 26, 1973. We predicted that you would find no new facts presented

1 today, and I think we can now affirm that this hearing has demon-
2 strated there has been no in any of the pertinent facts since the
3 adoption of the regulations.

4 We have told you and the Department, your own Technical
5 Department that the emission program at The Dalles represents --
6 and I quote from the paper read into the record by Mr. Skirvin
7 this morning -- "The highest and best practicable control
8 technology for this type of plant."

9 In the Appendix to this statement we have provided you
10 with the background information about The Dalles plant we explained
11 how the company has achieved this success in emissions control.
12 That Appendix also describes the aluminum reduction process and
13 I remind you and emphasize again that the process is a continuous
1 one. It is simply not feasible to turn the process down or off
15 for a limited period of time.

16 In preparation for this hearing we have carefully analyzed
17 our performance. We have agonized over these results and what
18 they mean in regard to our future performance. We have included
19 in this information those facts which we considered to be per-
20 tinent in evaluating the claims of a few growers that there is
21 need for special treatment in The Dalles. In consideration of
22 all this data and evidence, we request that you, one, direct
23 issuance of the proposed permit as of the January 1, 1977 com-
24 pliance date on the numerical limits, and, two, refuse to take any
action designating The Dalles as a special problem area. Your

1 decision would involve now not only the technical and legal con-
2 siderations but the policy you administer must also follow your
3 judgment as to what is "consistent with the overall public welfare
4 of the state," just as Dr. Crothers has brought out a few minutes
5 ago.

6 The public welfare of this community requires both the
7 orchard industry and the aluminum plant. There is no question
8 about that. We believe that the orchard industry benefits from
9 and in fact is heavily dependent on an economically healthy
10 community for its own wellbeing. We know that the aluminum com-
11 pany needs a solid community as a basis for its own success, and
12 we must not allow a few growers to interfere with the requirements
13 of this community for a balanced economy.

14 Those thoughts of mine and of the company were certainly
15 emphasized by the great majority of citizens at large that you
16 heard from today and those from whom you received letters and
17 those who wrote letters to the newspaper. This community and you
18 as members of this Commission are not faced with a choice between
19 the orchard industry and the aluminum plant. The history of
20 these two industries here provides overwhelming evidence of their
21 complete compatibility and successful co-operation. Recognition
22 of this now well established fact is long overdue. You have
23 heard fairly impassioned pleas from a number of citizens to that
24 effect. It is truly high time to have peace and co-operation
25 between these two vital communities industries rather than per-

1 petuation of this enervating, wasteful, antagonistic relationship
2 originating in distant past events. Martin Marietta Aluminum is
3 doing and will continue to do its full share to achieve good
4 relations with the orchard industry. By our continuous good
5 performance on emission controls, by expediting the resolution of
6 existing claims and suits both in and out of court, we expect
7 that well before January 1, 1977 we will have seen the end of
8 conflict with the growers. We believe that your acceptance of
9 our recommendations today for the resolution of the issues of
10 this hearing is an important and vital step towards peace in this
11 community, that peace that all of us, the growers, the aluminum
12 company, the community at large and perhaps I should even add
13 this Commission, so greatly need and deserve.

14 CHAIRMAN McPHILLIPS: Thank you.

15 DR. CROTHERS: Mr. Chairman, to use the phrase made
16 famous by Senator Baker, in search for some small element that
17 might promote harmony, I have been puzzled, as I know you are,
18 by some of these wild fluctuations in the emissions. I understand
19 you do not really understand why they happen. Some of them are
20 due to plant scheduling, but perhaps you do have some control.

21 There was one of the growers who testified that the really
22 critical period was about ten days, for the cherry blossoms,
23 about ten days. Is there any possibility that you could take
24 particular care in your scheduling of plant operations, putting
25 on perhaps additional workers so that you took very special pre-

1 cautions during that critical ten day period and to assure the
2 growers that you were going to do that?

3 MR. DOAN: I don't like this conflict any better
4 than the rest of the people in this room, I assure you, maybe a
5 little bit less so, and I want to assure you that the company has
6 been exercising its best possible diligence for a long long time,
7 not just in the growing season, and as we have said many many
8 times it is truly not a case of trying just a little bit harder.
9 We don't know how to extend our efforts with any increased
10 effectiveness.

11 We think all of our examinations of the data and the
12 fluctuations are indicative of the nature of the process, the
13 nature of the control equipment, the program, and even the nature
14 of the means of testing and the methods of analysis. It is the
15 summation of the variability of all these things that gives us
16 the variability we see and the end results recorded each month
17 with the Department.

18 DR. CROTHERS: Yes, but surely there are some things
19 that you can do to control some of the variability at a particular
20 time. For instance one of the things said was one of the elements
21 in this is just careless maintenance which comes in the summer
22 time. You get a lot of vacations. You get people that are not
23 as skilled and you get some careless operation. This is the kind
24 of thing that perhaps you could eliminate in that particularly
25 critical period. This is what I am talking about.

1 MR. DOAN: Yes, we do make a very specific effort
2 to control and schedule vacations of our seasoned, experienced
3 people, the majority with know-how so that we don't have an
4 excessive number gone at any one time.

5 DR. CROTHERS: Don't let any of them go in that
6 particular time.

7 MR. DOAN: Well, that might not be entirely popular
8 either.

9 DR. CROTHERS: Well, I am not worried about whether
10 you are popular with your employees.

11 DR. PHINNEY: One thing that concerns me is that
12 if you do not now know why there are these fluctuations in
13 emissions, what are your plans for any better idea of the fluc-
14 tuations, how to handle them any better by January 1977. That is
15 only three years away.

16 MR. DOAN: I cannot guarantee that we will have
17 any lower level of fluctuations by that time. We think our data
18 over the past two years predicts a very low frequency of results
19 in excess of the proposed limits, and we think that any regulation,
20 unless you write it so high that you can be sloppy, is going to
21 have an occasional result in excess of those limits. I think
22 that is something that we have to live with in the long view. We
23 ask that you don't force us to live with that particular aspect
24 of it in advance of others during the period when we are making
25 a special effort with the community working on its problems rather

1 than arguing about ancient history.

2 DR. PHINNEY: But you expect to be in exactly the
3 same position in 1977 as far as your management and equipment is
4 concerned. It is just that you don't like the idea of doing it
5 now.

6 MR. DOAN: That is a long time away, and I cannot
7 guarantee it will be any better off. I suppose if one looks back
8 in past history I suppose that you never stop learning, and I
9 suppose we will make some progress. I just don't know of any
10 specific way we will be able to do that.

11 CHAIRMAN McPHILLIPS: Thank you. Before winding
12 this up, Mr. Doan said that there is a young lady who wishes to
13 be heard, and we will take one more and then we will close the
14 hearing.

15 MRS. MARYLYN BRADLEY: I am a little nervous too.
16 My name is Marylyn Bradley, and I am the wife of Larry Lee Bradley.

17 First of all I want to say I appreciate very much the
18 comment about, about the quotation from the Good Book, and I trust
19 that you practice it as well as everything else that the Good
20 Book has to say.

21 I moved here about eight years ago from St. Louise,
22 Missouri, and, needless to say, it is a little bit bigger than
23 The Dalles. It took me approximately a month to learn how to
24 breathe again because it actually hurt to breathe the fresh clean
25 air that I breathed when I moved here, and I cannot say that that

1 air has gotten worse because I get up in the morning and the
2 first thing I generally do is walk out to my front porch and
3 breathe the good clean air.

4 I am sorry if the cherry growers are being hurt by the
5 fumes that Martin Marietta is putting out, if this is the problem,
6 and I must say to the cherry growers I am a poet and I truly love
7 the beautiful blossoms in the spring time, and they have inspired
8 many of the poems that I have written.

9 But, as I said before, my husband is an employee of Martin
10 Marietta, and I have Martin Marietta to thank for many things.

11 First of all, we have only been married for three years.
12 We own our car, a 1971 Datsun 1200, an economical car. It gives
13 good gas mileage. We are buying our home, and we have a child,
14 a one year old little boy, and he is completely paid for thanks
15 to Martin Marietta.

16 I don't know, I felt like I had to say this because it
17 would really be a tragedy to this town if Martin Marietta, for
18 one reason or another, did have to close down, and I know my
19 husband is terribly proud of his plant. He comes home to me and
20 continually tells me how Martin Marietta is the leading plant in,
21 you know, having all the top pollution fighting things.

22 Anyway, I just wonder how many young families of cherry
23 growers can say they have done this, how many homes have they
24 given to a family who have just been married three years. It is
25 not a \$40,000.00 home by any means, but it is our home, and how

1 many have they given children to that are completely paid for
2 after, well, completely paid for within a month after we had it,
you know, and, like I say, we own our car, and I am sorry again
4 if the cherry growers are being hurt, but in looking at a few of
5 them it looks like a lot of them have not been hurt as far as
6 eating habits. It was made in all due respect, I just love to
7 eat, and I got to get home because he is due home and I got to
8 get supper.

9 But I want to thank you for giving me the opportunity
10 to speak, and I hope that in making your decision that this
11 thought will rest with you. I know, I don't know all of the
12 technical things that you have to go through and really in order
13 to make a decision that you are going to have to make, but con-
14 sider the people, I pray, and think about it a little bit, and,
15 Martin Marietta and The Dalles cherry growers, please work
16 together to settle your feud because your children are going to
17 have to grow up together, and be an example for them as adults.
18 Thank you. (Applause)

19 CHAIRMAN McPHILLIPS: Thank you, Mrs. Bradley. I
20 think that yours is probably the most sincere testimonial that
21 we have had today.

22 We are going to hold the record open for ten days for any
23 written testimony. I am sure I see Mr. Shenker making copious
24 notes down there, and I am sure that he and Mr. Ragen will find
25 additional material, and anyone else who wishes to and I hope that

1 we will get it out and we will be able to give you a decision on
2 our May 24th meeting. Is there anyone else from the Commission
who wishes to say anything?

4 MR. ROBERT L. HASKINS: I have a brief comment to
5 make, Mr. Chairman. This is my second meeting with the Commission,
6 and most of the people in the room I know we regard as friends,
7 and we can appreciate the problems that all of you have and your
8 sincere interest in this particular problem. I want to thank you
9 all for showing up today, and for those of you who presented your
10 views you have presented them ably.

11 Personalities or clashes among personalities have no place
12 in the findings of the Commission, but one thing I want to make
13 perfectly clear to all of you is that by leaving the record open
4 for ten days there can be no ex-parte communication with any
15 member of the Commission. To do so would be to cause the
16 Commission's ruling to come under question.


17 I want to thank all of you for the restraint that you
18 have shown up to this point because I can't see anybody in the
19 room who has come in and abused their position about it. I
20 appreciate your restraint. I have got to live in the community,
21 and whatever decision is made will be made, so far as I am con-
22 cerned, will be based upon the best reasoning I have. I don't
23 have the choice here. There are five people on the Commission.
24 But I do want you to understand that I cannot hear ex-parte
25 testimony about the hearing. That has to be either presented today

1 or if you have additional facts you want to call to the attention
2 of the Commission please do not in writing bring them to me.
3 They should be presented to the Commission in writing at 1234
4 Southwest Morrison Street, Portland 97205. I will repeat that
5 again for you. It is the Environmental Quality Commission, 1234
6 Southwest Morrison Street, Portland, Oregon 97205, and if anybody
7 wants to obtain a record of the hearing, they can. It is
8 transcribed, and that is available at the same address from the
9 Department, and if you have any questions about the hearing B.
10 J. Seymour is the public information officer here. You can reach
11 her at 229-5329. Thank you all very much.

12 CHAIRMAN McPHILLIPS: Thank you all for coming.
13 The meeting is adjourned.

14 (Hearing concluded at 3:30 p. m.)
15
16

17 Certified to be a true and correct transcript of all
18 proceedings had in the foregoing hearing at the time and place
19 mentioned in the caption.
20

21 
22 Gordon R. Griffiths, Court Reporter
23
24
25

Documents in conjunction with the May 3, 1974, Department of Environmental Quality hearing:

Memorandum, to Environmental Quality Commission from Director, regarding the May 3, 1974, hearing, includes a copy of the proposed permit

Statement of John C. Capell, May 3, 1974

Statement of Joseph Schulein, May 3, 1974

Letter to the Environmental Quality Commission from B. M. Keith, dated May 3, 1974

Letter to Kessler R. Cannon from Douglas M. Ragen dated March 19, 1974, enclosing Response of Martin Marietta Aluminum Inc.

Letter to Diarmuid O'Scannlain from Arden E. Shenker dated February 19, 1974, enclosing the Petition of the Wasco County Fruit and Produce League

Letters to the Department of Environmental Quality from Duane Peterson, B. M. Keith and Henry Tiano, dated April 22, 1974, and April 23, 1974

Letter to the Department of Environmental Quality from Mrs. Jim (Loretta) Ellett, dated May 1, 1974

Letter to Kessler R. Cannon from Arden E. Shenker dated April 5, 1974, enclosing Petitioner's Reply



DEPARTMENT OF
ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5297

TOM McCALL
GOVERNOR

KESS CANNON
Director

MEMORANDUM

To: ENVIRONMENTAL QUALITY COMMISSION
From: Director
Subject: Agenda Item M, May 24, 1974 EQC Meeting

AMBIENT AIR STANDARD FOR LEAD, STATUS REPORT

Pursuant to a petition received by the Department on May 2, 1973 and reported to the Commission on May 29, 1973, the staff has completed an evaluation of sampling data and reference material and has prepared a proposed ambient air standard for lead.

As is indicated on the attached Notice of Hearing, the proposed standard will be presented for public hearing on June 24, 1974. A copy of the proposed standard is also attached.

A short oral presentation summarizing the content of the standard report will be made to the Commission at the May 24, 1974 meeting.

KESSLER R. CANNON
Director

5/17/74 RMJ:h



DEPARTMENT OF JUSTICE

PORTLAND DIVISION
555 STATE OFFICE BUILDING
PORTLAND, OREGON 97201
TELEPHONE: (503) 229-5725

May 22, 1974

Mr. Ray Johnson
Air Quality Control Division
Department of Environmental Quality
Terminal Sales Building
1234 S.W. Morrison
Portland, Oregon 97205

Re: EPA Pre-emption of Regulations Pertaining to Lead
Content of Vehicle Fuels

Dear Mr. Johnson:

I am sorry that I have been delayed in responding to your April 19, 1974 memorandum inquiring whether Oregon's jurisdiction would be pre-empted by the federal regulation, or whether DEQ could promulgate a more restrictive rule based on health effects or other factors.

Subparagraph (c) (4) (A) of section 211 of the Clean Air Act provides for pre-emption of a state's attempt to enforce, for purposes of motor vehicle emission control, any control or prohibition respecting use of a fuel or fuel additive in a motor vehicle or motor vehicle engine (1) if the Administrator of EPA has found that no control or prohibition under this section is necessary and has published his finding in the Federal Register, or (2) if the Administrator has prescribed under this section a control or prohibition applicable to such fuel or fuel additive, unless state prohibition or control is identical to the prohibition or control prescribed by the Administrator. The Memorandum of Law which you forwarded with your memorandum to me indicates that until a regulatory prohibition proposed by EPA becomes effective, a differing state regulation, based on health reasons, would not be pre-empted. Thus, the answer seems to depend upon whether or not the promulgation of the prohibition by EPA has yet occurred. Upon the promulgation or effective implementation of the regulation by EPA, the pre-emption would appear to occur. Therefore, I would not advise that the state propose a differing regulation.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
MAY 23 1974

AIR QUALITY CONTROL

Mr. Ray Johnson

-2-

May 22, 1974

because, upon the anticipated effective date of the EPA regulation, the state regulation would appear to be pre-empted.

Please let me know if you have further questions about this matter.

Sincerely,



RAYMOND P. UNDERWOOD
Chief Counsel
Portland Office

✓ ej


cc: Mr. Hal Patterson
Air Quality Division

NOTICE OF PUBLIC HEARING
DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE OF OREGON

NOTICE IS HEREBY GIVEN that the Department of Environmental Quality is considering the adoption of an ambient air quality standard for lead particulate pursuant to ORS 468.020 and ORS 468.295 to adequately protect the public welfare, the health of humans, plant and animal life, public and private property, and the enjoyment of life and property throughout such areas of the state as may be affected by this air contaminant.

Copies of the proposed standard may be obtained upon request from the Department of Environmental Quality, Office of the Director, Air Quality Control Division, 1234 S. W. Morrison Street, Portland, Oregon 97205.

Any interested person desiring to submit any written document, views or data on this matter may do so by forwarding them to the Office of the Director, Air Quality Control Division, 1234 S. W. Morrison Street, Portland, Oregon 97205, or may appear and submit his material, or be heard orally at 9:00 a.m. on the 24th day of June, 1974 in the Second Floor Auditorium of the Public Service Building, 920 S. W. Sixth Avenue, Portland, Oregon. The Hearing will be held before a Hearings Officer appointed by the Director.



KESSLER R. CANNON
Director

Recommendation

On the basis of the information summarized in this report, it is recommended that the following standard be adopted for concentrations of lead in the ambient air:

Standards

- A. The lead concentration measured at any sampling station, using sampling and analytical methods on file with the Department, shall not exceed 2.0 ug/m^3 as an arithmetic average concentration of all samples collected during any three calendar month period.

CRITERIA FOR LEAD AMBIENT AIR STANDARD

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

Air Quality Control Division
1234 SW Morrison Street
Portland, Oregon 97205

May 15 , 1974

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public interest and investigation. Occurrences of blood lead levels elevated above those of the general population in individuals residing near freeways have pointed to emissions of lead resulting from the combustion of automotive fuels as a primary source of lead contamination. Studies of ambient air near freeways and heavily travelled streets have confirmed that the motor vehicle is the major source of this contaminant in metropolitan areas.

Inasmuch as industrial and commercial operations in Oregon are not considered to be significant sources of lead emissions at the present time, control measures for this contaminant must be directed primarily toward reduction of the use of leaded fuels by automobiles.

Lead content in automotive fuel is currently under regulation by the Environmental Protection Agency, and is projected to provide sufficient reduction in automotive lead emissions to insure the attainment of the standard proposed in this report in most areas of the state by 1980. Immediate additional protection for the public can be achieved by traffic control methods, acquisition of wider freeway rights of way, street washing programs and adoption of fuel lead content regulations more stringent than those adopted by the Environmental Protection Agency.

Available information indicates that an ambient air concentration of 2.0 ug/m^3 of lead averaged over a three month period is a minimal level for the onset of increased body lead burdens in most humans. An ambient

air standard for lead should therefore not be set at levels exceeding this concentration. Studies indicate that some individuals may be susceptible to concentrations of lead somewhat less than the 2.0 ug/m^3 level, but are not definite about the additional amount of protection required for these individuals. Thus, this standard should be re-evaluated when more definite health studies become available.

Discussion of Airborne Lead

A. Introduction

In reviewing the available literature in the process of writing this report, emphasis has been placed on the material contained in three publications: "Health Hazards of Lead" ⁽¹⁾, "EPA's Position on the Health Effects of Lead" ⁽²⁾, and "Lead-Airborne Lead in Perspective" ⁽³⁾.

The first two publications are summaries of available literature developed by the Environmental Protection Agency as a basis for federal regulations controlling the use of lead in gasoline, while the third is a summary and evaluation prepared by the National Academy of Sciences. It is concluded that these three publications represent abstracted and summarized information from nearly all of the available literature pertinent to the effects of airborne lead on man and in the environment. Additional references will be found in the bibliography in the appendix of this report.

B. Sources of Lead Intake In Humans

Humans may be exposed to lead in food, water and in the air they breathe ⁽⁴⁾. Additional sources of lead, particularly in children include the ingestion of lead contaminated paint, dirt and dust ⁽⁵⁾.

The diet is considered the major source of lead input in man and most animals ⁽⁶⁾. Lead content of water supplies in the United States does not usually exceed 50 ug/liter, and the average daily intake from this source for adults is estimated as about 20 ug. Lead content of foods is estimated at between 0.01 and 2.5 ppm depending on the type of food, and an estimate of the range of the average daily adult intake of lead

from this source would be 100 - 500 ug, depending on the food eaten. An average daily lead intake from all food and water for adults in the United States is estimated at about 300 ug, and a corresponding estimate for infants on a mixed diet would be about 130 ug/day.

Absorption of lead ingested orally is low, about 5 - 10% under normal conditions. The total absorbed lead from food and beverages is therefore estimated at about 30 ug per day ⁽⁷⁾.

Inhalation of airborne lead constitutes a smaller potential input of lead to the body than dietary sources and the contribution of inhaled lead is not clearly known. Deposition of lead in the lungs is estimated at about 30 - 37% of the amount breathed. Almost all of the deposited inhaled lead is absorbed by the body ⁽⁸⁾.

Studies of the effects of airborne lead in children are complicated by pica (the ingestion of non-food substances such as paint and dirt). Estimates of the number of children with pica are high, perhaps greater than 50% ⁽⁹⁾. Since street dusts in many areas are contaminated with lead in concentrations above those considered safe in paint, they may be considered as having the same intoxication potential as do the paint chips long known to be a source of lead intoxication in children. The EPA has concluded that continued ingestion of only fractions of a teaspoon per day of street dust contaminated with amounts of lead routinely found in urban areas would easily exceed the daily permissible lead intake for children ⁽¹⁰⁾.

The primary source of lead in the atmosphere in Oregon is the combustion of automotive fuels. At present, there are very few industrial sources of this contaminant in the State. This report therefore concentrates on the effects of automotive emissions of lead in the environment.

combustion of gasolines with lead additives is considered as responsible for 98% of the airborne lead that can be traced to its source. The public is exposed to lead contamination by inhalation of lead carried in the air and by contamination of street and house dust, particularly near freeways and heavily travelled thoroughfares. Average lead levels in soils in front yards of urban homes have been shown to be two to three times as high as those of soil samples taken in backyards located farther from roadways⁽¹¹⁾. Urban dwellers exposed to automotive traffic have similarly elevated blood levels of lead when compared to populations not subjected to contamination from this source⁽¹²⁾. A table summarizing these elevated levels is appended as Table 1. Comparisons of blood lead levels in urban and rural residents are shown in Table 2. Blood lead levels in Oregon residents and ambient air levels measured at sampling sites around the state will be covered in a separate section of this discussion.

C. Health Effects of Lead in Man

Lead is a toxic substance that apparently has no beneficial biological properties⁽¹³⁾. Manifestations of lead intoxication include effects on the central nervous system, the gastrointestinal system, the hematopoietic system and the kidneys. Other organs may be involved in varying degrees. The symptoms of mild lead intoxication include anemia, headaches, muscle aches, constipation and diffuse abdominal pain⁽¹⁴⁾. In severe poisoning the central nervous system is seriously affected, and permanent brain damage may occur. Renal damage is also severe and may be permanent. The life span of red blood cells is shortened, and anemia may result.

Subtle effects of prolonged exposure to low concentrations of lead include mental retardation and hyperactivity, although studies demonstrating these effects in children have been somewhat subjective⁽¹⁵⁾. Chromosomal

abnormalities have been shown to occur in men with lead poisoning and in workers occupationally exposed to lead ⁽¹⁷⁾. It has not been shown that these abnormalities would be associated with the low lead concentration exposures common to the general public.

Accumulation of lead in the body occurs when the amount of intake exceeds the amount the body is able to excrete. Clinical signs of lead intoxication do not normally occur at blood lead concentrations lower than 80 ug/100 g of whole blood except in cases associated with anemia ⁽¹⁸⁾. Indications of blood lead buildup occur at levels much less than 80 ug/100 g. Inhibition of delta aminolevulinic acid dehydrase (ALAD), an enzyme necessary in hematopoiesis (formation of red blood cells), has been shown to occur at levels above 40 ug/100 g in humans and at concentrations below this level in laboratory tests using several types of in vitro (test-tube) procedures ⁽¹⁹⁾.

It is currently impossible to set allowable blood lead levels that would protect all sensitive groups among the general public ⁽²⁰⁾. Cases of lead intoxication in children have been reported at levels as low as 40 - 50 ug/100 g blood, although many workers in the field are reluctant to attribute symptoms to lead-poisoning in this range ⁽²¹⁾. Acceptable blood lead levels must be lower for expectant mothers due to the necessity for providing lower lead concentrations to the developing fetus ⁽²²⁾. Other individuals particularly susceptible to lead exposure include those with calcium deficiencies or other dietary deficiencies ⁽²³⁾.

After summarizing the information available concerning acceptable blood levels of lead in susceptible individuals, the EPA has recommended that the following guidelines be adopted for upper acceptable blood lead levels:

Blood Lead Guidelines in the General Population⁽²⁴⁾

Group	Upper Acceptable Blood Lead Level (ug/100 g blood)
Fetus and Newborn	30
Children	No more than 40, preferably 35
Adults	40
Expectant Mothers	30

It is obvious that a complete summary of the health effects of lead in man is beyond the scope of this report. Accordingly, additional references are included in the bibliography for reference by interested individuals.

D. Ambient Air Concentrations of Lead Affecting Man

Initial summarizations by the EPA of the relationship of ambient lead concentrations to increased absorption of lead in man indicated that human blood lead levels began to increase after continued exposure to ambient concentrations in excess of 2.0 ug/m^3 ⁽²⁵⁾. Additional information available to EPA and summarized in a later publication indicated that individuals susceptible to lead intoxication would be affected at concentrations less than 2.0 ug/m^3 , and that potentially harmful levels of lead in dirt and dust could occur after continued exposure to this lead concentration. Accordingly, although concluding that an initial value of 2.0 ug/m^3 as a three month average should be established as the standard for the state, this report also indicates a need for the re-evaluation of this standard when more definite information is available about how much additional protection is necessary to protect the most sensitive individuals in the population. If additional studies indicate that the 2.0 ug/m^3 concentration is not sufficiently low enough to provide the desired degree of protection for the public, then a lower concentration will be considered.

E. Ambient Air Concentrations of Lead in Oregon

Most available ambient air sampling data for this contaminant in the State has come from total suspended particulate samples collected by Hi-Volume samples since 1970 at stations in cities with 10,000 or greater population included in the Statewide Air Sampling Network. These stations have been located in order to provide area-wide air quality information for various air contaminants and therefore in most instances were purposely located away from major emission sources, including main thoroughfares and freeways. Accordingly, the results are only representative of those sampling sites and do not give an indication of the higher levels which occur in some cities near high density traffic areas. A limited number of freeway oriented samples have been obtained during special studies by the Department and by the Oregon Graduate Center, and are included to indicate the highest levels of lead concentrations known to occur in the State.

A summary of results of samples obtained in statewide sampling shows that concentrations of lead in all cities in the state except the Portland Metropolitan area would meet the standard proposed in this report. Results of all available data are included in the appendix as Table 3 and an initial study summarizing early statewide data is included as reference 26. Concentrations exceeding the proposed standard are few, and occur primarily in the core area of downtown Portland. It is anticipated that the scheduled reduction of fuel lead content will provide a sufficient drop in ambient air lead concentrations so as to prevent averages in excess of the standard in the Portland Metropolitan area.

Although the sampling results from the freeway oriented studies are limited, examination of the results of the first 8 months of sampling indicates that while the three month standard will probably be met at the

sampling site furthest from the freeway (approximately 800 feet), it will not be met at the two sampling locations nearest the freeway (within 200 and 400 feet). These reported concentrations will decline over the next few years as the EPA fuel lead content regulations are implemented. It is likely that these sampling sites will meet the projected standard after the full effect of the regulations has been achieved. A summary of the data available from this study is included in the appendix as Table 4.

Ambient air samples obtained during the Oregon Graduate Center study were collected using Lundgren impactor samplers rather than the Hi-Volume samplers used by the Department, and a correlation between sampling methods is not available. Blood lead samples were also taken as a part of the OGC study and are probably representative of average blood lead concentrations in Portland residents exposed to lead from automotive sources, although there appears to be some question about the accuracy of the analytical procedures used. Street dust, house dust and soil samples were also analyzed for lead concentrations. The results of the study indicate that widespread, excessive lead concentrations do not exist in the Portland area at the present time, although current concentrations of lead in the areas studied might be sufficient to cause slight increases in the blood lead levels of individuals living within 1 - 200 feet of freeways. Soil and dust samples obtained in the study had lead concentrations lower than those obtained in urban areas of other parts of the country. Surface soil lead concentrations averaged 380 ppm, ranging in concentration from 30 to 1500 ppm. Soil lead concentrations were shown to be related to traffic density and were highest in samples taken near major thoroughfares, decreasing in concentration to a background level within 200 to 300 feet of the roadway. House dust lead concentrations averaged 825 ppm with values ranging from

100 to 2700 ppm. Ambient air samples obtained with Lundgren impactors had weekly average sampling results ranging from 0.69 ug/m^3 at a site near the freeway to a low value of 0.18 ug/m^3 at a site further from the freeway (2500'). Averages ranged from 0.69 ug/m^3 one week to 0.29 ug/m^3 on a different week at the same site. These data, while indicative of lead concentrations near the freeway for the period of time studied do not provide sufficient samples to project accurate yearly or monthly averages for these sites. Blood lead concentrations reported in the study averaged 24.0 ug/100 ml for analyses performed by one laboratory and 14.3 ug/100 ml for those performed at another laboratory. Differences in these results were explained as due to lead loss in the storage containers during the longer time required for transport and analysis of the samples to the second laboratory. Average blood lead levels were higher for men than for women as is to be expected from the results of other studies. No significant variation of blood levels to time of residence was found, and no significant correlation of these levels to house dust lead concentrations was noted⁽²⁷⁾.

Data for proposed freeways is limited. The only freeway for which extensive emission dispersion modelling is available is the I-205 freeway in southeast and northeast Portland. Data presented in the impact statement for this freeway indicates that the standard will probably be exceeded at two locations within 200' of the proposed freeway route, even after the EPA fuel content regulations have achieved the projected reductions in emissions. Inasmuch as not all sections of the freeway were included in this model, the probability of additional locations being in violation at this distance is high. Comparison of anticipated traffic volumes on the proposed freeway and existing traffic on the portion of I-5 near the special lead sampling sites indicates that traffic volumes above 70,000 to 80,000 cars per day can be expected to produce violations of the proposed standard at distances of 200 to 400 feet from the freeway center line⁽²⁸⁾⁽²⁹⁾.

CONTROL MEASURES

A. Present Control Measures

Fuel lead content restrictions. Currently effective fuel lead content regulations adopted by the Environmental Protection Agency are projected to provide a 60-65% reduction in lead emissions from automobiles by 1980 at which time all gasoline must contain no more than 0.5 grams/gallon of lead. Major refiners are required to attain this level by no later than January 1, 1979. As adopted, these regulations require reductions in fuel lead content according to the following schedule:

No More Than:	After
1.7 grams lead/gallon	January 1, 1975
1.4 grams lead/gallon	January 1, 1976
1.0 grams lead/gallon	January 1, 1977
0.8 grams lead/gallon	January 1, 1978
0.5 grams lead/gallon	January 1, 1979

As indicated above, these regulations apply to major refiners. Smaller refiners would have one year longer to attain the required reduction in fuel lead content. A copy of the Federal Register, Vol. 38 Number 234, December 6, 1973, containing these regulations is included in the appendix of this report.

B. Alternative Control Measures

Alternative control measures which could be implemented include the following:

1. Traffic Control Measures. Traffic control and effective mass transit programs would be of major assistance in decreasing lead levels. The use of mass transit would provide reductions of lead emissions in a two-fold manner, both by reducing the number of automobiles in the area and by the fact that fuels for diesel-powered vehicles normally used for mass transit are unleaded. Restrictions on the number of

vehicles using all or portions of freeways and major thoroughfares where lead standards are exceeded would effectively lower lead concentrations in those areas.

2. Fuel Lead Content Regulations More Restrictive Than Those of the EPA.

Control of fuel lead content is considered to be preempted by the Environmental Protection Agency, but a Memorandum of Law received by the Department relative to the ability of the State to adopt regulations more restrictive than those of the federal agency is being reviewed by the Attorney General's Office.

In the event that present federal regulations on fuel lead content do not produce the desired reduction in ambient concentrations of lead, and it is concluded that the State has the authority to adopt more restrictive regulations, the adoption of this type of regulations could be a direct approach toward achieving the necessary reductions.

3. Wider Rights of Way for New and Existing Freeways

In the event that studies or computer modeling predictions for proposed freeways indicate that this proposed standard will be exceeded at points along the freeway route, requirements should be made that the highway agency involved must acquire sufficient additional land along the right of way so as to prevent exposure of nearby residents to undesirable concentrations of lead. Similar requirements could be made in areas of existing freeways where sampling results have demonstrated that undesirable ambient lead concentrations exist and are not resolvable otherwise. Preliminary evaluations of environmental impact statements for freeways and of special freeway oriented ambient air samples taken by the Department and others indicate that right of way widths of 200 feet or more

from the center line may be necessary to protect the public in areas of poor contaminant dispersion.

4. Street Washing Programs. Street washing programs have been suggested as a means of reducing ambient air lead concentrations, particularly in reducing re-entrained dust from vehicular sources. Although this type of program might be of limited value during the periods of heavy rain common to parts of the state, the practice could be of some benefit during the less rainy and dry periods of the year. Test or demonstration programs may have to be developed to ascertain the possible detrimental effects of a program of this type on water quality.

Recommendation

On the basis of the information summarized in this report, it is recommended that the following standard be adopted for concentrations of lead in the ambient air:

Standards

- A. The lead concentration measured at any sampling station, using sampling and analytical methods on file with the Department, shall not exceed 2.0 ug/m^3 as an arithmetic average concentration of all samples collected during any three calendar month period.

Definitions

AMBIENT AIR - The surrounding outside air.

AIR QUALITY STANDARD - An established concentration, exposure time and frequency of occurrence of contaminant or multiple contaminants in the ambient air which shall not be exceeded.

SUSPENDED PARTICULATES - Those airborne particulates collected on 8 x 10-inch sheets of flash-fired glass fiber filter web of given porosity, using a high volume sampler or other particulate collection equipment equivalent in collection efficiency to the high volume sampler and glass fiber filter.

DEPARTMENT - The Department of Environmental Quality

Methods of Measurement and Analysis

Sampling

Sampling shall be accomplished using the high volume air sampler with flash fired glass fiber filters and following methods set forth in "Criteria for Suspended Particulate Objectives and Standards" available from the Department. Exceptions to these methods are as follows:

- A. Sampling dates will be at least as frequent as those listed in the schedule for suspended particulate samples, but shall be adjusted to provide more frequent sampling periods as is necessary to provide statistically dependable arithmetic and geometric mean values for lead concentrations.
- B. Sampling sites and sampler locations shall be selected to insure detection of elevated ambient air levels at residences near sources of emissions.
- C. Industrial and commercial sources of lead emissions may be required to provide special ambient air sampling or source testing programs in order to insure protection of neighboring residents, industries or commercial operations.

Analysis

Analysis of ambient air samples shall be accomplished using low temperature ashing for extraction of lead in the sample and atomic absorption spectrometry for determination of lead concentration of the extracted samples. Complete methods for extraction and analysis are available from the Department.

TABLE 1

EXTENT OF ABNORMALLY ELEVATED BLOOD LEADS AMONG URBAN ADULTS*

<u>City</u>	<u>Exposure Category</u>	<u>Number Studied</u>	<u>% of Blood Leads Equal to or Greater than 40 ug/100 g</u>
Cincinnati	Post Office Employees	140	2.9
	Firemen	191	3.0
	Service Station Attendants	130	12.3
	Police	40	12.5
	Drivers of cars	59	15.0
	Parking attendants	48	44.0
	Garage mechanics	152	67.0
Los Angeles Area	L. A. Police	155	0.6
	Pasadena Male City Employees	88	3.3
	L. A. Female Aircraft Employees	87	3.3
	General L.A. Clinic Population	45	4.4
	L. A. Male Aircraft Employees	291	5.2
Oakland	Female Clinic Patients	53	1.9
	Male Clinic Patients	36	5.5
Philadelphia	Male Commuters	43	2.3
	Police	113	3.5
	Downtown Male Residents	66	4.5
Camden, NJ	Women Living Near Freeways	55	1.8
Composite Urban Samples	Females from NY, Phila., and Chicago	423	0.7
	Males and Females from 6 cities (those above 40)	833	2.7

*Taken from "EPA's Position on The Health Effects of Airborne Lead",
Table VI-1, page VI-6.

TABLE 2

URBAN - SUBURBAN BLOOD LEAD COMPARISONS IN ADULTS*

<u>Group Studied</u>	<u>Number Studied</u>	<u>% Blood Leads Equal to or Greater Than 40 ug/100g</u>
Urban Females	423	0.7
Suburban Females	556	0
Philadelphia Males		
Urban	66	4.5
Suburban	23	0
Composite		
Urban	833	2.7**
Suburban	162	0

**only those above 40

*Taken from "EPA's Position on the Health Effects of Airborne Lead",
Table VI-2, page VI-8

TABLE 3

3-MONTH AVERAGE AMBIENT AIR LEAD CONCENTRATIONS

(Averages of all available data)

All values ug/m³

STATION	1971			1972			1973		
	Min. 3 mo. Avg.	Max. 3 mo. Avg.	No. avgs. > 2.0 ug/m ³	Min. 3 mo. Avg.	Max. 3 mo. Avg.	No. avgs. > 2.0 ug/m ³	Min. 3 mo. Avg.	Max. 3 mo. Avg.	No. avgs. > 2.0 ug/m ³
<u>STATEWIDE STATIONS</u>									
Albany		Data Incomplete		No Data			No Data		
Ashland	.12	.65	-	.40	.60	-	.29	.42	-
Astoria	.20	1.13	-	.55	1.0	-	.40	.71	-
Baker	.09	.39	-	.27	.37	-	.20	.37	-
Bend	.07	.51	-	.23	.50	-	.15	.30	-
Coos Bay	.15	.35	-	.29	.55	-	.23	.67	-
Corvallis	.13	.87	-		No Data			No Data	
Eugene	.20	1.48	-		No Data			No Data	
Grants Pass	.19	1.01	-	.39	.89	-	.34	.73	-
Klamath Falls (Core)	.18	1.10	-	.40	1.23	-	.25	.62	-
Klamath Falls (OIT)	.07	.14	-	.07	.37	-	.04	.49	-
LaGrande	.04	.34	-		No Data		.08	.23	-
McMinnville	.07	.52	-		No data			No Data	
Medford	.17	1.10	-	.50	1.01	-	.33	.76	-
Pendleton	.09	.69	-	.23	.80	-	.23	.73	-
Roseburg	.16	1.03	-	.45	.89	-	.25	.97	-
Salem	.16	1.22	-		No data			No data	
Springfield	.21	.24	-		No data			No data	
The Dalles	.15	.99	-	.23	.80	-	.22	.64	-
Umatilla (Background)		Station not established		.06	.18	-	.03	.12	-
<u>PORTLAND AREA STATIONS</u>									
Beaverton	.27	1.70	-	.77	1.05	-	.42	.95	-
Hillsboro	.16	1.20	-		No data			1 avg., .35, new site	
Lake Oswego	.34	2.03	1		Incomplete data				
Linnton		No data			No data		.66	.83	-
Milwaukie	.21	2.03	1		No data		.81	.93	-
Oregon City		No data		1.00	1.49	-	.57	1.12	-
Portland:									
CAN Sta.	.40	2.12	2	.87	1.93	-	.75	2.20	2
Grout School	.22	1.70	-		Station discontinued			Station discontinued	
Roosevelt High School		No data		.87	1.09	-	.32	.77	-
Central Fire Station		No data		.93	2.24	2			
Industrial Air		No data		.57	1.19	-	.48	.89	-
Jackson High School		No data			No data		.45	.63	-
KOIN Transmitter		No data			No data		.27	.46	-
Moffat, Nichol & Bonale		No data		.74	1.75	-	.80	1.26	-
Mt. Hood NFS		No data		1.26	1.70	-	.84	1.11	-
Nat. Fish Lab		No data			No data		.15	.17	-
Pac. Motor Truck		No data		1.12	1.80	-	.45	1.11	-
Rivergate		No data			No data		.41	.50	-
Waterways Term.		No data			No data		.36	.39	-
St. Helens		No data			No data		.24	.29	-
Troutdale		No data			No data		.22	.23	-
<u>OTHER</u>									
Martin Marietta (The Dalles)		No data		.42	1.03	-	.26	.78	-

TABLE 4

RESULTS OF SPECIAL FREEWAY-ORIENTED SAMPLING (All values $\mu\text{g}/\text{m}^3$,
Samples over an 8-month period)

Station	Max.	Min.	Approx. Geo. \bar{x}	Approx. Dev.	No. of Samples
Viewpoint Terrace	4.88	.32	1.60	1.98	38
Kneeland & Kneeland	5.72	.37	1.24	1.76	43
Terwilliger School	3.57	.15	.85	2.27	39

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PART II



ENVIRONMENTAL
PROTECTION
AGENCY

□

REGULATION OF
FUELS AND
FUEL ADDITIVES

TITLE 49—PROTECTION OF ENVIRONMENT

Chapter I—Environmental Protection Agency

SUBCHAPTER C—AIR PROGRAMS

PART 80—REGULATION OF FUELS AND FUEL ADDITIVES

On February 23, 1972, a notice of proposed rule making was published in the FEDERAL REGISTER (37 FR 3822), setting forth proposed regulations promulgating Federal standards for the use of lead and phosphorus additives in gasoline. Pursuant to the above notice, several public hearings were held. In addition, numerous written comments were received during an extended public comment period. After consideration of the hearings' testimony and other comments, and after further consideration of the available information on health effects of airborne lead and the adverse effect of leaded gasoline on emission control devices, the regulations have been divided into two separate pieces of regulatory action; proposed regulations based upon the health effects of airborne lead, which provide for the reduction of lead in all grades of leaded gasoline, and final regulations, which provide for the general availability of lead-free gasoline. The regulations on reduction of lead for health reasons are being repropose because the Agency's basis for the reduction has been substantially revised. The proposed regulations are published in this issue of the FEDERAL REGISTER, accompanied by an explanation of the basis for the reproposal. The regulations providing for the availability of lead-free and phosphorus-free fuel, modified as determined to be appropriate by the Agency, are promulgated below. The basis for this promulgation is explained below.

When the proposed regulations were published, the Administrator had determined that emission products of lead and phosphorus additives would impair to a significant degree the performance of emission control systems which include catalytic converters that motor vehicle manufacturers are developing to meet the 1975-76 motor vehicle emission standards and that are likely to be in general use if lead and phosphorus additives are controlled or prohibited for use in certain motor vehicle gasolines. This determination was based upon consideration of the available scientific and economic data including a cost-benefit analysis comparing motor vehicle emission control devices or systems which are or will be in general use and require control or prohibition of lead additives in gasolines with emission control devices or systems which are or will be in general use and do not require such control or prohibition of those additives. After identifying the emission control systems or devices under consideration by automobile manufacturers for

meeting the 1975-76 standards, the Administrator determined that one system, the catalytic converter, would be in general use in the 1975 model year. Accordingly, a comparison of systems or devices was not feasible. Since publication of the proposed rule making, additional information on this subject has been submitted to the Agency during public hearings on the suspension of 1975 model year light duty motor vehicle emission standards, and the lead regulations hearings and comment period. This information provides further support for the Administrator's determination.

Therefore, the proposed provision for the general availability by July 1, 1973, of essentially lead-free and phosphorus-free gasolines of an octane quality suitable for 1975 and subsequent model year light duty vehicles is included in the final regulations. Copies of the cost-benefit analysis referred to above, entitled Aerospace Report, PB-205-981, are available for \$4.50 each from National Technical Information Service, Department of Commerce, 5285 Port Royal Road, Springfield, VA 22151.

At the time of the proposed rule making, the Administrator concluded that the proposed control of the use of lead additives and phosphorus-containing additives in lead-free gasoline would not cause the use of any other fuel or fuel additive that will produce emissions which will endanger the public health or welfare to the same or greater degree. Since that time, additional information has been developed which further supports the Administrator's earlier conclusion. This additional information and the basis for the original finding are set forth in a paper entitled "Effects of Required Use of Lead in Gasoline on Vehicle Emissions and Photochemical Reactivity" (with addendum). Copies of this paper are available from the Publications Section, Environmental Protection Agency, 401 M Street SW., Room 238W, Washington, DC 20460.

In the preamble to the proposed regulations, the Administrator invited comments concerning the effect of various levels of sulfur concentrations in lead-free and phosphorus-free gasoline on catalytic emission control systems, the impact of a sulfur limitation on the petroleum industry, and the impact of a sulfur limitation on motor vehicle performance and the cost of gasoline to the consumer. In light of these comments, the Administrator has determined that the currently available information is not adequate to clearly determine the impact of gasoline sulfur levels on emission control devices. Accordingly, additional information on both the effects of sulfur on catalyst deterioration and the impact of a sulfur regulation on the oil industry is required before regulatory action can be proposed.

The regulations as proposed provided that the lead content of unleaded gasoline not exceed 0.05 gram of lead per gallon. This maximum trace lead level is based upon the determination that it

would provide adequate protection for catalyst emission control devices and that delivery of unleaded gasoline meeting this specification is within the capability of the petroleum industry.

Most of the auto manufacturers initially asserted that the standard should be set at a maximum of 0.03 gram per gallon or less to prevent impairment of the effectiveness of the catalytic emission control devices. More recently, several manufacturers have stated that the proposed trace lead standard of 0.05 gram per gallon would be acceptable if such a standard assured that the average lead content of unleaded gasoline were 0.03 gram per gallon.

Speakers for the petroleum industry urged that the trace lead standard be set at 0.07 gram per gallon, the specification for unleaded gasoline established by the American Society for Testing and Materials. This specification was chosen on the basis of: (a) The capacity of the distribution system to deliver gasoline with low trace lead levels and (b) the reproducibility of the test methods. The experience of the petroleum industry as a whole in delivery of unleaded gasoline was conceded to be limited. The one company with substantial experience in the distribution of unleaded product is currently able to meet a 0.03 standard most of the time.

The regulations provide for the general availability of a lead-free and phosphorus-free gasoline with specified trace lead levels of 0.05 gram of lead per gallon. It is the Administrator's determination that without regulatory action requiring retail outlets to market at least one grade of such gasoline, availability of that product to the general public in all areas of the country would be uncertain, and may not be sufficient to assure the protection of catalytic control devices. This regulation will determine the range of trace lead in gasoline which will be available to the consuming public for use in motor vehicles with control devices (e.g., from 0 gram lead to 0.05 gram lead). Based on the available data on marketing of unleaded gasolines, the Agency projects that a 0.05 gram of lead per gallon maximum will result in a 0.03 gram per gallon average lead content. Since the Agency's motor vehicle certification regulations require that gasoline generally available at retail outlets be used in vehicle certification tests, 1975 model year vehicle certification testing will be required to be conducted using gasolines having a minimum lead content of 0.03 gram per gallon.

EPA has received numerous comments from the automobile industry requesting that the trace phosphorus level in the lead-free and phosphorus-free gasoline be lowered from the proposed level of 0.01 gram of phosphorus per gallon to 0.005 gram of phosphorus per gallon and below. After evaluating the catalyst deterioration data submitted in support of these requests, the Administrator has determined that the trace phosphorus level must be lowered to 0.005 gram of phosphorus per gallon in order to prevent

catalyst deterioration which would preclude compliance with the emission standards for the useful life of 1975 and later model year vehicles. Though some members of the oil industry contend that a lower phosphorus level would remove some of the existing flexibility in the use of phosphorus detergent additives, the Agency has determined that the need for any such flexibility is outweighed by the need to prevent catalyst deterioration. Moreover, nonphosphorus additives are fast becoming the predominant detergents in unleaded gasoline and are already in large scale use.

Representatives of the petroleum industry have sought clarification of the term "owner or operator" of a retail outlet used in paragraphs (c), (d), and (g) of § 80.22 of the regulations as proposed. These paragraphs have been modified to adopt the terms of the definition of "owner or operator" contained in section 111(a)(5) of Title I of the Clean Air Act which defines an "owner or operator" as any person who "owns, leases, operates, controls, or supervises" a regulated facility.

The final regulations do not include the proposed prohibition of the dyeing of unleaded gasolines or the proposed requirement that leaded gasolines be conspicuously colored. Based on comments received on the control of transport of unleaded gasoline, the Agency has determined that a color-coding system is not necessary to the implementation of this regulation.

The Agency agrees with comments received that engine octane demand decreases with increase in altitude, and has added to the requirement that retail outlets market unleaded gasoline of at least 91 octane a provision allowing reduction in octane number in high altitude areas.

The proposed regulations set forth labeling requirements for retail outlets and motor vehicles and dimensions specifications for pump nozzles and automobile fuel filler inlets to prevent accidental use of leaded gasoline in vehicles equipped with emission control devices requiring the use of unleaded fuel. The regulations include slight changes in the required fuel filter inlet and pump nozzle dimensions proposed, in accordance with the recommendations of the Society of Automotive Engineers.

The country's independent gasoline marketers have expressed concern that the major refiners, who currently provide their supply of leaded gasoline, will not produce enough unleaded gasoline during the transition period following the regulation's effective date to supply both the majors' branded outlets and the independent outlets. Based on the results of the Agency's evaluation of the independent marketers' supply problems, the Administrator has determined that it would be premature to conclude that gasoline refiners will be unable or unwilling to provide adequate supplies of unleaded gasoline to retail outlets required by these regulations to offer it. If the shortage of unleaded gasoline

feared by the independent marketers materializes, this Agency will consider whether additional measures are necessary to assure the general availability of unleaded gasoline.

Comments were received which objected to the imposition of liability upon major brand refiners for sales at their retail outlets of unleaded gasoline containing lead in violation of the standard. The regulation retains this provision, with slight wording changes, based upon the Agency's determination that the contamination of unleaded gasoline associated with transportation of the product can best be prevented by the major refiners who have control or the ability to control their distribution networks. However, in order to clearly indicate that there is a positive duty on the major brand refiner to prevent any violation of the unleaded gasoline standard at his retail outlets, the Agency is proposing in this issue of the FEDERAL REGISTER a regulation specifically imposing this duty.

The regulations promulgated below shall be effective on February 9, 1973.

Dated: January 4, 1973.

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Administrator,
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A new Part 80 is added to Chapter I, Title 40 of the Code of Federal Regulations, as follows:

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AUTHORITY: Secs. 211 and 301(a) of the Clean Air Act, as amended (42 U.S.C. 1857f-6c).

Subpart A—General Provisions

§ 80.1 Scope.

This part prescribes regulations for the control and/or prohibition of fuels and additives for use in motor vehicles and motor vehicle engines. These regulations are based upon a determination by the Administrator that the emission product of a fuel or additive will impair to a significant degree the performance of a motor vehicle emission control device in general use or which the Administrator finds has been developed to a point where in a reasonable time it would be in general use were such regulations promulgated; and certain other findings specified by the Act.

§ 80.2 Definitions.

As used in this part:

(a) "Act" means the Clean Air Act, as amended (42 U.S.C. 1857 et seq.).

(b) "Administrator" means the Administrator of the Environmental Protection Agency.

(c) "Gasoline" means any fuel sold in any State for use in motor vehicles and motor vehicle engines, and commonly or commercially known or sold as gasoline.

(d) "Research octane number" means a measurement of a gasoline's knock characteristics which is determined by American Society for Testing and Materials analytical method designated D-2699.

(e) "Lead additive" means any substance containing lead or lead compounds.

(f) "Leaded gasoline" means gasoline which is produced with the use of any lead additive or which contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon.

(g) "Unleaded gasoline" means gasoline containing not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon.

(h) "Refinery" means a plant at which gasoline is produced.

(i) "Refiner" means any person who owns, leases, operates, controls, or supervises a refinery.

(j) "Retail outlet" means any establishment at which gasoline is sold or offered for sale to the public.

(k) "Retailer" means any person who owns, leases, operates, controls, or supervises a retail outlet.

(l) "Distributor" means any person who transports or stores or causes the transportation or storage of gasoline at any point between any gasoline refinery and any retail outlet.

§ 80.3 Test methods.

The lead and phosphorus content of gasoline shall be determined in accordance with test methods to be prescribed by the Administrator.

§ 80.4 Right of entry; tests and inspections.

The Administrator or his authorized representative upon presentation of appropriate credentials shall have a right to enter upon or through any retail outlet or the premises or property of any distributor and shall have the right to make inspections, take samples, and conduct tests to determine compliance with this part and the Act.

§ 80.5 Penalties.

Any person who violates these regulations shall forfeit and pay to the United States a civil penalty of \$10,000 for each and every day of the continuance of

¹ "State" means a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa.

such violation, which shall accrue to the United States and be recovered in a civil suit in the name of the United States, brought in the district where such person has his principal office or any district in which he does business. The Administrator may, upon application by the person against whom any such penalty has been assessed, remit or mitigate any such forfeiture. The Administrator shall have authority to determine the facts upon all such applications.

Subpart B—Controls and Prohibitions

§ 80.20 [Reserved]

§ 80.21 Controls applicable to gasoline distributors.

After July 1, 1974, no distributor shall sell to any distributor or retailer any gasoline which he represents is unleaded gasoline unless such gasoline does, in fact, meet the defined requirements for unleaded gasoline in § 80.2(g).

§ 80.22 Controls applicable to gasoline retailers.

(a) After July 1, 1974, no retailer or his employee or agent shall introduce, or cause or allow the introduction of, leaded gasoline into any motor vehicle which is labeled "unleaded gasoline only," or which is equipped with a gasoline tank filler inlet which is designed for the introduction of unleaded gasoline.

(b) After July 1, 1974, every person who owns, leases, operates, controls, or supervises a retail outlet at which 200,000 or more gallons of gasoline was sold during any calendar year beginning with the year 1971 shall offer for sale at least one grade of unleaded gasoline of not less than 91 Research Octane Number at such retail outlet: *Provided, however,* That the octane number of unleaded gasoline offered for sale in areas where altitude is greater than 2,000 feet may be reduced one (1) octane number for each succeeding 1,000 feet but not more than three (3) octane numbers in total.

(c) After July 1, 1974, every person who owns, leases, operates, controls, or supervises six or more retail outlets shall offer for sale at least one grade of unleaded gasoline of not less than 91 Research Octane Number at no fewer than 60 percent of such outlets; *Provided, however,* That the octane number of unleaded gasoline offered for sale in areas where altitude is greater than 2,000 feet may be reduced one (1) octane number for each succeeding 1,000 feet but not more than three (3) octane numbers in total.

(d) After July 1, 1974, every retailer shall prominently and conspicuously display in the immediate area of each gasoline pump stand the following notice:

Federal law prohibits the introduction of any gasoline containing lead or phosphorus into any motor vehicle labeled "UNLEADED GASOLINE ONLY."

Such notice shall be no smaller than 36-point bold type and shall be located so as to be readily visible to the retailer's employees and customers.

(e) After July 1, 1974, every retailer shall affix to each gasoline pump stand a permanent legible label as follows:

(1) For gasoline pump stands containing pumps for introduction of unleaded gasoline into motor vehicles, the label shall state:

Unleaded gasoline.

(2) For gasoline pump stands containing pumps for introduction of leaded gasoline into motor vehicles, the label shall state:

Contains lead antiknock compounds.

Any label required under this paragraph shall be located so as to be readily visible to the retailer's employees and customers.

(f) After July 1, 1974, every retailer shall equip all gasoline pumps as follows:

(1) Each pump from which leaded gasoline is sold shall be equipped with a nozzle spout having a terminal end with an outside diameter of not less than 0.930 inch (2.362 centimeters).

(2) Each pump from which unleaded gasoline is sold shall be equipped with a nozzle spout which meets the following specifications:

(i) The outside diameter of the terminal end shall not be greater than 0.840 inch (2.134 centimeters):

(ii) The terminal end shall have a straight section of at least 2.5 inches (6.34 centimeters) in length;

(iii) The retaining spring shall terminate 3.0 inches (7.6 centimeters) from the terminal end.

(g) If more than one grade of gasoline is dispensed from a gasoline pump or pump stand, the Administrator may grant an exception to paragraph (c) or (f) of this section where it has been demonstrated to his satisfaction that an alternate system of labeling or equipment will comply with the objectives of paragraph (c) or (f) of this section.

§ 80.23 Liability for violations.

Liability for violations of paragraph (a) of § 80.22 shall be determined as follows:

(a) (1) Where the corporate, trade, or brand name of a gasoline refiner or any of its marketing subsidiaries appears on the pump stand or is displayed at the retail outlet from which the gasoline was sold, the retailer and such gasoline refiner shall be deemed in violation. The refiner shall be deemed in violation irrespective of whether any refiner, distributor, or retailer, or the employee or agent of any refiner, distributor, or retailer may have caused or permitted the violation.

(2) Where the corporate, trade, or brand name of a gasoline refiner or any of its marketing subsidiaries does not appear on the pump or pump stand or

is not displayed at the retail outlet from which the gasoline was sold, the retailer and any distributor who sold the retailer gasoline contained in the retail outlet storage tank which supplied that pump at the time of the violation shall be deemed in violation.

(b) (1) In any case in which a retailer and any gasoline refiner or distributor would be in violation under paragraph (a) (1) or (2) of § 80.22 the retailer shall not be liable if the retailer can demonstrate that the violation was not caused by him or his employee or agent.

(2) In any case under paragraph (a) (2) of § 80.22 in which two or more distributors have sold the retailer gasoline contained in the retail outlet storage tank which supplied the pump from which the gasoline was sold, any of such distributors who can demonstrate that the violation was not caused by him or his employee or agent shall not be liable.

(c) In any case in which a retailer or his employee or agent introduced leaded gasoline from a pump from which leaded gasoline is sold into a motor vehicle which is equipped with a gasoline tank filler inlet designed for the introduction of unleaded gasoline, only the retailer shall be deemed in violation.

§ 80.24 Controls applicable to motor vehicle manufacturers.

The manufacturer of any motor vehicle equipped with an emission control device which the Administrator has determined will be significantly impaired by the use of leaded gasoline shall:

(a) Affix two permanent, legible labels reading "Unleaded Gasoline Only" to such vehicle at the time of its manufacture, as follows:

(1) One label shall be located on the instrument panel so as to be readily visible to the operator of the vehicle: *Provided, however,* That the required statement may be incorporated into the design of the instrument panel rather than provided on a separate label; and

(2) One label shall be located immediately adjacent to the gasoline filler tank inlet, outside of any filler inlet compartment, and shall be located so as to be readily visible to any person introducing gasoline to such filler inlet.

Such labels shall be in the English language in block letters which shall be of a color that contrasts with their background.

(b) Manufacture such vehicle with a gasoline tank filler inlet having a restriction with an inside diameter not greater than 0.910 inch (2.311 centimeters), which prevents the insertion of a nozzle with a spout larger than prescribed in § 80.22(f) (2) (i). Such filler inlet shall be designed so as to activate immediately any automatic shut-off device on any nozzle subject to § 80.22(f) (1) when the introduction of gasoline into such filler inlet from such a nozzle is attempted.

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Title 40—Protection of Environment

CHAPTER I—ENVIRONMENTAL
PROTECTION AGENCYPART 80—REGULATION OF FUELS AND
FUEL ADDITIVES

Control of Lead Additives in Gasoline

On February 23, 1972 (37 FR 3882), the Administrator proposed regulations providing for the general availability of lead-free gasoline by July 1, 1974 and a reduction in the lead content of leaded gasoline to 1.25 grams per gallon by 1977. The lead-free gasoline regulations were proposed primarily to ensure the availability of lead-free fuel for use in automobiles designed to meet Federal emission standards with lead-sensitive emission control devices. The Agency recognized that these regulations would also result in a reduction in lead emissions from the new automobile segment of the vehicle population, which would be equipped with those devices. However, based on public health consideration, it was considered necessary, to propose a reduction in the lead content of leaded gasoline as well.

After consideration of the information provided during public hearings and an extended comment period, as well as additional information on the health effects of airborne lead and the adverse effects of lead on emission control devices, the Administrator determined that the two regulations should be dealt with separately. On January 10, 1973, the regulations providing for lead-free gasoline were promulgated, and the regulatory sections providing for a reduction in the lead content of leaded gasoline were repropoed. (33 FR 1255 and 32 FR 1259)

The leaded gasoline regulations were repropoed because the Agency's position on the health effects associated with lead emissions changed substantially. The Administrator had originally proposed the regulations based on the conclusions that airborne lead levels exceeding 2 micrograms per cubic meter were associated with a sufficient risk of adverse physiological effects to endanger public health. After evaluation of the public comment and additional information on this issue, the Administrator determined that it was difficult, if not impossible, to establish a precise level of airborne lead as an acceptable basis for a control strategy. The original health effects analysis was reevaluated in view of this finding. The resulting new health position paper concluded that airborne lead can either be directly absorbed through the lungs as people breathe, or can settle out of the air to contaminate dirt which may be consumed by children. Strong evidence existed which supported the view that through these routes airborne lead contributes to excessive lead exposure in urban adults and children. In light of this evidence of health risks, the Administrator concluded that it would be prudent to reduce preventable lead exposure.

The repropoed regulations provided for a reduction in the average lead content of leaded gasolines to 1.25 grams per

gallon over a four year period as follows: 2.00 grams per gallon in 1975, 1.70 grams per gallon in 1976, 1.5 grams per gallon in 1977, and 1.25 grams per gallon in 1978. The specified average lead levels referred to the average lead levels of leaded gasoline produced by an individual refinery during any quarter of the specified year.

The final regulations contain a revised lead-reduction schedule based on the Administrator's determination that averaging over all grades of gasoline, including lead-free grades, is preferable to averaging over the leaded grades alone. The schedule has been adjusted to moderate the impact in the early years and to extend it for an additional year. This is discussed in greater detail below. The revised schedule prescribes lower allowable lead content levels, but the overall amount of lead used in gasoline would equal the lead usage expected to result from the repropoed leaded grade reduction schedule in 1979. The reduction schedule under this total pool averaging approach is 1.7 grams per gallon in 1975, 1.4 grams per gallon in 1976, 1.0 grams per gallon in 1978, and 0.5 grams per gallon in 1979. The various averaging alternatives considered by the Administrator are discussed below.

The repropoed reduction schedule was designed to accomplish a 60-65 percent decrease in lead usage from base 1971 by supplementing the projected increasing use beginning in 1974 of lead-free gasoline by new automobiles with catalytic (lead-sensitive) emission control systems. The schedule promulgated below also is designed to achieve the targeted decrease, and generally maintain the repropoed average lead contents for the leaded grades of gasoline.

The Administrator's judgment is that the promulgated reduction schedule is reasonable from the standpoint of protection of health and from the standpoint of economic and technological feasibility. While implementation of this schedule is reducing lead content of gasoline, a joint effort will be made by the Agency and the Department of Health, Education and Welfare to further examine lead emissions from automobile exhausts, to determine whether additional regulation is necessary.

Statutory basis. Section 211(c) (1) of the Clean Air Act authorizes EPA to "control or prohibit the manufacture, introduction into commerce, offering for sale, or sale of any fuel or fuel additive for use in a motor vehicle or motor vehicle engine * * * if any emission products of such fuel or fuel additive will endanger the public health or welfare". The scheduled reduction in the use of lead additives in gasoline to achieve a significant reduction in lead emissions from motor vehicles by 1978 is based on the finding that lead particle emissions from motor vehicles present a significant risk of harm to the health of urban populations, particularly to the health of city children. It is the Administrator's view that the statutory language quoted above does not require a determination that automobile emissions alone create the endangerment on which controls may be

based. Rather, the Administrator believes that in providing this authority, the Congress was aware that the public's exposure to harmful substances results from a number of sources which may have varying degrees of susceptibility to control.

Health implications of airborne lead—Introduction. The issue concerning the contribution of automobile lead exhausts to the country's lead exposure problem is complex and controversial. In order to complete a fair assessment of this problem, EPA has made a concentrated effort to obtain and review all the medical and scientific evidence. The Agency has repeatedly requested information and comments from the medical and scientific communities as well as the general public. Since the repropoal of the regulations, information gathered through the comment period on the repropoed regulations, earlier comment periods on the originally proposed regulations, and surveys of relevant studies by EPA personnel have been thoroughly reviewed and evaluated by a task force of EPA medical experts and scientists. A paper entitled "EPA's Position on the Health Implications of Airborne Lead" sets forth in detail the Agency's evaluation that there is a health basis for reducing the use of lead in gasoline. A copy of this paper is available from the Publications Section, Environmental Protection Agency, 401 M Street SW, Room 238W, Washington, D.C. 20460.

General summary of health issue. Environmental lead exposure is a major health problem in this country. A small but significant portion of the urban adult population and up to 25 percent of children in urban areas are over-exposed to lead. The lead exposure problem is caused by a combination of sources including food, water, air, leaded paint, and dust. The aggregate contribution of lead from all these sources poses a significant threat to health. However, it is extremely difficult to determine what percentage of the problem each separate environmental factor contributes. Since these are additive sources whose importance varies considerably among individuals it is likewise difficult to determine what impact would be achieved by partial or total reduction of lead from any source. Should the lead in all sources be reduced, however, it seems clear that the situation would be substantially improved. Leaded gasoline is a source of air and dust lead which can be readily and significantly reduced in comparison to these other sources. It is also one of the few lead sources not yet subject to any controls other than EPA's lead-free gasoline regulations.

Lead from gasoline accounts for approximately 90 percent of airborne lead, total lead additive usage being well over 200,000 tons a year. Lead from stationary sources and deteriorating leaded paint from buildings, combined with lead from gasoline cause high lead levels in dirt and dust. Of these sources, lead from gasoline is the most ubiquitous source of lead found in both the air and the dirt and dust in urban areas. Human exposure to this lead takes place by in-

halation and by ingestion of dirt and dust contaminated by air lead fallout. Since exposure to lead among the general population is widespread, it is reasonable that efforts be made to reduce preventable sources of lead exposure including lead emissions resulting from lead in gasoline.

Many of those disagreeing with the reposed regulations based their comments on EPA's failure to show sufficient evidence of adverse health effects specifically caused by the use of lead additives in gasoline. While most agree that the combustion of leaded gasoline causes an increase in the amount of lead in the environment, they do not believe that lead in gasoline represents a sufficient endangerment to health or a sufficient risk to the environment to warrant promulgation of controls. The arguments against the position set forth in EPA's reposed regulations include the following: (1) EPA has failed to show a clear correlation between lead levels in the air and those in the blood of exposed individuals; (2) lead from dust and dirt does not represent a significant threat to body burden of lead; (3) leaded paint is the primary cause of childhood lead poisoning and lead in gasoline does not play an important role in lead poisoning or excessive lead exposure; (4) lead in food and water and not airborne lead are the principal sources of lead to the general population.

A discussion of the four major areas of criticism and a summary of the significant new information received since the regulations were reposed are provided below.

I. Is there a correlation between air lead levels and blood lead levels? A portion of the comments received were critical of EPA's reposed regulation on the basis that consistently strong correlations have not been found between air lead and blood lead levels. The conclusion expressed by many comments is that except for persons whose occupations bring them in close contact with environmental lead, exposure to airborne lead does not contribute to increased blood lead levels and does not pose a significant threat to health.

These comments cite several studies which did not demonstrate a strong correlation between air lead and blood lead levels. For example, The Seven Cities Study did not show a close correlation between increase in blood lead levels and simultaneous increases in air lead exposures. Blood lead levels were lower among the New York City residents studies than the Philadelphia residents, despite the fact that air lead exposures among the New York residents were actually greater than those in Philadelphia. Also cited as evidence against EPA's position is the observation that despite significant increases in the use of lead in gasoline in recent years there have been no discernible increases in blood lead levels of populations so exposed.

Residential differences in blood lead levels have also not always corresponded to differences in air lead exposures. For example, studies of primitive populations,

as well as studies of rural U.S. populations, have shown that the blood lead levels in some of these groups are as high or higher than those of persons living in industrial areas, even though the air lead levels in the rural areas should have been much lower. A comparison between London day and night taxi drivers has also shown no significant differences in blood lead levels but did find differences in exposure to carbon monoxide suggesting that despite the possibility that air lead exposure in the day may have been higher than at night, this was not reflected in blood lead increases. However, differences in smoking intensity, as well as actual differences in air lead exposure between groups, could explain these results and neither were measured.

In summary, a number of comments have criticized EPA's position on the basis that there is not a good correlation between air lead exposure and blood lead levels.

The Agency has weighed against these criticisms studies which have shown that airborne lead does contribute significantly to lead exposure in the general population. For example, using a pilot lead isotope approach, preliminary data show that airborne lead at $2 \mu\text{g}/\text{m}^3$ can contribute as much as $\frac{1}{3}$ to total lead exposure in man. This result is consistent with data concerning the deposition of lead particles in the pulmonary tract and the absorption of such particles into the blood stream.

An unpublished study in Japan similar to the Seven Cities Study, but which has not yet been completely analyzed, has preliminarily demonstrated that airborne lead exposures below $2 \mu\text{g}/\text{m}^3$ affect blood lead levels.

Chamber studies in carefully controlled environments, have shown significant increases in blood lead of men exposed to air lead slightly greater than $3 \mu\text{g}/\text{m}^3$.

Differences in the blood lead levels between urban and suburban residents in the same geographic area have been found. When comparable groups with similar lead intakes from other sources besides air were studied, blood leads were consistently higher in urban areas and near highways where air lead concentrations were greatest. Thus while correlations between blood leads and air lead at lower exposure levels are not always good, the evidence indicates that air lead does contribute to general population lead exposure.

Failure to find consistent correlations does not in the Administrator's judgment invalidate the above conclusions. Studies which have come to contrary conclusions have generally failed to take into account the influence of other sources of lead on blood lead levels in people being studied. In the Seven Cities Study, for example, these other sources of lead influencing blood lead levels were not adequately considered in the blood lead-air lead comparisons. EPA has re-analyzed the Seven Cities Study and has found that air lead was a significant, though not the most influential factor affecting blood lead levels. Further, in

the Seven Cities Study, urban-suburban differences in blood leads between comparable groups were consistently found which at least in part reflect differences in air lead exposure.

In summary, absorption of air lead does contribute to total lead exposure and when added to lead from other sources such as food and water results in total exposure that is excessive. Thus, the partial removal of lead from the air will help to reduce the degree of excess lead exposure which currently exists among adults and children in the United States.

II. Does dust lead contribute to lead poisoning in children? Many comments received by the Agency express the viewpoint that the primary cause of lead poisoning in children is ingestion of lead-based peeling paint. Investigations of cases of clinical lead poisoning in children have repeatedly demonstrated peeling leaded paint as the major source of exposure. Since peeling leaded paint has consistently been observed in the environment of lead poisoned children, many commentators thought it unlikely that lead in dust and dirt could make a significant contribution to this problem. They also point out that lead in dust could be caused by peeling or erosion of leaded paint in or near a home.

One commentator cites X-ray studies of the abdomen among children with lead poisoning as showing paint chips in the majority of instances. Another argues that differences in blood lead levels between Black and Puerto Rican children could not be explained by exposure to different quantities of lead in dust. Further, studies have shown that animals do not absorb lead from dust as readily as they absorb lead from paint.

Commentors have criticized the Agency for considering that the El Paso Study supports the dustfall hypothesis related to lead in gasoline. In the El Paso Study, children living near a lead smelter were examined for blood lead levels and for sources of lead in their environment. These results showed that children living nearest the smelter had the highest blood lead levels and that dust lead was a probable major cause. Many commentators, however, considered the El Paso Study applicable only to stationary lead sources and not to lead in gasoline which is different in particle size and chemical composition from smelter-emitted lead.

EPA recognizes the importance of leaded paint as a source of lead exposure for children and that it is the primary cause of clinical lead poisoning. However, based on the evidence available to it, EPA does not believe that leaded paint is the only significant source of lead contributing to excessive lead exposures in children. The Agency's position is that numerous sources contribute to childhood exposure including lead in food, water, air, dust, and dirt as well as paint. Among these sources, contaminated dust and dirt from motor vehicles exhausts are believed to be important exposure routes.

Currently, the contention that lead contamination of dust and dirt by automotive emissions is a significant source of lead exposure is a hypothesis consistent with information provided by a vari-

ety of studies. However, at this time, not all links in the argument have been established beyond dispute and no single study has collectively inter-related all steps in the exposure process to conclusively inter-related all steps in the exposure process to conclusively prove or disprove the hypothesis. Despite the existing uncertainties, comments received from the majority of scientists not affiliated with industrial or environmental groups support the contention that dust is an important source of exposure. This is based on the following evidence:

A. Environmental sampling in a number of cities has demonstrated the ubiquitous presence of lead contaminated dust in urban areas. These measurements were taken inside and outside of buildings including homes and schools. Dust lead measurements outside homes commonly ranged from 0.1 to 0.5 percent lead by weight. Measurements well in excess of 0.5 percent have also been recorded. Inside homes, samples were found to contain lead contents ranging from 0.05 to 0.2 percent and in some instances as high as 0.5 percent. Current Federal regulations have already established that lead concentrations in paint in excess of 0.5 percent represent a definite hazard to children and serious consideration is being given to reducing the allowable level to 0.06 percent. In testimony before the United States Senate, Dr. Merlin DuVal, at the time Assistant Secretary for Health and Scientific Affairs at HEW, commented on an appropriate safe level for lead in paint:

Based on information now available to us, we are satisfied that it is technologically feasible, and desirable from a health viewpoint to move toward the .06 percent standard recommended by the American Academy of Pediatrics.

B. As was stated above, high lead concentrations in dust are prevalent in urban areas. It is not clear in all instances, which sources are contributing most to this contamination. Comments received by the agency point out that high lead levels in some cases may be caused by the chipping or peeling of leaded paint from interior and exterior surfaces. EPA agrees that this is true. In other cases, the lead dust content is clearly the result of lead emission from stationary sources such as smelters. However, EPA believes an important and the most ubiquitous source of lead in dust is the exhaust of automobiles using leaded gasoline. Annually, over 200,000 tons of lead are used as additives in gasoline. The vast majority of this lead is emitted into the environment. Although significant amounts of lead remain airborne for extended periods of time, evidence indicates that a large quantity of the exhaust lead rapidly settles to the ground within several hundred feet of the source. Measurements of lead in dust and soil further indicate that lead content decreases with increased distance from the roadway. It has also been found that dust lead levels in homes near heavily traveled roadways are significantly higher than in comparable homes located along side streets.

It should be noted that the majority of studies reporting high levels of lead in dust and dirt did not associate sources of peeling leaded paint or stationary lead sources with the lead dust measurements. Accordingly, the Agency believes that in most circumstances lead from automobile exhaust is the primary source of lead in dust and soil in urban areas.

C. The general environment of urban children commonly includes dirt and dust contaminated with lead. A large percentage of children, especially between the ages of one and three years, are known to ingest non-food objects in their mouths. It has been demonstrated that children living in high-dust lead environments have greater quantities of lead on their hands than children living in less contaminated environments. The existence of leaded dust on the hands of urban children has been highlighted by the common occurrence of inadvertent lead contamination of finger prick blood lead specimens taken from these children.

D. Children who ingest leaded dust and dirt can be expected to absorb some of the lead into their bodies. Though it is difficult to determine the precise amount of lead that would be absorbed, animal experiments suggest that appreciable quantities of this lead, whether from smelters, paint or gasoline exhaust, are absorbed. Further, it has also been shown that at least some children residing in environments heavily contaminated by leaded dust and dirt absorb enough to suffer from subclinical and even clinical effects of lead overexposure. This was particularly true in the case of El Paso, mentioned above. Though the lead source was a smelter, animal studies indicate that lead in dust due to leaded gasoline would be absorbed in quantities comparable to that emitted by the smelter. Another study from Charleston, South Carolina indicates that children residing in homes near high soil lead concentrations had a greater frequency of lead poisoning than children residing in less contaminated areas. This study suggests that lead from soil was absorbed, although it is not clear what sources were primarily responsible for those high soil lead levels. It should be further noted that instances such as those above, coupled with known high levels of lead in dirt and dust, indicate that children could easily ingest enough lead by this route to be significant.

E. Various studies indicate that cases of lead poisoning and significant overexposure are not always associated with urban home environments in which sources of peeling or chipping leaded paint were observed. These studies include children residing primarily in inner city areas. Admittedly children may be exposed to peeling or chipping leaded paint in environments away from their own homes. However, since several recent studies indicate that up to 50 percent of children with excessive lead exposure are known to not reside in homes where peeling lead based paint can be found, it is unlikely that peeling paint exposure away from the homes accounts

totally for this difference. Furthermore, extension of blood lead screening programs outside of urban areas indicates that the lead exposure problem is found in children residing in higher income areas where peeling paint is not frequent and exposure to this source away from the home is less likely. In conjunction with these findings, residence near roadways have been found to contain higher quantities of lead than those measured away from the road. Findings such as these indicate that in some circumstances dust lead is an important factor and at times may be the primary factor contributing to excessive lead exposure associated with subclinical if not clinical effects.

P. Clinical symptoms resulting from very high lead exposure in children are known to be associated with permanent neurologic damage. It has also long been suspected, but not proven beyond doubt, that lead exposures below those sufficient to cause clinical symptoms in children are also harmful. In particular it has been observed that physiologically significant biochemical changes occur in children with excessive exposures below clinical toxicity and it has been proposed that these changes are reflective of subclinical changes that precede overt disease. Recently available scientific information, though far from completely resolving this issue, supports the view that adverse effects due to lead in children are not confined only to situations in which overt clinical symptoms of lead poisoning occur. Included in these findings are increased subtle neurological impairments among children more highly exposed to lead below levels known to cause clinical disease.

III. *Will a reduction of lead in gasoline reduce the incidence of clinical lead poisoning in children?* Ingestion of peeling paint has long been recognized as the primary cause of clinical lead poisoning in children. This position has been expressed in many comments received by the Agency including those from several noted authorities in the field of lead poisoning. For this reason, numerous comments have questioned the need to reduce lead in gasoline on the basis that this action would have little if any impact on reducing the incidence of clinical lead poisoning in children.

While EPA recognizes the importance of leaded paint as a source of lead for children and has supported governmental efforts to reduce this risk, the findings of several studies suggest that lead poisoning can develop in the absence of significant sources of leaded paint. Though this possibility does not affirm that reducing lead in gasoline will reduce the incidence of lead poisoning in children it indicates that lead in gasoline may, in conjunction with other non-paint sources, contribute to the development of lead poisoning. Whatever the impact this reduction may have upon clinical lead poisoning, the action will significantly reduce lead exposure among children.

EPA is also concerned about the probability that children exposed to lead at

levels below those associated with clinical poisoning are also being adversely affected. Several effects identified as sub-clinical lead effects include impairment of fine motor functions, and altered behavior.

It is noteworthy that in a significantly large percentage of excessive lead exposure cases (up to 50 percent in some instances) peeling lead based paint in the home cannot be identified as a source of the exposure. Thus, while leaded paint is recognized as the major cause of childhood lead poisoning, it is not clear that leaded paint is singly responsible for the large degree of excess childhood lead exposure in this country.

IV. *Excess lead exposure among the general population could result from a combination of lead sources, not one of which by itself is sufficient to be a problem. Under these circumstances, would it not be preferable to formulate a control strategy based upon reducing lead levels among those sources that contribute the most to this total exposure?* It is generally agreed that food is the major source of lead to the general population. A World Health Organization expert committee reports that according to the results of total diet studies in industrialized countries, the total intake of lead from food generally ranges from 200-300 ug per person per day. WHO further states that based upon available data, these levels are similar to those found in the past 30-40 years and that no upward trend in lead levels in food is evident.

This information suggests that the level of lead in food has remained relatively constant in recent times. Though lead in food would certainly contribute to total lead exposure for the general population, lead in food is probably not the source that is most readily reduced in the event that total exposure to lead is excessive. According to WHO, "Any increase in the amount of lead derived from drinking water or inhaled from the atmosphere will reduce the amount that can be tolerated in food. The lead in air is probably the contribution that is most accessible to action for reducing the total body burden of lead, especially where this fraction is large compared with that absorbed from food."

V. *What new information has become available since reproposal of the regulation and as a result of the additional comment period?* The majority of comments addressed the evidence presented by EPA in support of its proposed regulation and did not introduce new evidence. The number of comments received were approximately evenly divided between those in favor and those against. The bulk of comments critical of EPA's health position was submitted by industry or industry affiliated scientists. Independent scientists who commented, not affiliated directly with the industry or environmental groups, were in favor of the regulation by approximately 2/1. Most favorable comments, though often from scientists knowledgeable in the field of lead, provided testimonial support rather than new evidence. Most new data that either was presented in comments or

which subsequently became available to EPA does support the need to reduce lead emissions from automobiles. Among these latest data are the following:

(1) Studies of subclinical lead effects in children continue to suggest that fine motor function and behavior are affected. Though this issue is not completely resolved, the new data emphasize the potential subclinical risk.

(2) It has been reaffirmed that high dust lead levels, up to 1% lead content, have been found in children's play areas, inside schools and in homes.

(3) New evidence reaffirms that high dust lead levels can be caused by leaded gasoline. A recent study in Rochester, New York, demonstrates that high dust lead levels in homes are not always associated with peeling paint and that house dust lead levels are higher in urban than suburban homes. A study in Vermont has shown that higher concentrations of lead in house dust are found in homes located near busy roads compared to homes on side streets. This latter point is consistent with the previously known fact that air lead fallout decreases with increased distance from roadways. A study by EPA in New York City indicates that higher household dust and soil lead levels are found in areas with greater dust lead fallout from the air as compared to areas with little lead fallout.

(4) Young children living in homes with high dust lead contents have been found to have more lead on their hands than children in homes with low dust lead content. This finding provides an important link in the dust-lead hypothesis. The finding is consistent with observations that finger prick blood-lead specimens taken from children are routinely contaminated by lead that is present on the fingers.

(5) Studies continue to indicate that a high degree of exposure to environmental lead is not confined to inner city areas. Cases of over-exposure continue to be reported from areas in which leaded paint would not be expected to be the predominant factor.

(6) Studies from Newark, New Jersey, observed that the frequency of lead poisoning and undue lead exposure is doubled among children living close to major roadways compared to children living farther away.

Other means of achieving lead reductions. Before prescribing regulations based on public health consideration, the Administrator must consider "other technological or economically feasible means of achieving emission standards under section 202." Thus, if EPA determined that a reduction of lead emissions from motor vehicles is necessary for protection of public health or welfare, the feasibility of achieving such a reduction under section 202 (new motor vehicle emission standards) must be considered.

The primary alternative to the use of lead additive regulations to achieve reduction in lead emissions would be to impose a lead emissions standard which would result in the installation of "lead-

traps" on motor vehicles. The possibilities of incorporating this alternative, however, are limited by the existing legal and technical realities.

EPA does have the authority to impose a lead emissions standard on new vehicles which would result in the use of lead traps. The earliest that such a regulation could be imposed, however, would be the 1976 model year. Most motor vehicle manufacturers are expected to use lead sensitive emissions control systems to meet the Federal emissions standards which are applicable to new vehicles in 1976. Lead traps cannot adequately protect these systems because they are not capable of trapping all of the lead emitted. Lead-free gasoline will be required in most new vehicles based on the information now before the Agency. See Aerospace Report, PB-205-931, available from National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22151. Accordingly, the use of lead traps is relevant principally with regard to in-use vehicles. EPA realizes that lead-tolerant emission control systems may be used on a progressively greater number of new vehicles in the future. However, many of the new technology lead tolerant control systems are expected to operate on low octane gasoline which may not require lead additives. Nevertheless, the Agency is continuing to study the feasibility of using lead traps on new vehicles in the future.

The Clean Air Act does not authorize EPA to establish national emission standards on in-use vehicles. Since lead traps cannot be used successfully on the vast majority of new vehicles and the Agency is legally incapable of requiring them on all in-use vehicles, the use of lead traps is really not a feasible alternative at this time in the Administrator's judgment.

Despite the legal authority obstacle EPA has examined the technological capabilities and costs of lead traps and has determined the regulation of lead additive use is the preferable method of controlling lead emissions.

Other emissions. Concern has been expressed that the control of lead additives may result in the use of other gasoline components or additives which may also have an adverse impact on health. EPA has evaluated the potential use of other additives or greater percentages of certain gasoline components in conjunction with the lower lead levels. This evaluation has been performed in recognition of the Agency's responsibility to assess the environmental consequences of its actions. (See Judge Leventhal's opinion in *Portland Cement V. Ruckelshaus*, 5 ERC 1593, 1599, U.S. App. D.C. (1973).)

Lead additives are used as efficient octane boosters in gasoline. If the use of lead is restricted, the refiner must use greater quantities of blending stocks with high aromatic hydrocarbon concentrations, or substitute anti-knock additives, to increase gasoline octane levels. Consequently, the Administrator has considered the effects of increased aromatic hydrocarbon content of gasoline or the use of manganese additives on emis-

sions from the general motor vehicle population and the effects of these emissions on health. EPA has also considered the impact of the regulations on particulate emissions.

A. Impact due to increased use of aromatics. The implementation of the promulgated and re-proposed lead regulations is projected to result in a 5 to 7 percent increase in the average aromatics content of gasoline. Concern has been expressed that this increase will cause a complementary increase in the reactivity of automobile exhaust and in the quantity of polynuclear aromatic emissions from the motor vehicle population. EPA has determined that neither the reactivity of automobile exhaust or the emissions of polynuclear aromatics will increase above current levels due to the lead regulations.

Emissions reactivity. Gasoline is composed of three general types of hydrocarbon: aromatics, olefins, and paraffins. Aromatics and olefins are highly reactive and facilitate the formation of photochemical smog. Assuming no hydrocarbon emission controls, aromatics emissions are linearly related to the aromatic content of gasoline. Olefin emissions are directly related to the olefin and paraffin content of gasoline. An increase in the aromatic content of gasoline is accompanied by a decrease in the paraffin and olefin content. Consequently, reactive aromatic emissions increase resulting from an increase in the aromatic content of gasoline are generally offset by a decrease in the reactive olefin emissions due to a complementary reduction in the olefin and paraffin content of the specified gasoline. Accordingly, the increase in the aromatics content in gasoline will not have a significant impact on automobile emissions reactivity.

The lack of increase in exhaust reactivity due to increased use of aromatics has been verified in smog chamber studies completed by the Bureau of Mines as well as EPA. It should also be noted that aromatic emissions from the automobile population will continue to decrease as vehicles with increasingly stringent hydrocarbon emission control systems replace older uncontrolled vehicles on the road.

A detailed analysis estimating exhaust reactivity and the effect of the EPA fuel regulations has been conducted and reported by Dr. A. P. Altshuler in "Effects of Reduced Use of Lead in Gasoline on Vehicle Emissions and Photochemical Reactivity," February, 1972. This paper is available from the Environmental Protection Agency's Office of Public Affairs, Publications Section, Room 233 W. 491 M Street, SW., Washington, D.C. 20460.

Polynuclear aromatic emissions. Polynuclear aromatic hydrocarbons (PNA) are carcinogenic and are primarily caused by hydrocarbon emissions from stationary sources such as petroleum refineries and coke ovens. Currently automobile emissions account for less than 2 percent of total PNA emissions.

Polynuclear aromatic emissions from the general automobile population have

been steadily declining since the introduction of hydrocarbon emission controls in 1963. Due to the continued attrition of older uncontrolled vehicles from the road and the introduction of new vehicles with stringent hydrocarbon controls, PNA emissions should be reduced by more than 75 percent from current levels by 1980. This assumes the implementation of both the promulgated lead-free and re-proposed low-lead regulations will have a very slight impact on the rate of decrease in PNA emissions. According to a recent EPA analysis, PNA emissions will be reduced by 73 percent by 1980 assuming the implementation of the 1976 hydrocarbon emission standards. If the lead regulations are implemented, PNA emissions will decrease by 76 percent. (An analysis of this problem is contained in a paper entitled "Lead in Gasoline, Impact of Removal on Current and Future Automotive Emissions".) EPA concludes that the current use of lead additives endangers the public health to a greater degree than this difference of 2 percent in the rate of decrease of PNA emissions.

This relative endangerment judgment is based upon the following line of reasoning. Lead additive emissions from automobiles have been determined to pose a sufficient endangerment to health to warrant regulatory action. Mobile sources contribute less than 2 percent of the total polynuclear aromatics emissions. Implementation of the Federal emission standards without the lead additive emissions will result in an approximately 73 percent decrease in polynuclear aromatic emissions from current levels of automobile emissions. Implementation of the lead regulations will slow the rate of emissions decrease by about 2 percent. Assuming automobiles account for the same relative contribution of aromatics in 1980, implementation of the emission standards with the regulations as compared to without the regulations would only cause a 0.04 percent difference in reduction rate in total PNA emissions. In view of the continual decline in PNA emissions and any associated health risk, from stationary sources through particulate controls and from mobile sources through hydrocarbon controls, the health implication of the slight difference in PNA emissions due to the lead regulations is considered negligible.

Although the indication is that the lead regulations will not produce an aromatics or a PNA emission problem, EPA nevertheless has the authority to regulate the aromatic content of gasoline should such action become necessary.

B. Particulate emissions from unleaded fuel. Exhaust particulate resulting from the use of leaded and lead-free gasoline has been extensively examined. The examination concluded that since lead additives account for a major portion of exhaust particulates, the use of fuel without lead additives substantially decreases particulates emissions. This conclusion is true for vehicles equipped with emission control devices as well as uncontrolled automobiles.

C. Use of substitute anti-knock additives. Various anti-knock additives have been developed, but as is explained in the paper, "Lead in Gasoline" referred to above, the effectiveness of almost all of these additives is severely limited. Manganese is the only fuel additive besides lead which is now recognized as being a cost effective octane booster. While manganese additives are not currently in widespread use in gasoline, manganese may be used as a partial replacement for lead in gasoline. EPA has been examining the impact the use of manganese additives might have on control devices and on the public health.

One automobile manufacturer has recently completed tests using fuel containing 0.25 grams per gallon manganese in vehicles equipped with catalytic emission control systems. While no chemical poisoning was observed, a very high back pressure developed after several thousand miles. This back pressure was due to manganese oxides plugging the catalyst. Apparently, manganese oxides, unlike lead halides, are nonvolatile and physically destroy catalyst functioning by plugging. The 0.25 grams per gallon manganese is above the levels that would be used in fuel by only a factor of two. Accordingly, the plugging problem would eventually occur if manganese is used in lead-free gasoline. Furthermore, deterioration of catalyst performance would occur soon after an individual began using gasoline containing manganese additives. At the present time, the auto manufacturers have not requested that manganese additives be controlled. This may reflect the industry's expectation that manganese additives will not be used in lead-free gasoline. If it is used, EPA would have to consider regulating manganese additives under the authority of section 211(c)(1)(C) of the Clean Air Act.

Occupational experience indicates that airborne manganese at sufficiently high levels of exposure can cause damage to the central nervous system with symptoms similar to that in Parkinson's disease, and can cause manganese pneumonia. Available evidence indicates that dosages required to produce these adverse effects are several orders of magnitude above those that would be present in the ambient air as a result of even the widespread use of manganese as a gasoline additive. Thus, while there presently appears to be a reasonable margin of safety with use of manganese in gasoline, the health implications of this use require continued study. An EPA position paper on manganese is currently being prepared which will be available in the near future. This document will be based upon a comprehensive review of the information available on manganese directed by the National Academy of Sciences.

If regulation of manganese in gasoline for health reasons is found to be necessary, EPA has authority to do so under the Clean Air Act. Though the Agency does not currently have enough evidence to definitely say that manganese in gasoline would pose a threat to health, EPA would not favor the use of manganese in

gasoline until additional studies are completed. However, at this time, the use of manganese additives is judged not to pose as significant a risk to health as that from lead additives.

Cost and energy impacts. Recently EPA has worked with Bonner and Moore Associates to complete a study based on updated information of the impacts associated with the re-proposed leaded grade regulations. This study separates the various costs according to two assumptions concerning the portions of the vehicle population which will use lead-free gasolines. The first case assumed all motor vehicles manufactured after 1975 will be equipped with lead sensitive catalytic emission control systems and will thus need lead-free gasoline. The second case assumed an ever increasing portion of the vehicles produced during model years after 1975 will be equipped with emission control systems capable of tolerating leaded gasoline. The second case assumed that by the 1985 model year, all new vehicles will have emissions control systems which can tolerate lead.

Based on this new data, EPA has calculated the annual consumer costs attributable to the low-lead regulations. This calculation includes the increased costs of raw stocks, as well as operating and production costs at the refinery. During 1980, capital investment in the refinery industry is predicted to be roughly \$1.5 billion. The low-lead regulation will force the industry to invest an additional \$82 million. If a lead-tolerant technology is gradually phased in and thus more leaded gasoline is used, the incremental investment impact of the low-lead regulation will be \$113 million. This figure will increase the cost of producing gasoline by less than .1¢ per gallon.

Recently, much concern has been expressed about the potential impact lead regulations would have on the nation's crude oil supply. The low-lead regulations will not go into effect until 1975 and will have a minimal impact on crude oil requirements during this decade. Modeling studies completed by Bonner and Moore Associates demonstrated no positive impact in either 1975 or 1977 on crude usage. If it is assumed that additional leaded gasoline is required to fuel new vehicles equipped with lead tolerant emission control systems which might be partially phased in between 1976 and the end of the decade the impact represents less than a .4 percent increase in crude usage by 1980. If one assumes catalysts are used on all future model vehicles and consequently the quantity of leaded gasoline produced continues to decline, the low-lead regulations never have a significant impact on crude requirements.

It is instructive to compare these numbers with the energy impact of air conditioners in automobiles. Air conditioners have been estimated to have a 13 percent impact on fuel economy. In 1980 if 75 percent of the automobiles are equipped with air conditioners, the impact on crude oil requirements will be approximately 800 thousand barrels per day or

roughly 4.4 percent of the nation's needs.

Averaging strategy. The lead regulations proposed on January 10, 1973, would permit each refinery (not company) to average its lead usage over quarterly production of leaded gasoline so long as the average lead content per gallon did not exceed the applicable standard. Leaded pool averaging was proposed for comment based upon the determination that this approach afforded optimum refining flexibility consistent with attainment of the Agency's goal of 60-65 percent reduction in lead usage.

In light of additional information and views received during the comment period, EPA has reviewed the merits of two alternatives to leaded pool averaging. These are (1) a system of total pool averaging, permitting a refinery to average its lead usage over all grades of gasoline produced including the unleaded grade, and (2) permitting each refinery a choice between leaded pool averaging and total pool averaging. Analysis of the impacts and practicalities of the alternative averaging approaches has led EPA to conclude that total pool averaging should be adopted.

Comparing the effects of leaded pool averaging and total pool averaging shows that refiners who market two grades of gasoline, one leaded and one unleaded grade, are significantly penalized by leaded pool averaging. Because two grade marketers are unable to count production of unleaded gasoline in computing the average, a leaded pool standard exerts pressure to market three grades of gasoline, including two leaded grades, to maximize allowable lead usage. Leaded pool averaging similarly tends to penalize three grade marketers who produce more than the industry average proportion of unleaded gasoline. It benefits refiners who produce little or no unleaded gasoline.

Total pool averaging is not expected to induce three-grade marketers to opt for two grades, but does not tend to discourage production of unleaded gasoline. A total pool standard permits each refiner to use the same amount of lead for equivalent gasoline production and is more neutral in its effect upon industry marketing decisions.

The alternative of allowing each refinery a choice between leaded pool and total pool averaging would permit each refinery to choose the system that maximizes lead usage. The price of this flexibility is that lead reduction goals would not be achieved. It is not possible under an option system to predict what reductions in lead usage would be achieved under the regulations. The reductions achievable under an option system would depend on the mix of leaded and unleaded gasoline sales, the sales volumes, and the marketing plans of all gasoline refiners. The option alternative does not permit reasonable estimates of the reductions in lead usage attainable under any given pair of standards.

A majority of the refiners who commented on the regulations recommended that total pool averaging be adopted.

The Administrator finds that total pool averaging is in fact the fairest workable mechanism for accomplishing the necessary reduction in lead usage.

Computation of total pool standard. The promulgation of a total pool average standard requires that the re-proposed leaded pool standard be adjusted to take account of projected sales of all gasoline. The method of computation is to multiply the numerical leaded pool standard by the percentage of leaded gasoline sales estimated for the particular year. For example, 2 grams per gallon \times the percentage of 1975 sales of leaded gasoline = the total pool standard for 1975.

Future sales of unleaded and leaded gasoline cannot be predicted with complete assurance. Actual sales of unleaded gasoline will depend upon the number of vehicles requiring it to meet emission standards, the extent to which owners of vehicles not requiring unleaded gasoline will buy it, and the projected miles driven and fuel consumption of vehicles in the various model year classes.

A study entitled "Alternative Proposals for the Regulation of Lead Additives in Gasoline" prepared for EPA by the firm of Turner, Mason, and Solomon in June, 1972, sets forth estimates based on different assumptions affecting sales of leaded and unleaded gasoline. The estimates selected by EPA as most consistent with present trends in unleaded gasoline sales are provided in case I of the Turner, Mason and Solomon Report. Case I assumes no extension of the 1975 standards, eliminating the need for unleaded gasoline, but that owners of pre-1975 model year motor vehicles will purchase little or no unleaded gasoline.

EPA recognizes that the assumption that owners of pre-1975 vehicles will purchase little or no unleaded gasoline results in conservative estimates of unleaded gasoline sales, but this assumption is offset by the fact that not all 1975 vehicles will require unleaded gasoline.

Using the Case I estimates of future sales of leaded and unleaded gasoline, the conversion of the proposed leaded pool standard to a total pool standard is as follows:

Year	Leaded pool std.	Percent of sales unleaded	Total pool std.
1975	2.0	82.2/17.8	1.64 = 1.6
1976	1.7	69.8/30.2	1.18 = 1.2
1977	1.5	59.6/40.5	.89 = .9
1978	1.25	50.9/49.1	.63 = .6
1979	1.25	43.6/56.7	.51 = .5

The promulgated reduction schedule is derived from the table above, but the schedule has been adjusted to moderate the economic and technological impacts of the regulations during the period over which the reductions would be accomplished. To achieve the targeted 60-65% reduction in lead usage requires that the schedule be extended to include 1979. The total pool standard corresponding to the proposed leaded pool standard for 1979 is .5 gram per gallon. As stated above, the schedule promulgated is as follows:

January 1, 1975.....	1.7 grams per gallon.
January 1, 1976.....	1.4 grams per gallon.
January 1, 1977.....	1.0 grams per gallon.
January 1, 1978.....	.8 grams per gallon.
January 1, 1979.....	.5 grams per gallon.

This reduction schedule will achieve the 60-65 percent reduction in lead usage and emissions as planned and will also assure that industry's lead usage under total pool standards is approximately the same as the lead usage projected under the leaded pool standards previously proposed.

The standard will have to be evaluated in 1978 to determine what further reductions in the lead standard, if any, are necessary to maintain lead emissions at the desired level. Presumably no further reductions will be required if unleaded gasoline remains the fuel required for new motor vehicles. If unleaded gasoline is no longer required for new vehicles, the 1978 standard will be reexamined in light of increasing gasoline demand.

Combining refineries for purposes of averaging. Two refineries have requested that the regulations be changed to authorize EPA to approve combinations of refineries for purposes of computing the average instead of requiring averaging at each refinery. This approval would be requested to enable a company to concentrate production of leaded or unleaded gasoline at particular refineries.

EPA proposed averaging at each refinery instead of each company in order to mitigate any regional variation in lead emissions due to averaging. Regional variation could result from the mix of gasoline grades sold in a particular market if a company used its lead allotment mainly in one grade or from a company's decision to produce high-lead gasoline at an old southeast refinery and low-lead gasoline at a newer west coast facility, each serving different markets. Requiring lead levels to be moderated at each source is a reasonable effective means of minimizing variation in the area where the gasoline is actually sold.

Although one company has suggested that the location of the refineries in a particular EPA region might serve as a basis for approving combinations, this criterion does not provide assurance that the areas served by those refineries and other refineries would not be subject to variation in lead emissions. There is no necessary correlation between the location of the refineries and their service areas. The Administrator has concluded that there are no workable criteria for assessing the impact of combinations for purposes of averaging and that the refiners' desire for added flexibility in lead usage cannot be accommodated without compromising the objective of minimal variation in reduction in lead emissions in all parts of the country.

Averaging period. Many refiners requested an annual or semiannual averaging period instead of the quarterly period proposed. A longer averaging period would accommodate seasonal variations in lead usage. Because high volatility, high octane blending stocks are used in the winter season to facilitate cold starts, less lead is needed in winter blends. The

refiners would like to be free to put more lead in summer blends, and a longer averaging period would make this possible.

The summer season is also the period of maximum exposure to airborne and dustborne lead for both children and adults. For this reason, EPA is unable to agree to the change proposed in the averaging period.

Small refiners. The repropoed regulations provided for a one-year delay of the requirement to comply with the lead reduction schedule for small refiners, as defined in § 80.26(b), in recognition of special lead-time problems faced by this group. EPA has reviewed the lead-time requirements of the small business refiners with particular reference to the effect on lead-time, if any, of the change to a standard based on total pool averaging. The Agency recognizes that under the repropoed leaded pool standard, refiners producing little or no unleaded gasoline received the benefit of a higher average lead level per gallon of leaded gasoline. Some small refiners fall into this category, and would have been able to use more lead under a leaded pool standard taking account of production of unleaded gasoline by other refiners.

EPA's evaluation of the small refiners' situation has led to the conclusion that these refiners require additional lead-time for compliance beyond the one year deferment previously proposed. This appears to be the case regardless of the averaging strategy adopted. Industry and consultants' estimates of time required by small refiners to plan, finance, and construct upgraded refining facilities range from two to three years from the date of promulgation of final standards. Accordingly, the Administrator has determined that it is reasonable and necessary to defer the requirement for compliance by small refiners until January 1, 1977. On this date, small refiners are required to comply with the 1977 standard.

Review of lead reduction program. In the January 10, 1973, reproposal of the regulations, the Administrator stated his intention to reduce the lead content in gasoline as much as possible, giving consideration (a) to the degree of reduction achieved by introduction of unleaded gasoline and (b) evidence on the feasibility of reducing lead from other environmental sources. It is too early to state whether unleaded gasoline sales will expand steadily through the seventies. Studies of potential reduction in lead from other sources are in progress. Accordingly, the Administrator has determined that it would be premature to announce a decision on the need for further reductions in lead in gasoline. EPA will review progress under the regulation as well as additional studies every three years, beginning in 1977. This review will afford a firmer basis for a decision on whether further action is necessary to regulate lead in gasoline to protect public health and welfare.

Reporting by lead additive manufacturers. The January 10, 1973 reproposal included a requirement that lead additive

manufacturers would report quarterly to the Administrator on their shipments of lead to each refinery. No comments were received on this proposal, which is promulgated below as proposed. The basis for the requirement—that it is determined to be necessary for verification of lead additive usage reports by refineries—has not changed.

Prevention of violations by refiners. As a complementary measure to the January 10, 1973 promulgation of a strict liability provision in § 80.23 applicable to refiners, the Agency on that date proposed a provision specifying that it is the refiner's duty to prevent violations of § 80.22(a). Two refiners and one petroleum trade association commented that practical and legal considerations made the regulation unreasonable, particularly as regards the requirement on permitting violations. One other refiner commented that if the requirement was to be adopted, it should provide for a showing by the refiner that he in fact did not cause or permit a given violation. The issue of vicarious liability under § 80.23 is now in litigation and the Agency is engaged in negotiations with refiners which may lead to revision of the provision. Accordingly, no action is being taken on the proposed § 80.20(c), but it is not being withdrawn.

Control of lead under Title I. One commentator has contended that the Clean Air Act requires the Administrator to establish a national ambient air quality standard for lead under Title I or, at least, to impose controls under § 211 that would achieve results which would be as protective of health on as expeditious a timetable as could have been achieved under Title I. The commentator, an environmental group, concludes that the repropoed lead reduction schedule would achieve "far less effective and timely results than action under Title I because the repropoed schedule is so weak," and petitioned EPA for the issuance of national ambient air quality standards for lead.

It is clear from Agency actions to date that the Administrator has chosen to regulate lead emissions under section 211 of the Act. No action on lead under Title I is currently planned.

It is the Administrator's judgment that he may regulate a substance under section 211 without necessarily tailoring his action to what could have been accomplished under sections 103, 109, and 110, since section 211 is a co-equal grant of regulatory authority. The determination whether to issue a criteria document for a substance and thereby set Title I actions in motion is discretionary with the Administrator. Section 103 expressly recognizes this, inasmuch as it required the Administrator to set for action under Title I only those air pollutants "for which air quality criteria had not been issued before the date of enactment of the Clean Air Amendments of 1970, but for which he plans to issue air quality criteria. (emphasis added) This falls considerably short of a statutory directive to issue criteria for lead,

and may be contrasted readily with the requirements of section 202(b) of the Act specifically identifying carbon monoxide, hydrocarbons, and oxides of nitrogen for regulatory action. While, as the commentator points out, language in the Senate Report on its version of the 1970 Clean Air Act amendments stated that the bill would require issuance of a criteria document for lead, this must be construed as only a statement of the Committee's preference, since no such requirement appeared either in the language of the Senate or the conferees' bill.

The regulations promulgated below shall be effective on January 7, 1973.

(42 U.S.C. 1857f-6c, 1857g(a))

Dated: November 23, 1973.

JOHN QUARLES,
Acting Administrator,
Environmental Protection Agency.

Part 80 of Chapter I, Title 40 of the Code of Federal Regulations is amended as follows:

1. In § 80.1, the second sentence is revised to read as follows:

§ 80.1 Scope.

*** These regulations are based upon a determination by the Administrator that the emission product of a fuel or additive will endanger the public health, or will impair to a significant degree the performance of a motor vehicle emission control device in general use or which the Administrator finds has been developed to a point where in a reasonable time it would be in general use were such regulations promulgated; and certain other findings specified by the Act.

2. In § 80.2, a new paragraph (m) is added as follows:

§ 80.2 Definitions.

(m) "Lead additive manufacturer" means any person who produces a lead

additive or sells a lead additive under his own name.

3. A new § 80.20 is added as follows:

§ 80.20 Controls applicable to gasoline refiners.

(a) (1) In the manufacture of gasoline at any refinery, no gasoline refiner shall exceed the average lead content per gallon specified below for each 3-month period (January through March, April through June, July through September, October through December):

- (i) 1.7 grams of lead per gallon, after January 1, 1975;
- (ii) 1.4 grams of lead per gallon, after January 1, 1976;
- (iii) 1.0 grams of lead per gallon, after January 1, 1977;
- (iv) 0.8 grams of lead per gallon, after January 1, 1978;
- (v) 0.5 grams of lead per gallon, after January 1, 1979.

(2) For each 3-month period (January through March, April through June, July through September, October through December) the average lead content per gallon shall be computed by dividing total grams of lead used at a refinery in the manufacture of gasoline by total gallons of gasoline manufactured at such refinery.

(3) For each 3-month period (January through March, April through June, July through September, October through December) commencing with the period January 1, 1975 through March 31, 1975, each refiner shall submit to the Administrator a report showing for each refinery (i) the total grams of lead in lead additive inventory on the first day of the period, (ii) the total grams of lead received during the period, (iii) the total grams of lead in lead additive inventory on the last day of the period, (iv) the total gallons of gasoline produced by such refinery during the period, and (v) the average lead content in each gallon

of gasoline produced during the period. Reports shall be submitted within 15 days after the close of the reporting period, on forms supplied by the Administrator upon request.

(b) The provisions of paragraph (a) (1) (i) and (ii) of this section shall not be applicable to any refiner which does not have more than 30,000 barrels per day crude oil or bona fide feed stock capacity from owned or leased facilities or from facilities made available to such refiner under an arrangement such as, but not limited to, an exchange agreement (except one on a refined product for refined product basis), or a throughput or other form of processing agreement, with the same effects as though such facilities had been leased.

4. A new § 80.25 is added as follows:

§ 80.25 Controls applicable to lead additive manufacturers.

For each 3-month period (January through March, April through June, July through September, October through December) commencing with the period January 1, 1975 through March 31, 1975, each lead additive manufacturer shall submit to the Administrator a report showing the total grams of lead shipped to each refinery by such lead additive manufacturer during the period. Reports shall be submitted within 15 days after the close of the reporting period, on forms supplied by the Administrator upon request.

5. A new § 80.26 is added as follows:

§ 80.26 Confidentiality of information.

Information obtained by the Administrator or his representatives pursuant to this part shall be treated, in so far as its confidentiality is concerned, in accordance with the provisions of 40 CFR Part 2.

[FR Doc.73-25766 Filed 12-5-73; 8:45 am]

A. Publications Used As Reference In This Report

1. "Health Hazards of Lead," EPA, Office of Air Programs, Research Triangle Park, N.C., February 23, 1972, revised April 11, 1972.
2. "EPA's Position on the Health Effects of Airborne Lead," Health Effects Branch, Processes and Effects Division, Office of Research and Monitoring, EPA, Washington, D.C., November 29, 1972.
3. "Lead - Airborne Lead in Perspective," Committee on Biologic Effects of Atmospheric Pollutants, Division of Medical Sciences, National Research Council, National Academy of Sciences, Washington, D.C., 1972.
4. "EPA's Position on the Health Effects of Airborne Lead," op. cit., p. V-1.
5. *ibid.*
6. "Airborne Lead in Perspective," op. cit., p. 69.
7. *ibid.*
8. *ibid.*
9. "EPA's Position on the Health Effects of Airborne Lead," op. cit., p. V-10.
10. op. cit., p V-11.
11. "Airborne Lead in Perspective," op. cit., p. 31.
12. "EPA's Position on the Health Effects of Airborne Lead," op. cit., P. V-1.
13. op. cit., p. VI-1 & 2.
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15. "Airborne Lead in Perspective," op. cit., p. 207.
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18. "Airborne Lead in Perspective," op. cit., p. 207.
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21. op. cit., p. IV-3.
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DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229- 5359

TOM McCALL
GOVERNOR

KESS CANNON
Director

MEMORANDUM

To: ENVIRONMENTAL QUALITY COMMISSION

From: Director

Subject: Agenda Item N, EQC Meeting, May 24, 1974

Complex Sources Rule Revision Status Report

Upon adoption of Oregon's Clean Air Act Implementation Plan, a new rule for Parking Facilities and Urban Highways was adopted and has been implemented. The Environmental Protection Agency reviewed that rule and determined that the rule was not comprehensive enough to meet the requirements promulgated for indirect and complex sources. The principal points made by the Environmental Protection Agency that the Department should consider in revising the rule to meet the requirements for complex sources was that: 1) regulations and procedures must apply state-wide; 2) rule requirements must apply to other traffic generating sources as well as highways and parking facilities; 3) specific provisions must be made for complex sources proposals to be made available for public review and comment; and 4) owners and operators of proposed complex sources must comply with applicable portions of the transportation control strategy in the State Implementation Plan.

The Department is currently revising the rule and has issued the attached public notice establishing a public hearing for adoption of the new rule.

Mr. Michael J. Downs will give a status report concerning the proposed rule revision.

KESSLER R. CANNON
Director



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NOTICE OF PUBLIC HEARING

DEPARTMENT OF ENVIRONMENTAL QUALITY

STATE OF OREGON

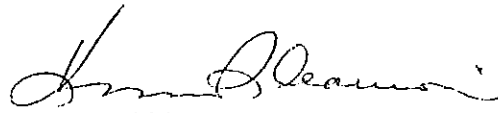
NOTICE IS HEREBY GIVEN that the Department of Environmental Quality is considering the adoption of amendments to Oregon Administrative Rules, Chapter 340, Sections 20-050 through 20-070, Parking Facilities and Highways in Urban Areas, pursuant to 40 CFR 51.18, published on June 18, 1973, in the Federal Register, Volume 38, P.15834, requiring that all state implementation plans have adequate legal authority to conduct review of air contaminant sources which may indirectly result in an increase in the ambient air of the concentration of air contaminants emitted by motor vehicles and aircraft. Such "complex sources" include, but are not limited to: a) highways and roads, b) parking facilities, c) retail, commercial and industrial facilities, d) recreation, amusement, sports and entertainment facilities, 3) airports, f) office and government buildings, g) apartment and condominium buildings, h) education facilities. The Department proposes to require air contaminant discharge permits for complex sources.

Copies of the proposed amended regulations may be obtained upon request from the Department of Environmental Quality, Office of the Director, Air Quality Control Division, 1234 S. W. Morrison Street, Portland, Oregon 97205.

Any interested person desiring to submit any written document, views or data on this matter may do so by forwarding them to the Office of the Director, Air Quality Control Division, 1234 S. W. Morrison Street, Portland, Oregon 97205, or may appear and submit his material, or be heard orally

at 2:00 p.m. on the 24th day of June, 1974 in the Second Floor Auditorium of the Public Service Building, 920 S. W. Sixth Avenue, Portland, Oregon.

The Hearing will be held before a Hearings Officer appointed by the Director.



KESSLER R. CANNON
Director

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY CONTROL DIVISION

May 20, 1974

PROPOSED RULES FOR COMPLEX SOURCES AND MAINTENANCE OF AIR QUALITY STANDARDS

OAR, Chapter 340, Sections 20-050 through 20-070 are repealed and Sections 20-100 through 20-140 are adopted in lieu thereof.

20-100 DEFINITIONS:

1. "Aircraft operation" means an aircraft take-off or landing.
2. "Commission" means the Environmental Quality Commission.
3. "Complex source" means a facility, building, structure, or installation, portion or combination thereof, which causes or may cause mobile source activity that results in emissions of an air contaminant or noise level for which there is a national or state standard. Such complex sources shall include, but not be limited to:
 - (a) Highways and roads.
 - (b) Parking facilities.
 - (c) Retail, commercial and industrial facilities.
 - (d) Recreation, amusement, sports and entertainment facilities.
 - (e) Airports.
 - (f) Office and Government buildings.
 - (g) Apartment and condominium buildings.
 - (h) Education facilities.
4. "Construct" or "construction" includes installation and establishment of new complex sources, addition to or enlargement or replacement of a complex source, or any major alternation or modification therein that significantly affects the emission of air contaminants or noise.
5. "Department" means the Department of Environmental Quality.
6. "Director" means director of the Department or his authorized deputies or officers.
7. "Expressway" means a divided arterial highway with four or more lanes available for through traffic with full or partial control of access and with or without grade separation at intersections.
8. "Freeway" means a divided arterial highway with four or more lanes available for through traffic with full control of access and grade separation at intersections.

9. The term "highway section" means the development proposal of a highway of substantial length between logical termini (major crossroads, population centers, major traffic generators, or similar major highway control elements) as normally included in a single location study or multi-year highway improvement program, as set forth in 23 CFR 770.201 (38 FR 31677).
10. "Motor vehicle" means any self-propelled vehicle used for transporting persons or commodities on public highways.
11. "Permit" means a written permit issued by the Department, bearing the signature of the Director, which by its conditions may authorize the permittee to construct, install, modify or operate specified facilities, conduct specified activities or emit air contaminants or noise within specified limitations.
12. "Person" includes individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the federal government and any agencies thereof.
13. "Regional authority" means a regional air quality control authority established under the provisions of ORS 468.505.
14. "Regional planning agency" means any planning agency which has been recognized as a substate-clearinghouse for the purposes of conducting project review under the United States Office of Management and Budget Circular Number A-95.
15. "Vehicle trip" means a single movement by a motor vehicle which originates or terminates at or uses a complex source.

20-105 COMMISSION FINDING:

The Commission finds and declares each complex source to be an air contamination source as defined in ORS 468.275 because by reason of the existence thereof air contaminants are emitted into the atmosphere and that the regulation by permit and otherwise of the construction and operation of complex sources is necessary to control the concentrations of air contaminants and the level of noise emissions from motor vehicles and aircraft which result from vehicle trips and aircraft operations associated with the use of such complex sources.

20-110 ASSUMPTION OF JURISDICTION AND POSSIBLE DELEGATION:

The Commission, though finding that the complexity or magnitude of complex sources requires state-wide regulation and that it assumes or retains jurisdiction thereof, may, when any regional authority requests the Commission and provides evidence demonstrating its capability to carry out the provisions of sections 20-100 through 20-140, Chapter 340, OAR, relating to complex sources, authorize such regional authority to perform all or any of such provisions within the geographic area comprising such regional authority's jurisdiction.

20-115 APPROVAL OF REGIONAL PLAN:

1. The Commission may give approval to a regional plan if the regional planning agency submits proof to the Commission that:
 - (a) The regional plan provides for the attainment and maintenance of ambient air and noise standards, and
 - (b) The regional plan includes land use and transportation plans consistent with state and regional policies and guidelines.
2. The Commission shall not approve a regional plan until it has held a public hearing and until a 30-day public comment period has been completed.
3. Failure to continue to meet the requirements of this section shall be grounds for revocation of approval of the regional plan. Revocation shall be by notice to the regional planning agency.

20-120 AIR CONTAMINANT DISCHARGE PERMITS REQUIRED:

1. No person shall commence construction or operation of any of the following complex sources in the State without first obtaining a permit from the Department:
 - (a) Within the municipal boundaries of any city having a population of 50,000 or greater or within five (5) miles of the municipal boundaries of any such city, a parking facility which provides 50 or more parking spaces.
 - (b) Except as otherwise provided in subsection (a) of this paragraph, within Clackamas, Lane, Marion, Multnomah, or Washington counties, a parking facility which provides 500 or more parking spaces or a highway section with an anticipated annual average daily traffic volume of 15,000 or more vehicles, or
 - (c) Except as otherwise provided in subsection (a) of this paragraph, within the counties not specified in subsection (b) of this paragraph, a parking facility which provides 1000 or more parking spaces or a highway section with an anticipated annual average daily traffic volume of 50,000 or more vehicles; or
 - (d) An airport with paved runways.
2. After June 1, 1975, no person shall construct or operate any freeway or expressway within the municipal boundaries of Portland or within 5 miles of such boundaries without first obtaining a permit from the Department.

20-125 DURATION OF PERMIT AND FEES:

1. The duration of a permit issued pursuant to sections 20-100 through

20-140, Chapter 340, OAR, shall be five (5) years.

2. All persons required to obtain a permit shall be subject to a two-part fee consisting of a uniform nonrefundable Filing Fee of \$25.00 and a variable Application Investigation and Permit Issuing or Denying Fee. The amount equal to the sum of these two fees shall be submitted as a required part of the application. The Application Investigation and Permit Issuing or Denying Fee shall be determined as follows:

(a) Parking facilities.

(1) Environmental impact statement not required:

<u>Number of Parking Spaces</u>	<u>Fee</u>
<100	\$15.00
100-249	\$25.00
250-499	\$50.00
>500	\$100.00

(2) Environmental impact statement required. Fee = \$200.00.

(b) Highway section. Fee = \$400.00.

(c) Airports. Fee = \$250.00.

3. Modifications of existing, unexpired permits which are instituted by the Department due to changing conditions or standards, receipt of additional information or any other reason pursuant to applicable statutes, and which do not require re-filing or review of an application or plans and specifications shall not require submission of the Filing Fee or the Application Investigation and Permit Issuing or Denying Fee.
4. The Filing Fee and Application Investigation and Permit Issuing and Denying Fee shall be submitted with each application for a new permit, modified permit, or renewed permit.
5. Upon accepting an application for filing, the Filing Fee shall be considered as nonrefundable.
6. All fees shall be made payable to the Department and shall be deposited in the State Treasury by the Department to the credit of the Department Air Emission Permit Account, which is continuously appropriated for the purpose of funding the air contaminant discharge permit program covered by sections 20-100 through 20-140, Chapter 340, OAR.

20-130 PROCEDURES AND REQUIREMENTS FOR OBTAINING PERMITS:

1. Submission and processing of applications for permits required

by sections 20-100 through 20-140, Chapter 340, OAR, and issuance, denial, modification, and revocation of permits shall be in accordance with duly adopted procedures of the Department.

2. The permit issuing agency may, within 30 days of receipt of an application for a permit, request submission of an environmental impact statement as a condition precedent to issuance of the permit. The contents of the environmental impact statement shall conform to guidelines prepared by the Department and include the following information as a minimum:
 - (a) Estimates of the effect of the construction of the complex source on traffic patterns, volumes, and flow in the vicinity of the source.
 - (b) Measured or estimated air quality and noise data at the site of the complex source prior to construction.
 - (c) An estimate of air quality and noise levels after construction of the complex source.
 - (d) An estimate of the effect of the construction of the complex source on total vehicle miles of travel and additional residential, commercial and industrial development which may occur as a result of such construction.
 - (e) The probable impact of the construction of the complex source upon development of mass transit and other public transportation systems; development of, or compatibility with, a comprehensive urban transportation plan for the area.
 - (f) Effect of surface runoff from paved areas upon the water quality of bodies of water in the vicinity of the complex source.
 - (g) Alternative designs of the complex source that would tend to minimize the environmental impact of the complex source.
 - (h) Effect of alternative modes of transportation, including public or private mass transit, bicycling, and pedestrian modes, on the size and need for the complex source.
3. No permit to construct or operate a complex source shall be granted unless the applicant shows that:
 - (a) The complex source will not cause a violation of the Clean Air Act Implementation Plan for Oregon, and
 - (b) The complex source will not prevent or interfere with the attainment or maintenance of compliance with any national or state ambient air quality standard or noise standard, and
 - (c) The complex source shall not cause any other complex source

or system of complex sources to violate any national or state ambient air quality standard or noise standard, and

- (d) The complex source has been recommended for permit by a regional planning agency as being in conformity with a regional plan approved by the Commission pursuant to section 20-115, Chapter 340, OAR, if such regional plan has been approved by the Commission, and
- (e) The complex source has obtained all permits and approvals related to siting required by governmental unit(s) having jurisdiction, or
- (f) A statement from the governmental unit(s) that the applicant has met all the requirements for such governmental units' purposes other than the complex source permit required by section 20-100 through 20-140, Chapter 340, OAR.
- (g) Notwithstanding the requirements of subsections (a), (b), and (c), the complex source shall be constructed and operated utilizing the highest and best practicable control measures and techniques to ensure the least possible deterioration of existing air quality and noise levels. Control measures and techniques shall include but not be limited to the following:
 - (1) Minimizing vehicle running time within parking lots through the use of sound parking lot design.
 - (2) Ensuring adequate gate capacity by providing for the proper number and location of entrances and exits and optimum signalization for such.
 - (3) Limiting traffic volume so as not to exceed the carrying capacity on roadways significantly affected by the complex source.
 - (4) Limiting the level of service at controlled intersections significantly affected by the complex source.
 - (5) Construction and maintenance of bus shelters and turn-out lanes.
 - (6) Making parking spaces available for park-and-ride stations.
 - (7) Reserved parking spaces for car pools.
 - (8) Posting transit route and scheduling information.
 - (9) Maintaining mass transit fare reimbursement programs.
 - (10) Construction and maintenance of exclusive transit ways.

(11) Construction and maintenance of bicycle and pedestrian pathways and bicycle racks.

Issuance of a permit shall not relieve the permittee from compliance with other applicable provisions of the Clean Air Act Implementation Plan for Oregon.

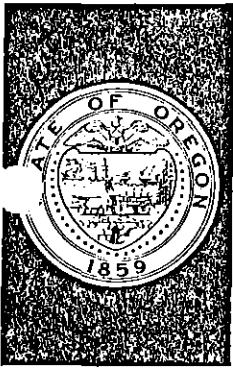
4. For highway sections subject to sections 20-100 through 20-140, Chapter 340, OAR, the determination required under subsection 3 of this section shall be made as follows:
 - (a) The impact of a public highway on the total vehicle miles traveled in an appropriate area selected for an area-wide analysis shall be used to determine the change in emissions for such area. Such area-wide air quality analysis shall then be used to determine expected ambient concentrations of carbon monoxide, photochemical oxidants, nitrogen oxides and lead particulate following construction.
 - (b) Using an appropriate diffusion model, the air quality impact of carbon monoxide and lead particulate emissions resulting from the expected maximum traffic volume on a public highway shall be evaluated at reasonable receptor or exposure sites in the vicinity of such highway.
 - (c) Using an appropriate noise level prediction model, the noise impact resulting from the expected maximum traffic volume on a public highway shall be evaluated at reasonable receptor or exposure sites in the vicinity of such highway.
5. For airports subject to sections 20-100 through 20-140, Chapter 340, OAR, the determination required under subsection 3 of this section shall be made as follows:
 - (a) All emissions from stationary and mobile sources at the airport, along with emissions from all new commercial, industrial, and transportation-related development expected to occur within three miles of the airport, shall be added together in order to determine the aggregate impact on air quality.
 - (b) An area-wide air quality analysis shall be used to determine the expected ambient concentrations of carbon monoxide, photochemical oxidants, nitrogen oxides and lead particulate following construction.
 - (c) Using an appropriate noise level prediction model, the noise level prediction model, the noise impact resulting from the expected maximum aircraft operations shall be evaluated at reasonable receptor or exposure sites in the vicinity of such airport.
6. For complex sources other than public roads and airports, the determination required under subsection 3 of this section shall be made

as follows:

- (a) Using an appropriate diffusion model, evaluate the impact of carbon monoxide and lead particulate emissions resulting from expected maximum vehicle trips to and from such source. Such impact shall be evaluated at reasonable receptor or exposure sites in the vicinity of such complex source.
- (b) Using an appropriate noise level prediction model, the noise impact resulting from the expected maximum vehicle trips to and from such source. Such impact shall be evaluated at reasonable receptor or exposure sites in the vicinity of such complex sources.

20-135 PUBLIC NOTICE PROCEDURES:

1. Within 30 days after receipt of a permit application, the Department shall:
 - (a) Make available in at least one location in each region in which the proposed complex source would be constructed, a copy of all materials submitted by the owner or operator; and
 - (b) Notify, in writing, the Administrator of the Environmental Protection Agency, and appropriate newspapers of general circulation, environmental groups, business organizations, public interest groups, and citizen organizations in each region in which the proposed complex source would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator.
2. A copy of the notice required pursuant to this subparagraph shall be sent to officials and agencies having cognizance over the location where the complex source will be situated, as follows: state and local air pollution control agencies, the chief executive of the city and county; any comprehensive regional land use planning agency; and for highways, any local board or committee charged with responsibility for activities in the conduct of the urban transportation planning process (3-C process) pursuant to 23 U.S.C. 134.
3. Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Department in making the final decision on the application. All comments shall be made available for public inspection in at least one location in the region in which the complex source would be located.



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5359

TOM McCALL
GOVERNOR

May 6, 1974

KESS CANNON
Director

Administrative Rules Division
Secretary of State's Office
Salem, Oregon 97310

Attn: Mrs. Ione Hanson

Gentlemen:

Attached are public hearing notices for a proposed ambient air standard for lead, proposed amendments to complex sources rules, and a synopsis of these notices.

Please publish these notices in the May 15, 1974 Secretary of State's bulletin.

Cordially,

KESSLER R. CANNON
Director

H. M. Patterson, Administrator
Air Quality Control Division

HMP:h

cc: Ray Underwood



SYNOPSIS

PROPOSED AMENDMENTS TO COMPLEX SOURCES RULE

The Department of Environmental Quality will hold a public hearing to consider the adoption of amendments to the complex sources rule, OAR Chapter 340, Sections 20-050 through 20-070, Parking Facilities and Highways in Urban Areas.

Testimony may be submitted orally or in written form at the public hearing, before a hearings officer, at 2:00 p.m. on the 24th day of June, 1974 in the Second Floor Auditorium of the Public Service Building, 920 S. W. Sixth Avenue, Portland, Oregon.

NOTICE OF PUBLIC HEARING
DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE OF OREGON

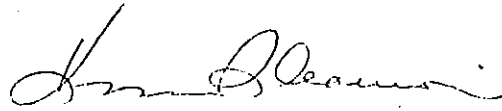
NOTICE IS HEREBY GIVEN that the Department of Environmental Quality is considering the adoption of amendments to Oregon Administrative Rules, Chapter 340, Sections 20-050 through 20-070, Parking Facilities and Highways in Urban Areas, pursuant to 40 CFR 51.18, published on June 18, 1973, in the Federal Register, Volume 38, P.15834, requiring that all state implementation plans have adequate legal authority to conduct review of air contaminant sources which may indirectly result in an increase in the ambient air of the concentration of air contaminants emitted by motor vehicles and aircraft. Such "complex sources" include, but are not limited to: a) highways and roads, b) parking facilities, c) retail, commercial and industrial facilities, d) recreation, amusement, sports and entertainment facilities, 3) airports, f) office and government buildings, g) apartment and condominium buildings, h) education facilities. The Department proposes to require air contaminant discharge permits for complex sources.

Copies of the proposed amended regulations may be obtained upon request from the Department of Environmental Quality, Office of the Director, Air Quality Control Division, 1234 S. W. Morrison Street, Portland, Oregon 97205.

Any interested person desiring to submit any written document, views or data on this matter may do so by forwarding them to the Office of the Director, Air Quality Control Division, 1234 S. W. Morrison Street, Portland, Oregon 97205, or may appear and submit his material, or be heard orally

at 2:00 p.m. on the 24th day of June, 1974 in the Second Floor Auditorium of the Public Service Building, 920 S. W. Sixth Avenue, Portland, Oregon.

The Hearing will be held before a Hearings Officer appointed by the Director.



KESSLER R. CANNON
Director

SYNOPSIS

PROPOSED AMBIENT AIR STANDARD FOR LEAD

The Department of Environmental Quality will hold a public hearing to consider the adoption of an ambient air quality standard for lead particulate applicable to all areas of the State of Oregon.

Testimony may be submitted orally or in written form at the public hearing before a hearings officer at 9:00 a.m. on the 24th day of June, 1974 in the Second Floor Auditorium of the Public Service Building, 920 S. W. Sixth Avenue, Portland, Oregon.

NOTICE OF PUBLIC HEARING
DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE OF OREGON

NOTICE IS HEREBY GIVEN that the Department of Environmental Quality is considering the adoption of an ambient air quality standard for lead particulate pursuant to ORS 468.020 and ORS 468.295 to adequately protect the public welfare, the health of humans, plant and animal life, public and private property, and the enjoyment of life and property throughout such areas of the state as may be affected by this air contaminant.

Copies of the proposed standard may be obtained upon request from the Department of Environmental Quality, Office of the Director, Air Quality Control Division, 1234 S. W. Morrison Street, Portland, Oregon 97205.

Any interested person desiring to submit any written document, views or data on this matter may do so by forwarding them to the Office of the Director, Air Quality Control Division, 1234 S. W. Morrison Street, Portland, Oregon 97205, or may appear and submit his material, or be heard orally at 9:00 a.m. on the 24th day of June, 1974 in the Second Floor Auditorium of the Public Service Building, 920 S. W. Sixth Avenue, Portland, Oregon. The Hearing will be held before a Hearings Officer appointed by the Director.



KESSLER R. CANNON
Director



DEPARTMENT OF ENVIRONMENTAL QUALITY

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TOM McCALL
GOVERNOR

KESS CANNON
Director

MEMORANDUM

To: ENVIRONMENTAL QUALITY COMMISSION

From: Director

Subject: Agenda Item O, EQC Meeting, May 24, 1974

Sulfur Content of Fuels, Informational Report

The Environmental Quality Commission adopted rules pertaining to sulfur content in fuel oils, specifically the following rule pertaining to residuals. The rule as adopted was submitted to the Environmental Protection Agency and incorporated as part of Oregon's Clean Air Act Implementation Plan.

"Residual Fuel Oil" means any oil meeting the specifications of ASTM Grade 4, Grade 5 or Grade 6 fuel oils"

"Section 22-010 Residual Fuel Oils (1) After July 1, 1972 no person shall sell, distribute, use or make available for use, any residual fuel oil containing more than 2.5 percent sulfur by weight.

(2) After July 1, 1974, no person shall sell, distribute, use, or make available for use, any residual oil containing more than 1.75 percent sulfur by weight."

There has been concern by industry, dealers and suppliers that the requirement for a 1.75 percent sulfur by weight requirement by July 1, 1974 cannot be met. The staff has met with specific companies, groups and committees and has communicated with oil suppliers in order to obtain current information on the availability of fuel and its sulfur content.



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To date no dealer, supplier or user has applied for a variance from the rule effective July 1, 1974.

Mr. E. Wayne Hanson, Assistant Director, will give an oral report at the Commission Meeting.

Attached is a copy of a letter mailed to major fuel distributors and oil suppliers concerning this matter.

A handwritten signature in cursive script, appearing to read "Kessler R. Cannon".

KESSLER R. CANNON
Director

5/20/74 HMP:h

TESTIMONY OF ASSOCIATED OREGON INDUSTRIES, INC.
BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
MAY 24, 1974

SUBJECT: Sulfur by Weight Limitations of Residual Fuel Oils

My name is Thomas C. Donaca, General Counsel of Associated Oregon Industries, Inc.

We received, as did many suppliers, distributors and users, Mr. Cannon's letter of May 17, 1974 indicating generally that the sulfur by weight regulations which call for a reduction from the present 2.5% sulfur by weight limitation to 1.75% will remain unchanged and that variances will in all cases have to be applied for. If we could rely on history to furnish an answer as to any adverse affects of this change it would tell us that generally fuel oil arriving in this state has not exceeded the July 1, 1974 standard.

We are afraid that we are unable to rely on history for complete guidance in this situation because of complicating factors, such as:

1. Lack of availability of residual fuels as indicated by the fact that those of our members who have attempted to shift suppliers can find no alternate source.
2. Regulation by the Federal Energy Office which not only controls allocations of residual fuels, but on May 1, 1974 issued further regulations indicating that any boiler, burner or other combustor of fuel having a total firing rate of 50 million BTU per hour, or greater in operation on or prior to December 7, 1973 shall use a petroleum product having a lower specified sulfur content by weight, than the average content of such fuels used during November 1973.

This regulation covers virtually all large boilers in Oregon and has two significant applications.

- A. If anyone was using any residual fuel in November 1973 in excess of the 1.75% sulfur by weight specified by you for July 1, 1974 they will be unable to use a lower sulfur fuel without Federal Energy Office approval; and

B. Even if the fuel used was under 1.75% sulfur by weight, say 1.6% they may not accept a load of oil at 1.3% without approval of the FEO.

3. Natural gas will be curtailed to interruptible customers throughout the Northwest for 180 to 210 days in 1974-75 from the 130 to 150 day curtailment in 1973-74. This will put an even greater strain on tight supplies throughout the Northwest and will require the utilization of even more residual fuel, and even more if we have an extremely cold winter. Origin of such fuel is unknown.

4. In view of the short residual fuel oil supplies we must remember there are other markets, such as the East coast where their problem is maintaining federal primary air standards, and other uses such as for asphalt which is in short supply.

Our concern here today is to point out the difficulties that may be posed not only to you as the chief environmental body in this state, but to all suppliers, distributors and users if residual oil supplies should, in general, exceed the 1.75% sulfur by weight regulation. We are not here to roll back environmental standards but only to suggest that you consider continuance of the rule at current sulfur by weight levels. Oregon does not have any significant sulfur dioxide problem as shown by the fact that we are not exceeding even federal secondary ambient levels, let alone the primary standards which is a major concern discussed in the May 1 Federal Energy Office regulations. The regulation currently in effect has over two years of history, and, as noted before, sulfur content of residual fuels have been well below those levels. No one has been dumping high sulfur fuels in Oregon.

Four of six supplying oil companies have advised that they can only guarantee to meet certain specifications, all above the 1.75% sulfur by weight limitation. Your staff indicates that the Department does not have sufficient information to justify a specific recommendation. What if the information proves correct? Then it seems to us we are all in an impossible situation.

First, by suggesting the use of variances you are electing to use a system that has generally been held in disfavor by all parties--the agency, industry and environmental groups. Variances have only been used where there was clear and convincing need on a case by case basis. The facts here do not warrant this approach because we are not exceeding federal secondary ambient sulfur dioxide standards, nor is there any reason to believe that we will in the next few years even with increased use of residual fuel. In addition, as neither the distributor or user has any control over the sulfur content of fuels, nor in most cases, the ability to make tests to determine sulfur content, there is little likelihood that variance requests from either of those classes will be able to provide the kind of information you generally need in order to consider a variance request.

Second, if sulfur levels of fuels exceed the levels proposed for July 1, 1974 will your staff be able to properly process up to 3000 variance requests without jeopardizing other air quality programs? Your staff is already stretched thin meeting the added load imposed by the air quality permit program and responding to EPA.

Third, can this commission, which must authorize every variance, respond rapidly enough to assure continuance of supply? If the supply line breaks down, the supply will not be replaced in a day or a week and during that period of time there could be severe economic consequences for both industry and its workers, not to mention other persons affected by the loss of fuel supply.

Because of: (1) the changed conditions since the adoption of the sulfur by weight regulation, namely the energy crisis;

(2) the potential difficulties posed for this commission as well as suppliers, distributors and users if the sulfur by weight standards are exceeded (we were advised yesterday that the FEO will not act on increased fuel allocations until September 1974 which will coincide with the possible shut-off of interruptible gas);

(3) the fact that Oregon does not exceed federal secondary standards for sulfur dioxide; and

(4) more time is needed to ascertain what the actual supply situation will be; we request the Commission to consider the following recommendations:

That OAR22-010(2) be amended by deleting "1974" and inserting "1975". This amendment would extend for one year the present 2.5% sulfur by weight limitation.

That your air quality staff be instructed to undertake a study of SO^2 emissions and estimates of residual fuel supplies and report back to you prior to April 1, 1975 as to its findings and recommendations on future sulfur content of fuels, as well as alternatives to the present regulation which might better control SO^2 emissions or at least alleviate some of the administrative difficulty of the present regulation.

We believe this matter is potentially so serious in its implications to the citizens and industry of this state, as well as to this commission, that we must raise the question "What if?" and suggest an alternative to you which we believe will not impair Oregon's effective air quality program.

OHI

THE OIL HEAT INSTITUTE OF OREGON / 1927 N.W. KEARNEY / PORTLAND, OREGON 97209 / PHONE 224-4231

May 22, 1974

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
MAY 23 1974

OFFICE OF THE DIRECTOR

Mr. Kessler R. Cannon, Director
Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Dear Mr. Cannon:

Thanks very much for your letter of May 17, 1974 with regard to the situation regarding sulfur content in residual fuel oils.

As you know, the Oil Heat Institute is an Association of independent fuel oil dealers who handle and distribute products to a variety of end users; chief of which is the individual home owner.

At this time, we would like to speak on behalf of the user of residual fuel in support of a variance.

As distributors of residual fuel, we cannot, of course control either the supply or its sulfur content, but we can speak with some authority with regard to the existing problem and our reasons for supporting a variance.

First, let me assure you that our industry fully supports the regulations effective July 1, 1974. We also recognize the need for high quality air standards and have done our best to support your efforts in this regard.

However, we would like to make these points with regard to the current situation:

- (1) The requiring of variances beyond the prime suppliers (of which there are approximately seven) would be unrealistic. In Oregon today there are approximately 2,500 end-users of residual fuel oils. Included are schools at all levels, institutions such as the State prison, Oregon State hospital, Portland Medical School, numerous apartment houses, hotels, rest homes and various major industries of all descriptions.



Mr. Kessler R. Cannon, Director

May 22, 1974

Page Two

If each of these people, as well as our member distributors, were required to seek a variance an unusual administrative problem would immediately arise as result of the necessity for a minimum of three variances for each unit of fuel.

- (2) There seems to be a genuine need for at least a one-year moratorium on imposition of the regulations, not because the regulations are being opposed as such, but merely because adequate time has not been given to all concerned to develop the statistical picture which will show the depth of the impact on Oregon's economy. This is evidenced by ~~the~~ deep uncertainty among our suppliers as to whether there will be enough product available to meet the new requirement.
- (3) We must also recognize the hard fact that the gas utilities have notified many of their interruptible customers that they can anticipate anything from 180 to 210 days without gas this winter. The number of days historically in which these customers have been without gas has averaged approximately 70 days. Oil, traditionally, has been back-up fuel. Now, with the projected extension of cut-off many customers will be without gas, we are looking at a situation in which they could potentially be without fuel during the entire heating season which is normally calculated in Oregon at 212 days.

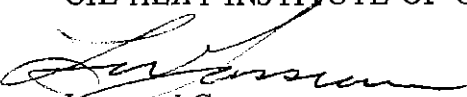
Therefore, we would recommend that the regulations of July, 1972 remain in effect and that implementation of the July, 1974 regulations be withheld for a period of one year until there can be:

- (a) a more accurate evaluation of the supply situation and;
- (b) the differences between the Department of Environmental Quality and the prime suppliers of this fuel be more satisfactorily resolved as result of the opportunity to develop the statistical information so necessary to a wise decision on a problem of this magnitude.

We stand ready to at any time supply any information that will help you toward a solution satisfactorily to the needs of the environment, the people and the economy of Oregon.

Sincerely yours,

OIL HEAT INSTITUTE OF OREGON


Leonard Gassner
Executive Director

LG/sf



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229- 6242

TOM McCALL
GOVERNOR

KESSLER R. CANNON
Director

Gentlemen:

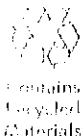
On the 24th of January 1972, the Environmental Quality Commission adopted rules pertaining to the sulfur content in fuel oils, specifically the following rule pertaining to residuals. The rule as adopted was submitted to the Environmental Protection Agency and incorporated as part of Oregon's Clean Air Act Implementation Plan.

"Residual Fuel Oil" means any oil meeting the specifications of ASTM Grade 4, Grade 5 or Grade 6 fuel oils."

"Section 22-010 Residual Fuel Oils (1) After July 1, 1972 no person shall sell, distribute, use or make available for use, any residual fuel oil containing more than 2.5 percent sulfur by weight.

(2) After July 1, 1974, no person shall sell, distribute, use, or make available for use, any residual oil containing more than 1.75 percent sulfur by weight."

Due to an anticipated oil shortage, the Department wrote on the 15th of January, 1974 to the suppliers of residual fuel oil and requested specific information that was believed necessary to evaluate the environmental effect and to develop a workable program to provide for



maintaining adequate fuel supplies consistent with environmental needs. Although a response has not been received from all companies contacted, information has been received from some oil suppliers, distributors and major users that indicates there may be difficulty in complying with the 1.75 percent sulfur limitation for residual fuel effective July 1, 1974.

At this time the Department does not have sufficient information to justify a specific recommendation to the Commission nor to project a long range plan. Therefore, unless specific written applications with supporting information justifying a variance are received and granted by the Commission, we will have no alternative but to strictly enforce the regulation.

Since the regulations require compliance by each supplier, distributor and user, applications and supporting information must be submitted by each party. Information considered basic with each applicant is the quantities, average and maximum sulfur content of fuels to be sold, distributed or used and details of plans including dates of implementation to achieve compliance with the regulation.

Oil suppliers are expected to provide information relative to the reasons why compliance cannot be achieved. Additionally, information is needed concerning the sulfur content of residual oil being provided to neighboring states and projected short and long range plans for supplying lower sulfur fuel to users in the State of Oregon.

Applications for a variance received by the Department before June 10, 1974 will be considered by the Environmental Quality Commission at their June 21, 1974 meeting in Coos Bay, Oregon.

Each applicant is expected to appear before the Commission and respond to any questions they may have concerning your request and supply additional information as needed.

Cordially,

KESSLER R. CANNON
Director

WH:vt

DISTRIBUTORS

PORTLAND

CARSON OIL COMPANY
2424 East Burnside
Portland, OR 97214

Attn: John Carson

ECONOMY OIL COMPANY
4225 N. E. Cully Boulevard
Portland, OR 97218

Attn. Roy Lindsay

DIAMOND FUEL COMPANY
4145 S. E. Powell Boulevard
Portland, OR 97202

Attn: Jim Coon

MORAN FUEL COMPANY
1923 S. E. Ankeny
Portland, OR 97214

Attn: Jim Moran

ALBINA FUEL COMPANY
3246 N. E. Broadway
Portland, OR 97232

Attn: Cliff Arntson

McCALL OIL COMPANY
1254 Lloyd Center
Portland, OR 97232

Attn: Bob McCall or
W. C. McCall

SUNSET FUEL COMPANY
2944 S. E. Powell Boulevard
Portland, OR 97202

Attn: Lloyd Miesen

ROBBEN AND SON
3024 S. E. Powell Boulevard
Portland, OR 97202

Attn: Dave Robben or
Lienell Robben

LARSEN OIL COMPANY
2500 N. E. Columbia
Portland, OR 97211

Attn: George Larsen

SALEM

CAPITAL CITY TRANSFER
1295 Jonson N. E.
Salem, OR 97303

Attn: Bill Lock

VALLEY OIL COMPANY
1790 16th Street S. E.
Salem, OR 97302

Attn: Bob Delk

MEDFORD

WESTERN OIL AND BURNER COMPANY
5 South Stage Road
Medford, OR 97501

Attn: Bud Brown

EUGENE

FREDERICK-SKILLERN
50 Highway 90 North
Eugene, OR 97402

Attn: Bob Newburn

COOS BAY

EMPIRE FUEL
320 North Front Avenue
Coos Bay, OR 97420

Attn: Jim Cahill

THE DALLES

E. W. TEMPLE
P. O. Box 720
The Dalles, OR 97508

Attn: E. W. Temple

Leonard Gassner
Oil Institute of Oregon
1927 N. W. Kearney
Portland, OR 97209

J. W. Hughes
Federal Energy Office
909 First Avenue
Seattle, WA 98104

Dave Piper
Office of Energy Conservation
255 Church Street N. E.
Salem, OR 97310

MAJOR OIL SUPPLIERS

W. H. Broderick, Manager
Distribution and Traffic
Mobil Oil Corporation
150 East 42nd Street
New York, NY 10001

cc: T. L. Anderson
2324 Lloyd Center
Portland, OR 97232

Atlantic Richfield
Products Division
Box 2679 - T.A.
Los Angeles, California 90051

cc: Michael Fitzpatrick
P. O. Box 1571
Portland, OR 97207

Attn: David L. Peterson

Shell Oil Company
Technical Services
P. O. Box 2105
Houston, Texas 77001

cc: N. P. Staropoli
P. O. Box 14337
Portland, OR 97232

Attn: Leo Barnes, Manager

Union Oil Company
Division Services
2901 Western Avenue
Seattle, Washington 98111

Attn: W. M. Shreve, Manager

Standard Oil
P. O. Box 950
Portland, OR 97207

Attn: Jim Blamire

MAJOR OIL INDUSTRIAL USERS

Joe Kolberg
Boise Cascade
P. O. Box 1414
Portland, OR 97207

Cliff Thiede
Western Kraft
1601 Standard Plaza
Portland, OR 97204

G. F. Bradley
Reynolds Metals
1800 S. W. 1st
Portland, OR 97201

George Wagner
American Can Company
P. O. Box 215
Halsey, OR 97348

R. A. Rigert
Pacific Power & Light
Public Service Building
Portland, OR 97204

R. B. Dornhecker
Del Monte Corp.
P. O. Box 14130
Portland, OR 97214

Tom Villman
Stayton Canning Co.
930 West Washington Street
Stayton, OR 97383

Matt Gould
Georgia Pacific Corp.
900 S. W. Fifth Avenue
Portland, OR 97204

Ralph Carter
Hanna Nickel Smelting Co.
P. O. Box 85
Riddle, OR 97469

E. L. Miller
Oregon Portland Cement
111 S. E. Madison Street
Portland, OR 97214

R. E. Sprague
Owens Illinois Glass Co.
P. O. Box 20067
Portland, OR 97220

Storrs Waterman
Pennwalt Corp.
P. O. Box 4102
Portland, OR 97208

Irv Luiten
Weyerhaeuser Co.
401 Yeon Building
Portland, OR 97204

Pete Schnell
Publishers Paper
419 Main Street
Oregon City, OR 97045

Jack Brown
Crown Zellerbach
1500 S. W. First Avenue
Portland, OR 97201

MAJOR OIL USERS

AGRIPAC, INC.
P. O. Box 5346
Salem, OR 97304

ALBANY FROZEN FOODS
P. O. Box 609
Albany, OR 97321

CASTLE & COOKE FOODS
P. O. Box 5130
San Jose, California 95150

DEL MONTE CORPORATION
P. O. Box 3575
San Francisco, California 94119

DIAMOND FRUIT GROWERS, INC.
P. O. Box 180
Hood River, OR 97031

STAYTON CANNING CO., COOP.
P. O. Box 458
Stayton, OR 97383

STOKELY-VAN CAMP, INC.
P. O. Box 486
Albany, OR 97321

WEST FOODS, INC.
P. O. Box 428
Soquel, California 95073

THE DALLES CHERRY GROWERS, INC.
P. O. Box 439
The Dalles, OR 97048

UNITED STATES PRODUCTS, INC.
P. O. Box 309
Salem, OR 97308

WILLAMETTE CHERRY GROWERS
P. O. Box 7357
Salem, OR 97203

GENERAL FOODS CORP.
250 N Street
White Plains, NY 10602

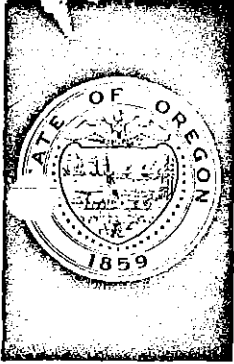
GOURMET FOOD PRODUCTS
P. O. Box 305
Metolius, OR 97742

JONES-NORMEL FOODS
Milton-Freewater, OR 97862

KELLEY, FARQUHAR & COMPANY
P. O. Box 7106
Salem, OR 97303

LAMB-WESTON, INC.
P. O. Box 705
Hermiston, OR 97838

ORE-IDA FOODS, INC.
P. O. Box 10
Ontario, OR 97914



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229

January 15, 1974

Shell Oil Company
N. P. Staropoli
P.O. Box 14337
Portland, OR 97232

Gentlemen:

Recently the Department received information that due to the present fuel oil shortage, the sulfur content of available oil may be higher in the future than currently being offered.

Existing Department rules regulate the sale, distribution and use of fuel oil in the State of Oregon as follows:

Maximum Allowable Sulfur Content

	<u>Present</u>	<u>After 1 July 1974</u>
ASTM Grade 1 Fuel Oil	0.3% Sulfur by wt.	Same
ASTM Grade 2 Fuel Oil	0.5% Sulfur by wt.	Same
ASTM Grade 4 Fuel Oil	2.5% Sulfur by wt.	1.75% Sulfur by wt.
ASTM Grade 5 Fuel Oil	2.5% Sulfur by wt.	1.75% Sulfur by wt.
ASTM Grade 6 Fuel Oil	2.5% Sulfur by wt.	1.75% Sulfur by wt.

In order to project the apparent changes in supply and the sulfur content in those available fuel supplies, and evaluate environmental effects, so that the Department and its Commission will have information in advance upon which plans and decisions can be made, the Department is requesting assistance from all local oil suppliers in providing the following essential information.

1. Approximate quantity (barrels) of each grade of fuel oil sold or distributed by your firm (ASTM Grades 1, 2, 4, 5, 6) in the State on an annual basis, (specify period of estimate).
2. Existing sulfur specifications of fuel oil in the above classes presently sold or distributed by your firm in the State.

COPY

3. Estimated increase in volume or percent of fuel oil by grade that would be made available to the State if the existing sulfur limitations were changed. Show estimate in nearest 0.5% increments, eg. volume in barrels or % increase for 3.5% S., 4.0% S., ect.

4. Anticipated change, if any, in the quantity of each grade of fuel oil (ASTM Grades 4, 5, 6) that will be sold or distributed by your firm in the State solely because of the regulatory change in sulfur content effective 1 July 1974.

5. Feasibility of controlling the distribution of fuel oil within the State based on sulfur content.

If you have any questions concerning the information requested, please contact Wayne Hanson of the Department, or if you are unable to provide the information requested, please forward this letter to other persons in your company that are able to provide the requested information.

Recognizing the importance of this information, your prompt attention is appreciated.

Very truly yours,

Ron L. Myles
Deputy Director

RLM:df



OFFICE OF THE GOVERNOR
255 CHURCH STREET N.E.
SALEM 97310

DAVID PIPER
ASSISTANT TO THE GOVERNOR

May 2, 1974

OFFICE OF ENERGY CONSERVATION
AND ALLOCATION

Mr. J.W. Hughes
Federal Energy Office
909 First Avenue
Seattle, WA 98104

Dear Bill:

We've done some research into the question of the state's requirements for residual fuel as they relate to sulphur content, and rather than relate this information to you verbally, I wanted to have it in letter form.

As you can see from the attached regulation, there are sulphur restrictions on residual fuel oils, distillate fuel oils, and coal. However, all of the other restrictions were to have been in effect on July 1, 1972, and only residual fuel oils are to be revised on July 1, 1974. The Oregon Department of Environmental Quality is concerned about the regulation as it relates to the available residual supply for the state. Wayne Hanson, of the Department of Environmental Quality has contacted each of the oil companies, asking for their comments on the availability of product after the new restriction goes into effect. The replies by the oil companies are nebulous at best, at least in trying to determine a course of action for the Department of Environmental Quality. Under the regulations, exemptions are possible, and large consumers of residual product have been told to petition the Environmental Quality Commission for this exemption. At the same time, they have been requested to appear with their suppliers to explain the supply situation to the Commission. So far, no one has made this appearance.

We have contacted the five major suppliers of residual product in Oregon, and the comments that we have received are reported below:

ATLANTIC RICHFIELD COMPANY

For that product which is supplied from ARCO crude, the present sulphur content is 1.5 to 1.7%. If the product is made from crude received on an exchange basis, it will run up to 3%. No committment was made as to future supply, but it is apparent that in the event the residual is made from crude received on an exchange basis, ARCO will not be able to supply its requirements.

Page Two
J.W. Hughes
May 2, 1974

STANDARD OIL COMPANY

They are presently producing residual at a sulphur content something below 1.75%; but as more imports from Arab countries and Indonesia are used, this percentage level will increase. However, they do plan to continue supplying residual.

MOBIL OIL COMPANY

In the past, residual has been made from Alberta crude and the sulphur contents varied from 1.0 to 1.25%. The present residual is produced from Indonesian crude, and the sulphur ranges from 1.6 to 2.0%. In the future, North Slope crude will be used, and the residual will have a sulphur content in the neighborhood of 2.0%. No supply commitment was made, but again, it is apparent that in the event the crude is North Slope crude, Mobil will not be able to supply Oregon customers.

SHELL OIL COMPANY

Our contact told us that they are presently producing residual product with a sulphur range of 1.4 to 1.8%, so there are no problems in the foreseeable future of meeting the restrictions. However, in a letter sent to Wayne Hanson, Shell has said that they plan to discontinue residual sales after the 1.75% restriction is in effect.

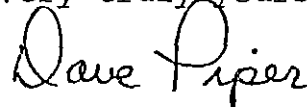
UNION OIL COMPANY

Union Oil has but two accounts in Oregon - Crown Zellerbach in Portland and Hannah Nickle, (a mining operation downstate). The residuals now supplied by Union Oil runs anywhere from 2.0 to 2.5% sulphur. Crown/Z is going to ask the State of Oregon for a variance against the Air Act in the state. If they are not successful, it will, in the words of Mr. Zurilla, give Union fits. At the present mixtures of crude being refined by Union's refineries, there is no way they'll be able to supply these two big users.

Page Three
J.W. Hughes
May 2, 1974

Obviously, we are very concerned about the impact on supply that this regulation will have. We will continue to work with the Department of Environmental Quality to assess this impact. If in your contacts with the oil companies, you learn of anything more firm than the above comments, please inform me.

Very truly yours,

A handwritten signature in cursive script that reads "Dave Piper". The signature is written in dark ink and is positioned above the typed name.

Dave Piper, Director

DEP:cj
Attachment
cc: Wayne Hanson



ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

TOM McCALL
GOVERNOR

B. A. McPHILLIPS
Chairman, McMinnville

GRACE S. PHINNEY
Corvallis

JACKLYN L. HALLOCK
Portland

MORRIS K. CROTHERS
Salem

Ronald M. Somers
The Dalles

Kessler R. Cannon
Director

MEMORANDUM

To : Environmental Quality Commission

From : Director

Subject: Agenda Item No. 2, May 24, 1974 EQC Meeting

Proposed Noise Rules - Status Report
Authorization for Public Hearing to Consider Adoption

A. Procedures Manuals

The noise control enabling legislation, Chapter 467 of the Oregon Revised Statutes, states that the requirements and specifications for equipment to be used in the monitoring of noise emissions, and the procedures for the collection, reporting, interpretation and use of data obtained from noise monitoring activities shall be established and adopted before the adoption of noise control regulations. To this end the Department has written three procedures manuals:

- 1) Sound Measurement Procedures Manual, NPC5-1
- 2) Requirements for Sound Measuring Instruments and Personnel, NPC5-2
- 3) Motor Vehicle Sound Measurement Procedures Manual, NPC5-21

The first sound measurement procedure manual, NPC5-1, establishes measurement procedures relating to noise from industry, commerce, racing events and public roads. The manual also defines procedures to obtain and record ambient noise measurements as needed in the control of ambient noise from motor vehicles, such as motorcycles, being operated near noise sensitive property. The majority of this manual is concerned with the procedures relating to noise regulations for industry, racing events and public roads which shall be submitted for adoption at a later date. This document has been reviewed and agreed upon by the Noise Advisory



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Committee which is composed of members of both industry and environmental groups.

The second manual, NPC-2, establishes specific requirements for instruments to be used in monitoring noise emissions. The manual also defines the level of personnel experience required to obtain acceptable measurements. The requirements in this document ensure the accuracy and quality of all noise measurements and thus minimize any variation between data obtained from any particular source of noise emissions.

The third manual, NPC-21, establishes testing procedures related to the motor vehicle regulations. The manual describes in detail how each test is performed. These tests include the stationary test measured at 25 feet, the on-highway tests used in areas of speed control greater and less than 35 miles per hour, new motor vehicle tests at 50 feet, and the auxiliary equipment sound level test.

As the regulations define different vehicle types, due to the inherent difference in noise sources for each type, the procedure manual describes testing methods for the various vehicle categories. The manual also describes in detail how the measurement site is located, the precautions to be taken during the testing to obtain acceptable data, test equipment setup, sound level measurements and the actual procedures of vehicle operation during the test. A sample of data test forms are included for each of the types of tests described.

B. General Comments on Noise Rules

I. Policy

The policy statement is proposed for all noise rules, not just those for motor vehicles, and is derived directly from the enabling legislation which directs the Department to adopt reasonable rules which protect the health, safety and welfare of Oregon's citizens. It will further be the policy of the Department to cooperate with other state and local governmental units in establishing and supporting noise control programs and to encourage the enforcement of viable local noise control regulations where these regulations do not conflict with those established by the Department. The control of all noise sources will be undertaken in a progressive manner in cooperation with all of the parties concerned.

II. Exceptions and Variances

Possible exceptions to the noise rules as written may be granted by the Department in situations described specifically in each of the noise rules. These exceptions are generally narrowly defined, i.e. classic cars, and of a technical nature. Their purpose is to allow the Department to make exceptions to the rules in instances too minor to consume the valuable time of the Commission. Of course, the final authority to issue variances to any of the noise regulations is vested in the Environmental Quality Commission.

C. Proposed Noise Standards

The proposed noise standards presently under consideration include noise limits on both new and in-use motor vehicles. The proposed standards for public roads, industry and commerce, and racing will be considered at a later date. The standards for industry and commerce are being examined in detail by a committee of environmentalists, industrialists and the Department staff. The work of this group should be completed by early June and hopefully can be considered by the Commission at the July meeting in Salem. The standards for public roads and racing are being reviewed by the Department staff and should be ready for consideration by the Commission in either August or September.

I. New Vehicle Standards

The noise standards for new motor vehicles cover motorcycles (on and off-road), snowmobiles, trucks, buses, automobiles and all other road vehicles. The only vehicles excluded from this standard would be farm machinery and other four-wheel vehicles used exclusively off-road. These standards are modeled after those adopted by the California legislature. Table I details the proposed noise limits and compares them with those adopted by California.

TABLE I

Vehicle	Oregon		California	
	Model Year	Standard (dBA)	Mfd. Year	Standard (dBA)
Snow-mobile	1975	82	1973-	82
Road Motor-Cycle	1975 1976-1978 1979-	83 80 75	1975-1977 1978-1987 1988-	80 75 70
Off-Road Motor-Cycle	1975 1976-1978 1979-	83 80 75	1975-	86
Trucks & Buses	1975 1976-1978 1979-	86 83 80	1975-1977 1978-1987 1988-	83 80 70
Autos & Light Trucks	1975 1976-1978 1979-	86 80 75	1975-1977 1978-1987 1988-	80 75 70

In general the comparison shows the proposed standards following the lead of California with some lag because of different enforcement dates, i.e. model year versus manufactured year.

As has been pointed out in papers on community noise, motor vehicle noise is the single most important source of noise in our environment. This is due primarily to the mobile nature of this noise source, but also to the excessive noise generated by many of the vehicles. In many cases the excessive noise is created by exhaust system deterioration or modification after the new vehicle is sold. However, many new vehicles are not constructed with effective noise control systems. Therefore it is essential to ensure that new vehicles equipped with available muffling technology be developed for use. With these goals in mind one can summarize the key aspects of the proposed rules as follows:

Motorcycles - In analyzing the public complaints received by the Department noise staff, noise from motorcycles is clearly one of the leading causes of noise complaints. The data on motorcycle noise collected on new 1973 models

indicates that while 83 dBA will require a substantial noise reduction for the noisiest cycles, the great majority of motorcycles will be able to meet the 83 dBA limit set for 1975. The 1976 standard of 80 dBA will clearly be more difficult to meet, but again the technology is most certainly available. One manufacturer has indicated to the Department that it will be able to meet that standard with its road cycles. The 1979 standard of 75 dBA will only be reached with the development of new technologies (although some small cycles now meet this standard), but the lead time for such development is sufficient and the technology should be available.

The primary problem most motorcycle manufacturers have with the proposed standards is the treatment of all cycles as equal. As was pointed out earlier, California has more lenient standards for off-road cycles than they do for road cycles. The view of the Department noise staff however, is that since road and off-road cycles have essentially the same propulsion systems, and since the same muffling technology is available to each, and since cycles operating off-road are the major source of our motorcycle complaints, the noise standards for off-road cycles should be identical to those for road cycles.

In summary, the motorcycle standards will generally be achievable by most road and off-road motorcycles. In the short-run some off-road models, particularly those with large displacement engines, may have to be held off the market or given a temporary variance from the standards.

Snowmobiles - The public hearing on these proposed noise rules yielded testimony that the control of noise in our wilderness areas is essential. The control of snowmobile noise is an important step in that direction. The snowmobile standards proposed in these rules should be generally attainable because they conform with the adopted noise reduction policy of the International Snowmobile Industry Association.

Trucks and Buses - The excessive noise from trucks is of particular concern both on our freeways and city streets. This problem is of such a magnitude that this is the first source of noise EPA has proposed to control (on an interstate basis). The proposed Department standards for trucks are set at a level which by 1976 will require the

introduction of noise reduction equipment presently being tested on prototype trucks. Prototype trucks do indicate that trucks can be built to meet the proposed 83 dBA standards for 1976-1978. Reaching the 80 dBA standard for 1979 and beyond will require the introduction of more extensive noise reduction equipment, but there is evidence in the federal "Quiet Truck" study that this level of noise reduction can be achieved.

The noise from relatively new buses in the Tri-Met fleet has recently been measured at approximately 80 dBA. Therefore we would anticipate that the three major bus manufacturers will be able to meet the standards as written. However, the standard will prevent any degradation from present production levels.

Light Trucks, Cars and Other Road Vehicles - Noise data on these vehicles indicates that the proposed standards can be achieved with existing noise control technology - American Motors does infer that Multi-Purpose Vehicles may have problems with these standards, but no data has been submitted to support this claim. These standards should limit the sale of custom built "modified" road vehicles which do not employ the appropriate muffling equipment.

New Vehicle Measurement and Enforcement- The Department intends to monitor compliance of the proposed rules as follows:

- 1) require submission of noise test data from the vehicle manufacturer,
- 2) as necessary, conduct random testing of new vehicles.

III. In-Use Vehicle Standards

The standards for in-use vehicles are tied directly to the new motor vehicle standards. In other words, if a vehicle is permitted to be sold at x dBA, the in-use standards are designed to take into account some exhaust system deterioration while limiting "hot rod" operations and therefore are set at x dBA plus or minus some dBA level to account for the operating variables. In-use standards for vehicles which had no new vehicle standards (all pre-1975 vehicles) are set at a level which will generally be attainable by all these vehicles if their exhaust system is in good working order. In short,

these standards will not require retrofits to most motor vehicles, but they are intended to prevent modifications creating unnecessary noise levels.

Ambient Noise Limits - To control the problem of off-road vehicles operating in residential areas, these standards set limits on the noise generated by the operation of these vehicles. Measurements are made at the nearest noise sensitive property. If the noise limits are exceeded the owner of the property on which the noise source is operating can be held responsible for the control of such noise on his property. A 1000 foot limit is used so that the operation of off-road vehicles on large land tracts is not prohibited by these regulations.

Auxiliary Equipment - Equipment powered by a motor vehicle's engine and used to handle or store products in that road vehicle are controlled to the levels permitted for trucks. Data available to the Department indicates that this standard is achievable in road vehicles with adequate muffling systems, but that the more stringent standards for model year 1976 and beyond will require the use of equipment quieter than that usually purchased today. Standards for equipment powered by a secondary power source are being developed for adoption in early 1975.

In-Use Vehicle Measurement and Enforcement

The Department's ability to monitor and enforce the proposed noise regulations for in-use motor vehicles is limited. The Department staff will respond within the capability of the existing staff to public complaints concerning excessive noise generated by vehicles (motorcycles, etc.) on vacant lots and off public roads. Some assistance in enforcement may be obtained from other enforcement agencies on this portion of the rules.

The Department will have the capability to monitor the compliance of noise from in-use vehicles at the motor vehicle emission inspection stations. However such capability is limited to the Portland Metro area. It is not anticipated the Department will have the staff nor the capability to monitor such noise outside the Portland area in the foreseeable future. Any other enforcement of this rule will have to be conducted by the law enforcement agencies.

There has been some interest expressed by city government, particularly Portland and Eugene, in this rule. The Department has met with representatives of these metropolitan

areas to discuss other possibilities and techniques of enforcement. Ultimately adequate enforcement of this rule may require additional funding by the Department if effective enforcement is to be achieved.

Summary

The noise rules for motor vehicles are written so as to control the modification of, and maintenance to the exhaust systems of vehicles presently in use, while reducing the noise levels found in new motor vehicles. This approach will gradually bring about a reduction in ambient noise from motor vehicles as the turnover of older vehicles reduces the noise level of the average vehicle.

A list of documents pertinent to the development of these proposed manuals and rules is presented in the attached bibliography.

Director's Recommendation

It is the recommendation of the Director that on June 21 in Coos Bay the Environmental Quality Commission hold a public hearing for the purpose of adoption of the noise manuals NPC-1,2,21 and the noise rules for motor vehicles.



KESSLER R. CANNON
Director

5/15/74

EXHIBIT LIST

1. "Motor Vehicle Noise" - Report by the Technical Advisory Panel on Motor Vehicle Noise for the California Legislative Assembly, February 1973.
2. "Motor Vehicle Noise: Identification and Analysis of Situations Contributing to Annoyance" prepared for the Automobile Manufacturer's Association Inc. by Bolt Beranek and Newman Inc. Report 2082, June 1971.
3. "Transportation Noise Pollution: Control and Abatement" NASA Langley Research Center and Old Dominion University; NASA Contract NGT 47-003-028 dated 1970.
4. "Public Health and Welfare Criteria for Noise" by U.S. Environmental Protection Agency dated July 27, 1973, Report Number 550/9--73-002.
5. "Transportation Noise and Noise From Equipment Powered by Internal Combustion Engines" by U.S. Environmental Protection Agency dated December 31, 1971. Report No. NTID 300.13.
6. James D. Miller, "Effects of Noise on People" U.S. Environmental Protection Agency dated December 31, 1971, Report No. NTID 300.7.
7. "Specification for Sound Level Meters" American National Standard Institute, Inc. approved April 27, 1971, Standard No. ANSI SI.4-1971.
8. "American Standard Specification for Octave, Half-Octave, and Third-Octave Band Filter Sets" American National Standard Institute, Inc., approved May 4, 1966, Standard No. SI.11-1966.
9. "Method for the Physical Measurement of Sound" American National Standards Institute Inc., approved August 20, 1962, Report No. ANSI SI.2-1962, reaffirmed 1971.
10. "Measurement of Automotive Passby Noise" by Ralph Hillquist and Richard Bettis, Society of Automotive Engineers Report No. 720275 dated January 1972.
11. "SAE Recommended Practice - Qualifying A Sound Data Acquisition System - SAE J184" 1973 SAE Handbook Society of Automotive Engineers, Inc., New York, N.Y.
12. "SAE Standard - Sound Level for Passenger Cars and Light Trucks- SAE J986a" 1973 SAE Handbook, Society of Automotive Engineers, Inc., New York, N.Y.

13. "SAE Recommended Practice - Exterior Sound Level for Heavy Trucks and Buses - SAE J366a", 1973 SAE Handbook Society of Automotive Engineers, Inc., New York, N.Y.
14. "SAE Recommended Practice - Exterior Sound Level for Snowmobiles SAE J192", 1973 SAE Handbook, Society of Automotive Engineers, Inc., New York, N.Y.
15. "SAE Standard - Sound Levels for Engine Powered Equipment - SAE J952b", 1973 SAE Handbook, Society of Automotive Engineers Inc., New York, N.Y.
16. "SAE Standard - Engine Rating Code - Spark Ignition - SAE J245", 1973 SAE Handbook, Society of Automotive Engineers, Inc., New York, N.Y.
17. "SAE Standard - Engine Rating Code - Diesel - SAE J270", 1973 SAE Handbook Society of Automotive Engineers, Inc., New York, N.Y.
18. "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare With an Adequate Margin of Safety", U.S. Environmental Protection Agency, March 1974, Report No. 550/9-74-004.
19. "Motor Vehicle Laws of Oregon", Compiled by Motor Vehicles Division, 1971/72 Edition.
20. "Report to the President and Congress on Noise" Report of the Administrator of the Environmental Protection Agency, February 1972, 92nd Congress 2nd Session, Senate, Document No. 92-63.
21. Oregon DEQ - Bar Chart of Relative Ranking of Noise Problems from State-Wide Public Information Meetings and Questionnaire Mail Response.
22. Oregon DEQ - Bar Chart of Relative Ranking of Noise Problems from Telephoned Complaints
23. Oregon DEQ - Memo - "Noise Reductions Inside a House"
24. Oregon DEQ - Memo - "Weather Conditions Effects on Noise Propagation"
25. Oregon Revised Statutes - Public Health, Safety and Morals, Chapter 467 Noise Control.

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY CONTROL DIVISION

MAY, 1974

PROPOSED

NOISE CONTROL REGULATIONS

5/9/74

PROPOSED NOISE CONTROL REGULATIONS

GENERAL

35-005 POLICY. 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 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.

35-010 EXCEPTIONS. Upon written request from the owner or controller of a noise source, the Department may authorize exceptions as specifically listed in these rules.

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 hours 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.

35-015 DEFINITIONS. As used in this Section,

(1) "Ambient Noise" means the all-encompassing noise associated with a given environment, being usually a composite of sounds from many sources near and far. Separate ambient noise measurements both including and excluding a noise source are often required on particular NOISE SENSITIVE PROPERTY to provide an index of the environmental impact of that noise source on the people residing on that property.

- (2) "Commission" means the Environmental Quality Commission.
- (3) "Department" means the Department of Environmental Quality.
- (4) "Director" means the Director of the DEPARTMENT.
- (5) "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.
- (6) "In-Use Motor Vehicle" means any MOTOR VEHICLE which is not a NEW MOTOR VEHICLE.
- (7) "Motorcycle" means any MOTOR VEHICLE, except FARM TRACTORS, designed to travel on not more than three wheels which are in contact with the ground.
- (8) "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 water craft.
- (9) "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.
- (10) "Noise Level" means weighted SOUND PRESSURE LEVEL measured by use of a metering characteristic with an "A" frequency weighting network and reported as dBA.
- (11) "Noise Sensitive Property" means real property on which people normally sleep, attend schools, churches and public libraries. Property used in industrial, commercial or agricultural activities is not defined to be NOISE SENSITIVE PROPERTY unless it meets the above criteria in more than an incidental manner.
- (12) "Off-Road Recreational Vehicle" means any MOTOR VEHICLE 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.
- (13) "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.
- (14) "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.
- (15) "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.
- (16) "Racing Events" means any competition using MOTOR VEHICLES, conducted under a permit issued by the governmental authority having jurisdiction or, if such permit is not required, then under the auspices of a recognized sanctioning body. This definition includes, but is not limited to, events on the surface of land and water.
- (17) "Racing Vehicle" means any MOTOR VEHICLE that is designed to be used exclusively in RACING EVENTS.
- (18) "Road Vehicle" means any MOTOR VEHICLE registered for use on PUBLIC ROADS, including any attached trailing vehicles.

(19) "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.

(20) "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 micronewtons per square meter.

(21) "Warning Device" means any device which signals an unsafe or potentially dangerous situation.

35-025 NOISE CONTROL REGULATIONS FOR THE SALE OF NEW MOTOR VEHICLES.

(1) Standards and Regulations. 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 A, except as otherwise provided in these rules.

TABLE A

Moving Test At 50 Feet

<u>Vehicle Type</u>	<u>Model Year</u>	<u>Maximum Noise Level, dBA</u>
Motorcycles	1975	83
	1976-1978	80
	after 1978	75
Snowmobiles as defined in ORS 481.048	1975	82
	1976-1978	78
	after 1978	75
Truck and bus as defined under ORS 481.030 and 481.035.	1975	86
	1976-1978	83
	after 1978	80
Automobiles, light trucks and all other ROAD VEHICLES	1975	83
	1976-1978	80
	after 1978	75

If no model year is defined for the New Motor Vehicle, then the model year shall be that calendar year in which the New Motor Vehicle is manufactured.

RACING VEHICLES will be exempt from the noise levels in Table A if it can be adequately demonstrated to the DEPARTMENT that these vehicles are used exclusively in sanctioned RACING EVENTS

(2) Measurement

(a) Sound measurements shall conform to test procedures adopted by the COMMISSION in Motor Vehicle Sound Measurement Procedures Manual (NPCS-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 comprehensive noise sampling technique shall be submitted by the new motor vehicle dealer (or designated representative) 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 shall cooperate in the reasonable noise testing of a specific class of motor vehicle being offered for sale.

(3) Monitoring and Reporting. Prior to the sale of any new motor vehicle designated in Table A, the dealer (those selling or offering for sale) or a designated representative shall submit the new motor vehicle noise data gathered by the vehicle manufacturer to the Department in the form requested by the Department.

(4) Exceptions. Upon prior written request from the dealer 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. It is recognized that noise data for 1975 model year vehicles may not be available prior to sale if manufacturers are not now engaged in noise tests.

35-030 NOISE CONTROL REGULATIONS FOR IN-USE MOTOR VEHICLES.

(1) Standards and Regulations

(a) Road Vehicles - No PERSON shall operate any ROAD VEHICLE which exceeds the NOISE LEVEL limits specified in Table B or C, except as otherwise provided in these rules.

TABLE B

Stationary Test At 25 Feet Or Greater

<u>Vehicle Type</u>	<u>Model Year</u>	<u>Maximum Noise Level, dBA</u>
Truck and bus as defined under ORS 481.030 and 481.035.	before 1976	94
	1976-1978	91
	after 1978	88
MOTORCYCLES	before 1975	94
	1975	91
	1976-1978	88
	after 1978	83
Automobiles, light trucks and all other ROAD VEHICLES	before 1976	92
	1976-1978	88
	after 1978	83

TABLE C

Moving Test at 50 Feet Or Greater At Vehicle Speed

<u>Vehicle Type</u>	<u>Model Year</u>	<u>Maximum Noise Level, dBA</u>	
		<u>35 mph or less</u>	<u>Greater than 35 mph</u>
Truck and bus as defined under ORS 481.030 and 481.035.	before 1976	88	90
	1976-1978	85	87
	after 1978	82	84
Motorcycles	before 1975	84	88
	1975	81	85
	1976-1978	78	82
	after 1978	73	77
Automobiles, light trucks and all other ROAD VEHICLES	before 1976	81	85
	1976-1978	78	82
	after 1978	73	77

Upon application to the DEPARTMENT non-conforming "classic" and other "special interest" vehicles shall be considered for an exception for the purpose of maintaining authentic equipment.

(b) Off-Road Recreational Vehicles - No person shall operate any OFF-ROAD RECREATIONAL VEHICLE which exceeds the noise limits specified in Table D.

TABLE D

Allowable Noise Limits

<u>Model Year</u>	<u>Maximum Noise Level, dBA</u>	
	<u>Stationary Test (25 feet or greater)</u>	<u>Moving Test (50 feet or greater)</u>
Before 1975	94	88
1975	91	85
1976-1978	88	82
After 1978	83	77

(c) Exhaust Systems - No person shall operate any road vehicle or off-road recreational vehicle with a defective exhaust system. This rule is limited to exhaust systems with the following defects:

- (A) no muffler
- (B) leaks in the exhaust system
- (C) pinched outlet pipe

(d) Ambient Noise Limits - No person shall cause, allow, permit or fail to control the use of MOTOR VEHICLES, which includes motorcycles, on property which he owns or controls within 1000 feet of the nearest NOISE SENSITIVE PROPERTY such that the noise levels specified in Table E are exceeded as measured 25 feet from the NOISE SENSITIVE PROPERTY toward the noise source.

TABLE E

Allowable Noise Limits

<u>Time</u>	<u>Maximum Noise Level, dBA</u>
7 a.m. - 10 p.m.	60
10 p.m. - 7 a.m.	55

Not included in this subsection are motor vehicles operating in RACING EVENTS, motor vehicles initially entering or leaving property more than 1000 feet from the nearest NOISE SENSITIVE PROPERTY, motor vehicles operating on PUBLIC ROADS, and 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 F, except as otherwise provided in these rules.

TABLE F

Stationary Test At 50 Feet Or Greater

<u>Model Year</u>	<u>Maximum Noise Level, dBA</u>
Before 1976	88
1976-1978	85
After 1978	82

(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 1/1/75.

(2) Measurement - Sound measurement shall conform to test procedures adopted by the Department 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 C.

35-100 VARIANCES. (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 or 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 holder of the variance by certified mail and all persons who have filed with the Commission a written request for such notification.



DEPARTMENT OF ENVIRONMENTAL QUALITY

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TOM McCALL
GOVERNOR

KESS CANNON
Director

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item Q, May 24, 1974 EQC Meeting

Portland Community College, Rock Creek Campus
Proposed 449-Space Parking Facility, Washington County

Background:

On March 18, 1974, the Department received an application from Portland Community College (PCC) to construct a 449-space parking facility ancillary to a proposed new PCC campus known as the Rock Creek Campus.

On April 12, 1974, the Department received additional information from PCC intended to supplement their March 18th application.

The proposed parking facility is designed to serve the first phase construction of the proposed campus which will contain 155,000 square feet of classrooms, vocational shops, library and support facilities for 600 students and 50 staff members.

The PCC master plan for the Rock Creek Campus envisions a full-time enrollment of 2500 students, plus various ancillary developments such as restaurants, service stations, motel-hotel and residential developments.

The site of the proposed campus is on 250 acres north of the intersection of NW 185th and Springville Road in Washington County next to the Rock Creek Reservoir (See Figure 1). The site is defined by CRAG, under the Radial Corridor or Combination Concept, adopted by the CRAG Executive Board on April 12, 1974, as suburban low density and rural residential and major agricultural land use (See Figure 1).



Contains
Recycled
Materials

Further, under the "Interim Regional Development Policy" adopted by the CRAG Executive Board on December 21, 1973, the site is located on the boundary between Priority Development Area 4 and Priority Development Area 6 (See Figure 2).

Priority Development Area 6 is the lowest priority category for development (rural-agricultural, no sewer or water service, and land use zoning is non-urban). In a letter dated September 26, 1973 (copy attached) CRAG recommended to the Washington County Planning Commission that a conditional use permit for the PCC Rock Creek Campus be denied. Washington County subsequently approved PCC's conditional use permit, however, site plan approval is still required and will not be considered by the Planning Commission before June 19, 1974.

Priority Development Area 4 are areas in which hookups to public sewer systems are not available, but the area is located in a water district or association, and land use zoning permits industrial or commercial structures and/or uses, or residential structures on lots less than one acre. The campus site is outside the Unified Sewerage Agency boundaries and will require an extension of sewer service. Such extension will require approval of the Portland Metropolitan Boundary Commission and will not be considered by that agency before July 24, 1974. In addition, the site is outside annexation to the district or extension of service for water supply. This application must also be approved by the Portland Metropolitan Boundary Commission within the same time frame as sewerage approval.

On April 19, 1974, the Department received a letter from CRAG recommending that the Department withhold approval of PCC's parking facility application until representatives from CRAG, Washington County and PCC explore more suitable alternative locations for the campus (copy attached). CRAG contends that the proposed Rock Creek Campus is a high people-oriented facility and is not consistent in its present proposed location with the Interim Development Policy or Radial Corridor Concept adopted by the CRAG Executive Board.

CRAG has indicated that the PCC campus would be more appropriate in the existing radial transportation corridor (shown in pink on Figure 1) between Beaverton and Hillsboro.

Pursuant to the provisions of Senate Bill 769 passed by the 1973 Legislative session, CRAG is the legally constituted regional planning agency for the Portland metropolitan area. On May 31, 1974 the CRAG Executive Board will hold its first meeting under the authority invested in it by SB 769.

Transit service in the vicinity of the proposed Rock Creek Campus is presently limited to a single line, the Somerset West line #61, which terminates approximately one mile from the campus site. Tri-Met has

indicated that it will not extend service to the PCC campus until it is fully developed at the 2500 student level.

PCC has agreed to operate a shuttle bus system to provide for student movement between the Rock Creek Campus and Mt. Sylvania Campus. This service fails to provide for the most significant traffic generating trips of the proposed campus which are the home to school and work to school trips.

PCC has also agreed to operate a computerized car pool information system for student use on a voluntary basis.

Discussion:

One of the major goals of the Interim Development Policy and Radial Corridor Concept adopted by the CRAG Executive Board was to eliminate the proliferation of public services into undeveloped areas thereby lessening the degree of urban sprawl and encouraging better utilization and a higher economic return on existing facilities.

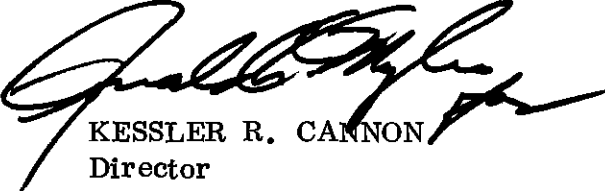
The construction of the Rock Creek Campus of PCC will require the extension of sewer and water service into presently unserved areas. It will as a result encourage the development of other commercial and residential projects in the area. More important from an air quality and noise level standpoint it will necessitate the improvement of existing public roads in the area and the extension of transit service. The consequence is dispersion of development and public services which is not consistent with the policies adopted thus far by the CRAG Executive Board. This is also inconsistent with the adopted policy of the EQC which is to allow only those parking facilities and highways to be built which are consistent with environmentally sound transportation plans and which do not interfere with attaining and maintaining acceptable air quality, noise levels and quality of life in urban areas, and to promote the development of comprehensive transportation plans in urban areas in which environmental considerations play a major role and specifically to promote the development of mass transit systems wherever feasible.

The policies adopted by CRAG are the first step in developing land use and transportation plans consistent with the objectives of the Department. Relocation of the proposed Rock Creek Campus to a site in the radial transportation corridor, where existing and planned transit services are designed for this level of development, would be consistent with the adopted policies of CRAG and DEQ.

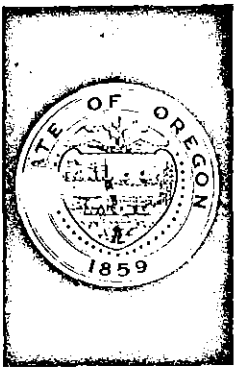
Therefore, in consideration of the analysis and recommendations of the CRAG staff, the adopted policies of the CRAG Executive Board, the fact that CRAG will assume the powers granted it pursuant to SB 769 effective May 31, 1974, the adopted policy of the EQC, and the previously expressed policy of the EQC not to grant approval to projects which have not received complete land use and siting approval from planning agencies, it is concluded that the March 18, 1974 application of PCC should be withheld until representatives from CRAG, Washington County and PCC explore alternative locations.

Recommendation:

The Director recommends that the Commission issue an order prohibiting construction of the 449-space parking facility proposed by Portland Community College, without prejudice to the right of Portland Community College to file a revised application when an approved location has been obtained from the Columbia Region Association of Governments.


KESSLER R. CANNON
Director

5/23/74 MJD:h



DEPARTMENT OF ENVIRONMENTAL QUALITY

PARKING FACILITY

NOTICE OF CONSTRUCTION AND APPLICATION FOR APPROVAL

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5267

To Construct or Modify an Air Contaminant Source

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

(A letter of approval to construct must be obtained from the Department prior to construction. The Department may request an environmental impact statement or other information within 30 days of receipt of this application.)

Business Name: Portland Community College
Rock Creek Center Phone: 244-6111

Address of Premises: 12000 SW 49th Avenue City Portland Zip: 97219

Nature of Business: Education

Responsible Person to Contact: Amo De Bernardis Title: President
Coordinator

Other Person Who May be Contacted: Roy L. Lindsay Title: Planning & Research

Corporation Partnership Individual Government Agency

Legal Owner's Address: Same City: Same Zip Same

Description of Parking Facility and its Intended Use. (Please include 2 copies of Plot Plan showing parking space location and access to streets or roadways):

See attached sheet

Estimated Cost: Parking Facility Only: \$ 275,000.00 (\$610.00 per space)

Estimated Construction Date: June 1, 1974 Estimated Operation Date: August 1975

Name of Applicant or Owner of Business: Portland Community College

Title: COORDINATION OF PLANNING Phone: 244-6111

Signature: Roy L. Lindsay Date: 3/15/74

Applicability: This Notice of Construction Requirement Pertains

1. To areas within five miles of the municipal boundary of any city having a population of 50,000 or greater.
2. Any parking facility used for temporary storage of 50 or more motor vehicles or having two or more levels of parking for motor vehicles.

Date Received: _____

N/C Number _____

March 15, 1974

PARKING FACILITY DESCRIPTION

PORTLAND COMMUNITY COLLEGE

ROCK CREEK CENTER

This parking facility is to be used by faculty, visitors and students while attending Portland Community College.

The first phase site development will include the construction of 449 off street parking spaces for use by approximately 600 students and 50 faculty members.

The parking area will be divided into three separate lots. The small parking lot immediately adjacent to the building contains 46 parking spaces including 4 spaces for use by the handicapped. Parking lot No. 2 will contain 78 spaces and parking lot no. 3 will contain 325 spaces. The parking lots will be surrounded by concrete curbs and each lot has been designed to have approximately 20% of the area within the lot landscaped. This landscaping shall consist of trees, shrubs, and ground cover.

SUPPLEMENTAL INFORMATION
PORTLAND COMMUNITY COLLEGE
ROCK CREEK CENTER

1. Extent and nature of development to be served by parking facility:
 - a. The first phase building construction for the Portland Community College, Rock Creek Center, will contain 155,000 square feet. This will consist of classrooms, vocational shops, library, and necessary support spaces for the operation of a community college.
 - b. There will be approximately 50 staff members employed and 600 students upon completion of the first phase construction.
 - c. There are no residential living units planned for the first phase of construction.
 - d. Washington County requires that there be one parking space for each six seats in the classrooms and one space for each two employees. This results in a total parking requirement of 425 spaces for students and faculty upon completion of the first phase of construction.
2. Existing and planned mass transit service in vicinity of development:
 - a. Please see the attached letter from Tri-Met, dated March 14, 1974. The 2,500 full-time enrollment referred to in this letter is the estimated enrollment upon completion of the entire campus.
3. Mass transit patronage incentive programs and car pool incentive programs:
 - a. Covered bus loading and unloading areas will be built during the first phase of construction adjacent to the main educational building. Additional covered bus loading and unloading areas will be added as the campus develops.
 - b. There will be printed information regarding mass transit schedules to the college available in the mall for students, faculty and visitors.

Supplemental Information
Portland Community College
Rock Creek Center
Page 2

- c. The college will establish a shuttle bus system between the Rock Creek Center and the existing Portland Community College Campus located at 12000 SW 49th Avenue, Portland, Oregon.
- d. The college is planning a computerized car pool program available for use by the students. Special parking places close to the main education structure will be reserved for the people participating in this program.

THE COUNTY
METROPOLITAN
TRANSPORTATION
DISTRICT
OF OREGON



4314 SE 17TH AVENUE
PORTLAND, OREGON 97202
(503) 233-8373

BOARD OF DIRECTORS

Mr. W. E. Roberts, *President*
Mr. John B. Piacentini, *Vice President*
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Mrs. Angle Davis, *Secretary*
Mr. George Brown
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TRI-MET

March 14, 1974

Mr. Robert Bloodworth
Bloodworth, Hawes, Peterson & Assoc.
7000 S. W. Varns Road
Tigard, Oregon 97223

Dear Mr. Bloodworth,

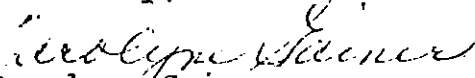
Mr. Frank Ellis of your office contacted Tri-Met to determine existing and proposed mass transit service to the new Rock Creek Center of Portland Community College. The following information should be helpful to you in responding to DEQ reporting requirements.

Bus service to the Rock Creek area is currently via the Somerset West Line #61, which terminates at N. W. Columbia Avenue and N. W. 192nd Avenue in the Rock Creek residential development. This point is approximately one mile from the PCC Rock Creek Center. In general, 40' headways are maintained on this route. Extension of this line will certainly be considered when enrollment warrants.

Additional public transit is being planned to this general area. With implementation of the Sunset Suburban Transit Station, to be located near the interchange of the Sunset Highway and Highway 217, connecting local feeder routes will be expanded into developing neighborhoods from that Station. This service is planned for operation by mid 1976. Your estimate of 2,500 full-time enrollment would justify extension of such feeder service to the Center.

If you have need of further information, please don't hesitate to call.

Sincerely,


Carolyne Gainer
Administrative Assistant

Bloodworth, Hawes, Peterson
& Associates Architects

7000 Southwest Varns Road Portland, Oregon 97223 Telephone (503) 639-9430

April 11, 1974

Mr. Kessler Cannon
Director
Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Re: Portland Community College
Rock Creek Center

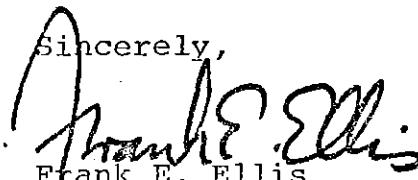
Dear Mr. Cannon:

In response to your letter dated March 27, 1974 we are sending you a copy of a letter from Portland Community College dated April 9, 1974.

This letter contains the requested information regarding the description and implementation of the proposed shuttle bus system and car pool program to be instigated at the Rock Creek Center.

Should you have any further questions please feel free to contact us.

Sincerely,


Frank E. Ellis

FEE:cp

cc: Dr. Amo De Bernardis

enclosure

OFFICE OF DEPUTY DIRECTORS

RECEIVED

APR 12 1974

DEPT. OF ENVIRONMENTAL QUALITY

Robert L. Bloodworth A.I.A., Richard Z. Hawes A.I.A., William D. Peterson A.I.A.,
Monte G. Cook A.I.A., Frank E. Ellis A.I.A., Richard H. G. Eslick A.I.A., Richard J. Sweeney



April 9, 1974

Robert Bloodworth
Bloodworth, Hawes, Peterson & Associates
7000 S. W. Varns Road
Portland, Oregon 97223

Attention: Frank Ellis

Dear Bob:

Pursuant to your April 1, 1974, letter requesting additional data for the Department of Environmental Quality, we enclose the following statements:

1. Shuttle Bus System - Description and Implementation

- (1) It has always been the intent of Portland Community College to make it possible for the students to exercise options. One of these options is to be enrolled for a program at the Rock Creek Center and be able to take some support courses or some general education courses at some other facility. To help students accomplish this and to exercise flexibility, we will continue to supplement public transportation systems by any necessary shuttle system in order to make our program work.
- (2) Because a broad range of college parallel courses will not be available immediately at the Rock Creek Center, we anticipate that there will be a strong need for those students enrolled in the technical programs offered at the Rock Creek Center to be able to supplement their programs by courses taught at Sylvania.
- (3) Portland Community College at the present time operates the shuttle bus between its Sylvania, Cascade, Ross Island, and Airport centers. We do this because it was found there was need for students to be able to move between facilities in order to give flexibility to the kinds of programs they were taking and to avoid duplications of programs. The shuttle bus system for the Rock Creek and Sylvania centers will be accomplished in the same manner as the shuttle bus system now in existence. Surveys are made of the students' needs and time schedules and then the bus is hired and the schedule built. We plan to be ready with our bus operation as soon as the facilities are ready at Rock Creek and we begin our first classes.

-2-

2. Car Pool Program - Description and Implementation

Portland Community College provides a carpool service available for all students and staff at its Ross Island and Sylvania centers. This service is designed to help relieve the commuter of the burdens of long gas lines, expensive gas, traffic congestion, and parking problems.

The student or staff member who desires carpool matching fills out a card at one of the carpool booths found at convenient locations at both centers. The card is then processed by the Data Processing Department resulting in a print-out of names, addresses, and telephone numbers of those who live near each other with similar schedules. This information is mailed to the student who then forms the carpool, making him/her eligible for a "preferred parking" sticker. There is a special prime parking area which is reserved only for the carpool drivers.

It is planned to extend this service to the Rock Creek Center. It can be implemented as soon as the facility is ready for classes.

Please submit these to the Department of Environmental Quality as requested in their letter of March 27, 1974.

Sincerely,



Amo De Bernardis
President

ADB ds

COLUMBIA REGION ASSOCIATION of GOVERNMENTS

CRAG

6400 S.W. CANYON COURT

(503) 297-3726

PORTLAND, OREGON 97221

September 26, 1973

Mr. Martin Cramton, Jr., Director
Washington County Planning Commission
Washington County Court House
Hillsboro, Oregon 97123

Dear Martin:

A. McKay Rich, Acting Executive Director, asked me to coordinate with other staff members on our review and comment of the projects referred to in your letter of August 30, 1973. Basically, the reviews are made within the framework of the recently adopted assumptions, goals and policies of the Regional Comprehensive Plan and the Interim Development Policy.

The staff wishes to emphasize that although the Regional Comprehensive Plan is not complete, the assumptions, goals and policies which provide the framework for that planning have been officially adopted by the Executive Board. The Interim Development Policy has not been adopted by the Executive Board of the General Assembly, although, its general purpose has been accepted by both bodies. The Executive Board reaffirmed that acceptance at their meeting on September 21, 1973.

These reviews have been forwarded to them for their information and further consideration.

STAFF REVIEWS:

PORTLAND COMMUNITY COLLEGE - CONDITIONAL USE APPLICATION

1. Relation to CRAG Interim Development Policy

The site is situated in an area designated in the proposed Interim Development Policy as Priority Number 6. This places the proposal in the lowest priority category for development (rural-agricultural, no sewer or water service, and land use zoning is non-urban).

2. Relation to CRAG Interim Comprehensive Plan

The Interim Comprehensive Plan indicates the shoreline areas surrounding the proposed Rock Creek Reservoir as "Open Space with Unique Opportunities." A "Major Community

CLACKAMAS COUNTY

Canby
Gladstone
Happy Valley
Lake Oswego
Milwaukie
Oregon City
West Linn

CLARK COUNTY

Camas
Vancouver
Washougal

COLUMBIA COUNTY

Clatskanie
Columbia City
Prescott
Rainier
Scappoose
St. Helens
Vernonia

MULTNOMAH COUNTY

Fairview
Gresham
Portland
Troutdale
Wood Village

WASHINGTON COUNTY

Beaverton
Cornelius
Durham
Forest Grove
Hillsboro
North Plains
Sherwood
Tigard
Tualatin

Facility" is designated to the east of the reservoir.

3. Relation to CRAG Sketch Plan Concepts

In general, a community college in the vicinity of Rock Creek Reservoir would probably be consistent with regional design concepts described as "dispersion"; but it would be difficult to reconcile it with the "concentration" or radial corridor concepts. Therefore, construction of a community college in the proposed location would tend to pre-commit regional development to a dispersal pattern which may or may not be the direction eventually agreed upon.

4. Other Considerations

There is no immediate commitment by USA to sewer this area. Plans called for the construction of sewers in the area after 1977.

The isolated location of this campus will require special public transportation service as it cannot be directly served by the lines serving other parts of eastern Washington County. The dispersal of students and staff throughout the entire residential area will make it very costly and difficult to provide an effective level of public transportation to the campus. Transportation to the campus will, therefore, be largely dependent upon the use of individually occupied private automobiles. Additionally, it is reasonable to try and use public facilities of the type to support a public transportation system. In this case, a better location might be nearer a defined public transportation corridor which will be forthcoming as a part of CRAG development of the Regional Comprehensive Plan.

RECOMMENDATION:

Pending adoption of the Regional Comprehensive Plan, the CRAG staff recommends that the conditional use permit be denied for the reasons cited above.

RIVIERA MOTORS PROPERTY

1. Relation to CRAG Interim Development Policy

The proposal site is situated in an area to be designated Priority Number 6. This places the proposal in the lowest priority category (rural-agricultural, no existing sewer or water service, land use zoning is non-urban).

COLUMBIA REGION ASSOCIATION of GOVERNMENTS

6400 S.W. CANYON COURT

PORTLAND, OREGON 97221

(503) 297-3726

April 17, 1974

Department of Environmental Quality
1234 S.W. Morrison Street
Portland, Oregon 97205

Dear Sir:

The staff of CRAG has reviewed the application submitted to you by Portland Community College to construct a 449 space parking facility on their proposed Rock Creek Campus at Northwest 185th and Springville Road.

As you know, CRAG is currently developing a REGIONAL COMPREHENSIVE PLAN. The first draft of that plan is scheduled to be completed by July of this year. The staff wishes to emphasize that although the plan is not completed, the assumptions, goals and policies which provide the framework for that planning effort were officially adopted by the Executive Board. Additionally, the Interim Development Policy was adopted by the General Assembly of CRAG on January 31, 1974.

Recently, as another step in the process, the Executive Board of CRAG selected a Radial Corridor land use concept as the basic framework for the REGIONAL COMPREHENSIVE PLAN. In that concept, emphasis is given to promoting mass transit along east-west, north-south corridors by increasing residential density and emphasizing other "high people-oriented facilities". We feel that Portland Community College falls in the latter category.

If the Portland Community College were to locate in the area proposed, we feel its impact would not only detract from the potential success of a mass transit operation, but would also emphasize additional use of the automobile by students, instructors and other associated staff personnel. This would tend to defeat the goal of eliminating unnecessary use of the auto and its associated impact on air pollution.

We realize that planning for this facility has been under way for some time. However, CRAG recommended against the initial zone change (required for construction) granted by Washington County almost one year ago for several of the same reasons outlined above. (A copy of that letter has been attached for your perusal.)

CLACKAMAS COUNTY

Canby
Gladstone
Happy Valley
Lake Oswego
Milwaukie
Oregon City
Sandy
West Linn
Wilsonville

CLATSOP COUNTY

Camas
Vancouver
Washougal

COLUMBIA COUNTY

Clatskanie
Columbia City
Pr...
Ra...
Scappoose
St. Helens
Vernonia

MULTNOMAH COUNTY

Fairview
Gresham
Portland
Trousdale
Wood Village

WASHINGTON COUNTY

Beaverton
Cornelius
Durham
Forest Grove
Hillsboro
North Plains
Sherwood
Tigard
Tualatin

Department of Environmental Quality
1234 Southwest Morrison
Portland, Oregon

Page Two

Therefore, based on the above, the staff recommends the permit be withheld until representatives from CRAG, Washington County and Portland Community College explore alternative locations.

Sincerely,



Larry Rice,
Executive Director

LR:ps

Enclosure 1

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
APR 19 1974

OFFICE OF THE DIRECTOR

COLUMBIA REGION ASSOCIATION of GOVERNMENTS

6400 S. W. CANYON COURT

(503) 297-3726

PORTLAND, OREGON 97221

SPECIAL MEETING

EXECUTIVE BOARD

Minutes - April 12, 1974

Members Present

William Young, Chairman
Rod Roth
Robert Schumacher
Allen Brickley
Neil Goldschmidt
Frank Corsiglia
Martin Wolf
Richard Granger
Mel Gordon

The Chairman called the meeting to order at 9:00 a.m. and reviewed the purposes of the special meeting as established at the regular Board meeting held on April 5. He then called on Lyle Balderson, CRAG Area Development Director, to review the steps in developing the three land use concepts and the necessity for selecting one of them at this time.

After Mr. Balderson's remarks, the Chairmen of the CRAG advisory committees or their substitutes, presented a summary of the activities and recommendations of each committee. William Dirker reported for the Transportation Committee and noted that Committee's recommendation for the Radial Corridor or Combination concept. Jim Riggle presented the report for the Area Development Committee and their recommendation for the Dispersion concept. Roland Haertl reported for the Public Works Committee and noted their recommendation of the Dispersion concept. He noted he preferred the title of Free Standing City Concept to the title Dispersion concept. Mort Spence reported for the Social Services Committee in the absence of Committee Chairman Jack Chapman. He noted that the Social Services Committee had been split but with a plurality favoring the

CLATSOP COUNTY

Canby
Gladstone
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Lake Oswego
Milwaukie
Oregon City
Sandy
West Linn
Wilsonville

CLATSOP COUNTY

Camas
Vancouver
Washougal

COLUMBIA COUNTY

Clatskanie
Columbia City
Heppner
Rainier
Scappoose
St. Helens
Vernonia

CLATSOP COUNTY

Fairview
Gresham
Portland
Trousdale
Wood Village

CLATSOP COUNTY

Beaverton
Cornelius
Durham
Forest Grove
Hillsboro
North Plains
Sherwood
Tigard
Tualatin

EXECUTIVE BOARD
SPECIAL MEETING
April 12, 1974
Page Two

Concentration concept. No one reported for the Criminal Justice Committee which earlier had stated the Committee had no agreed-upon preference. Larry Sprecher reported for the General Advisory Board which had supported the Area Development Committee recommendation with several amendments.

Gerard Drummond, Chairman of the Tri-Met Board, recommended adoption of the Concentration Concept with evolving satellite cities after the central area has been saturated. He stressed the need for strong growth and land use controls.

A discussion paper prepared by Ernie Bonner, Portland Planning Director, had been distributed at the meeting and Mr. Bonner discussed the paper which concluded with a recommendation for the Combination Concept.

After much discussion, Commissioner Roth moved for adoption of the Dispersion Concept. The motion was seconded by Councilman Wolf. The Chairman called for a voice vote and roled that the motion failed.

Mayor Goldschmidt moved that the Board adopt the Combination Concept for further detailing with instructions to the committees and staff to review local plans to determine any adverse effects this action would have on those local plans. The motion was seconded by Commissioner Gordon. The Chairman asked for a show of hands and the motion carried 9 to 7.

There being no further business, the meeting adjourned at 11:30 a.m.

INTERIM REGIONAL DEVELOPMENT POLICY

Adopted by the Executive Board
December 21, 1973

C O N T E N T S

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II. GUIDELINES FOR ESTABLISHING PRIORITY AREA BOUNDARIES.	4
III. DEVELOPMENT REQUIREMENTS FOR PRIORITY AREAS.	7
IV. PROCEDURES FOR IMPLEMENTING AND AMENDING THE POLICY	13
V. AN EXAMPLE OF AN ORDINANCE FOR ADOPTION BY LOCAL GOVERNMENTS.	15
VI. MAPS OF PRIORITY AREAS (Scale: 1"=2000')	Transmitted Separately

I. INTRODUCTION AND INTENT

CRAG is engaged in the preparation of a regional land use plan supported by appropriate transportation, sewerage, water, solid waste, and park and open space systems. Adoption of the total Regional Comprehensive Plan is scheduled for the middle of 1976. If the present rate of development of the metropolitan area continues during the period that this planning effort is under way, as is likely, it could foreclose many land use options currently being debated and render much of the complete plan obsolete.

For example, during 1971 building permits were used for 5,800 new housing units in the unurbanized portion of the CRAG planning area. They account for 35% of all new housing units in the CRAG area. At this rate, 17,400 new housing units would be added in the unurbanized area over a three year period (or about 50,460 people assuming 2.9 people per housing unit).

If this development in the unurbanized were to occur at a gross density of 2,400 people per square mile (comparable to the urbanized area excluding the City of Portland), it effectively would commit approximately 20 square miles of additional land to urbanization. This compares with an urbanized area total of 267 square miles in 1970.

On the other hand, if this development were to occur as much as possible within areas already committed to urbanization, filling in bypassed tracts and thereby raising gross densities, most options for long-range planning would still be left open. This would also be economically beneficial since the public facilities already constructed would be used to their fullest extent. This is the approach being emphasized by the Interim Development Policy.

The extreme response to this interim land use problem, and the one which would achieve the goal of keeping all future options open, would be to declare a moratorium on all new development pending completion of the Regional Comprehensive Plan. Clearly, this solution would create severe hardships and is not acceptable. There is no question that development must be allowed to continue, while work on the Regional Comprehensive Plan proceeds. However, the effort to minimize the negative impacts of that continued development while supporting the work already completed as a part of the Planning Program is also needed and is the essence of the proposed Interim Development Policy. Therefore, a modified response is being suggested to implement the objective outlined on page 3 of this report.

As a matter of caution, it is recognized that it might be more difficult to obtain land for new arterial street improvements or for school sites, parks and other public facilities, as well as encountering some adverse impacts on housing costs. For these

II. GUIDELINES FOR
ESTABLISHING PRIORITY AREA BOUNDARIES

PRIORITY DEVELOPMENT AREA 1

- A. Areas where hookups to public sewers are available without further construction of interceptors or trunk lines (exceeding 8" in diameter) or force mains.
- B. Areas where construction of interceptor or trunk lines are funded (funds have been appropriated) or assessments levied, thus permitting hookups to public sewers prior to July, 1976.

PRIORITY DEVELOPMENT AREA 2

- A. Areas that are unsewered but already predominantly occupied by industrial, commercial or residential uses, or where gross population densities generally exceed 1000 persons per square mile.
- B. Other unsewered areas substantially surrounded by lands already urbanized.
- C. Areas within the corporate limits of a city.

PRIORITY DEVELOPMENT AREA 3

- A. Areas not significantly urbanized, but are contained within a water district or association and are contiguous to the corporate limits of a city and public sewer hookups could be made without constructing new interceptors, trunk lines (exceeding 8" in diameter) or force mains.
- B. Areas not significantly urbanized, but located in a water district or association and sewer interceptors or trunk lines (which will eventually permit public sewer hookups) are designed and programmed, with construction to begin prior to July, 1976.

PRIORITY DEVELOPMENT AREA 4

- A. Areas in which hookups to public sewer systems are not available but area is located in a water district or association, and land use zoning permits industrial or commercial structures and/or uses, or residential structures on lots less than one (1) acre.

II. GUIDELINES FOR
ESTABLISHING PRIORITY AREA BOUNDARIES

PRIORITY DEVELOPMENT AREA 1

- A. Areas where hookups to public sewers are available without further construction of interceptors or trunk lines (exceeding 8" in diameter) or force mains.
- B. Areas where construction of interceptor or trunk lines are funded (funds have been appropriated) or assessments levied, thus permitting hookups to public sewers prior to July, 1976.

PRIORITY DEVELOPMENT AREA 2

- A. Areas that are unsewered but already predominantly occupied by industrial, commercial or residential uses, or where gross population densities generally exceed 1000 persons per square mile.
- B. Other unsewered areas substantially surrounded by lands already urbanized.
- C. Areas within the corporate limits of a city.

PRIORITY DEVELOPMENT AREA 3

- A. Areas not significantly urbanized, but are contained within a water district or association and are contiguous to the corporate limits of a city and public sewer hookups could be made without constructing new interceptors, trunk lines (exceeding 8" in diameter) or force mains.
- B. Areas not significantly urbanized, but located in a water district or association and sewer interceptors or trunk lines (which will eventually permit public sewer hookups) are designed and programmed, with construction to begin prior to July, 1976.

PRIORITY DEVELOPMENT AREA 4

- A. Areas in which hookups to public sewer systems are not available but area is located in a water district or association, and land use zoning permits industrial or commercial structures and/or uses, or residential structures on lots less than one (1) acre.

PRIORITY DEVELOPMENT AREA 5

- A. Areas not located in a water district or association, and hookups to public sewer systems are not available but land use zoning permits industrial or commercial structures or uses or residential structures on lots less than one (1) acre.

PRIORITY DEVELOPMENT AREA 6

- A. All remaining areas not included in Priority Areas 1 through 5.

III. DEVELOPMENT
REQUIREMENTS FOR PRIORITY AREAS

PRIORITY DEVELOPMENT AREA 1

- A. Current requirements for development apply. All federal, state and local standards must be complied with.

PRIORITY DEVELOPMENT AREA 2

- A. Current requirements for development apply. All federal, state and local standards must be complied with.
- B. The extension of sewer and water systems will be allowed.
- C. Formation of or changes in jurisdictional boundaries may be allowed.

PRIORITY DEVELOPMENT AREA 3

- A. Current requirements for development apply. All federal, state and local standards must be complied with.
- B. The extension of sewer and water systems will be allowed only to the extent that findings of fact according to standards set by CRAG show that such extensions are needed to alleviate health problems or other emergencies and that additional development will not be allowed, except as provided under (D) below.
- C. Formation of or changes in jurisdictional boundaries may be allowed only to the extent that findings of fact according to standards set by CRAG show such actions support the intent of the Interim Development Policy and adopted Regional Goals and Policies set forth in PLANNING IN THE CRAG REGION: AN APPRAISAL AND NEW DIRECTION or are needed to alleviate health problems or other emergencies.
- D. New subdivision plats with more than 10 lots subdivided within one (1) year or any industrial or commercial development may be approved by the local jurisdiction only if accompanied by an Impact Analysis which documents or substantiates the following:
- the proposed project does not conflict with the intent of the Interim Development Policy or the new goals and objectives.
 - positive and negative environmental and economic impacts are determined.
 - existing services in other areas will not be adversely impacted nor a burden placed on the residents already serviced by the system.

--the land is best suited for this proposal as opposed to other lands within higher priority development areas.

- E. Local jurisdictions shall find that these criteria have been met prior to issuing permits.
- F. Where zone changes, preliminary subdivisions, or planned unit developments have been approved by a city or county prior to the adoption of this Interim Development Policy, and where the appropriate agency has stated in writing to the city or county that sewer and water service can be provided, the development will be permitted.

PRIORITY DEVELOPMENT AREA 4

- A. Current requirements for development apply. All federal, state and local standards must be complied with.
- B. The extension of sewer and water systems will be allowed only to the extent that findings of fact according to standards set by CRAG show that such extensions are needed to alleviate health problems or other emergencies and that additional development will not occur.
- C. Formation of or changes in jurisdictional boundaries may be allowed only to the extent that findings of fact according to standards set by CRAG show such actions support the intent of the Interim Development Policy and adopted Regional Goals and Policies set forth in PLANNING IN THE CRAG REGION: AN APPRAISAL AND NEW DIRECTION or are needed to alleviate health problems or other emergencies.
- D. No new subdivision plats will be approved, but partitioning of two (2) or three (3) lots per year will be allowed.
- E. Except for lots of record on the dates that these requirements are enacted, building permits for new structures will be issued only on tracts or lots of five (5) acres or more. Evidence that sewage disposal methods have been approved by the appropriate agency or jurisdiction must accompany building permit applications.
- F. Development must be served by a water supply system approved by the appropriate federal, state, city or county agencies.
- G. Applications for conditional uses or community service use proposals may be approved only if accompanied by an Impact Analysis which documents or substantiates the following:
 - a public need for the service facility exists.
 - positive and negative environmental and economic impacts are detailed.
 - the proposed project does not conflict with the intent of the Interim Development Policy.
 - the land is best suited for this proposal as opposed to other lands within higher Priority Development Areas.

- H. Where zone changes, preliminary subdivisions, or planned unit developments have been approved by a city or county prior to the adoption of this Interim Development Policy, and where the appropriate agency has stated in writing to the city or county that sewer and water service can be provided, the development will be permitted.

PRIORITY DEVELOPMENT AREA 5

- A. Current requirements for development apply. All federal, state and local standards must be complied with.
- B. No new subdivision plats will be approved, but partitioning of two (2) or three (3) lots per year will be allowed.
- C. No annexations, incorporations, utility extensions will be approved prior to July, 1976, unless such actions are substantiated with a finding of fact according to standards set by CRAG that it is needed to alleviate a health problem.
- D. Except for lots of record on the date these requirements are enacted, building permits for new structures will be issued only on tracts of twenty (20) acres or more.
- E. Evidence that sewage disposal methods have been approved by the appropriate agency or jurisdiction must accompany building permit application.
- F. Development must be served by a water supply system approved by appropriate federal, state, city or county agencies.
- G. Applications for conditional uses or community service use proposals may be approved only if accompanied by an Impact Analysis which documents or substantiates the following:
- a public need for the service facility exists.
 - positive and negative environmental and economic impacts are detailed.
 - the proposed project does not conflict with the intent of the Interim Development Policy.
 - the land is best suited for this proposal as opposed to other lands within higher Priority Development Areas.
- H. Where zone changes, preliminary subdivisions, or planned unit developments have been approved by a city or county prior to the adoption of this Interim Development Policy, and where the appropriate agency has stated in writing to the city or county that sewer and water service can be provided, the development will be permitted.

I. The above requirements may be replaced by those set forth in J, K, and L below, if any city or county demonstrates to the CRAG Executive Board that the following processes have been completed and implementation methods adopted and that plans and ordinances so adopted are consistent with regional planning goals, policies and standards set by CRAG:

--analysis of the resource base that interrelates topography, geology, soil erosion characteristics, foundation characteristics, hydrographic features, precipitation, soil drainage, flood hazards, ground water, ground water yield, watersheds, soil fertility, vegetation, and fish and wildlife habitat.

--identification of the prime agricultural lands, major timber stands, watershed areas, flood plains and fragile land forms.

--survey of existing land use and parcelization.

--adoption of a plan that includes policy statements relative to an urban-rural form; design criteria for community development; the programming or staging of development.

--adoption of conservation zoning that preserved the prime agricultural land (pursuant to SB101) timber stands, watersheds, and restricts development in flood plain areas.

--adoption of rural residential zoning on accordance with the land capabilities identified in the natural resource analysis and which is not located on prime agricultural lands, forested areas or sensitive land forms.

J. Priority Development Area 6-RR (Rural Residential). Intended expressly to provide areas where persons may establish a rural residence on a parcel of land which may be adjacent to, on, or near lands being used primarily for food, fiber or forest production with specific provision that residents on these rural residential tracts will be subject to the normal and accepted farming and forestry practices in the locality.

Requirements: Current requirements for development apply. All federal, state and local standards must be complied with.

K. Priority Development Area 6-FR (Forest Resource). Intended to be applied to prime timber lands as well as associated scenic or recreation lands, wildlife habitat or other fragile land forms.

Requirements: Current requirements for development apply. All federal, state and local standards must be complied with.

L. Priority Development 6-AR (Agricultural Resource). Intended to be applied to prime agricultural lands, defined as predominantly Class I or Class II lands, and Class III on the valley floor (i.e., below 350 feet elevation) where utilization of the land for farming will have a reasonable chance of financial success.

Requirements: Current requirements for development apply. All federal, state and local standards must be complied with.

--adoption of conservation zoning that preserves the prime agricultural land (pursuant to SB101), timber stands, watersheds, and restricts development in flood plain areas.

--adoption of rural residential zoning in accordance with the land capabilities identified in the natural resource analysis and which is not located on prime agricultural lands, forested areas or sensitive land forms.

- G. Priority Development Area 6RR (Rural Residential). Intended expressly to provide areas where persons may establish a rural residence on a parcel of land which may be adjacent to, on, or near lands being used primarily for food, fiber or forest production with specific provision that residents on these rural residential tracts will be subject to the normal and accepted farming and forestry practices in the locality.

Requirements: Current requirements for development apply. All federal, state and local standards must be complied with.

- H. Priority Development Area 6FR (Forest Resource). Intended to be applied to prime timber lands as well as associated scenic or recreation lands, wildlife habitat or other fragile land forms.

Requirements: Current requirements for development apply. All federal, state, and local standards must be complied with.

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Requirements: Current requirements for development apply. All federal, state and local standards must be complied with.

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Requirements: Current requirements for development apply. All federal, state and local standards must be complied with.



ENVIRONMENTAL QUALITY COMMISSION

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Salem

Ronald M. Somers
The Dalles

Kessler R. Cannon
Director

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item R, May 24, 1974 EQC Meeting

Statewide Solid Waste Management Action Plan - Status Report

Background

The State Solid Waste Management Planning Program approved by the EQC and authorized by the State Emergency Board November 10, 1972 within an expenditure limit of \$1,129,630 is rapidly nearing completion. These funds provided for twenty-two (22) local government planning projects and one (1) service and assistance to local governments and the Department project by the Bureau of Governmental Research and Service, University of Oregon. There remains an active contingency balance from these funds of \$21,652. It appears that these unused funds will be needed to further assist specific projects in finding suitable landfill sites. Clatsop, Tillamook, and Union Counties are having particular difficulty in finding landfill sites.

The 1973 session of the State Legislature appropriated \$100,000 for a South Coast Energy Study and \$75,000 of this amount was granted to the Port of Umpqua Commission to study the feasibility of producing energy from all applicable solid wastes in Coos, Curry, Western Douglas, and Western Lane Counties. The results of this project are presently being reviewed by the affected local governments for possible implementing decision making. Coos County has assumed the leadership role in furthering intergovernmental cooperation for implementing such an Energy Recovery Facility because preliminary plan feasibility stresses such facility placement in the immediate proximity of Coos Bay.

The \$25,000 remaining from the Legislative appropriation has been released to the Department by the State Emergency Board May 10, 1974 for an overview report on the potential that exists in Western Oregon for energy recovery from solid wastes. A statewide individual project status report is attached for your reference.



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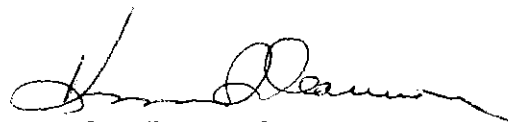
Final Plan Draft Reports submitted to the Department indicate that a real potential exists for energy recovery utilizing shredded, air-classified refuse for fuel. There appears to be a high probability of success for such a program covering most of Western Oregon from the Portland area south through Ashland. Over 3000 tons per day of salable air-classified fuel for use in existing boiler facilities has been identified as a statewide potential.

Energy Recovery Programs presently have much public appeal and the Department asked the State Emergency Board for, and received, permission to utilize the \$25,000 remaining from the South Coast Energy Study to expand the grant of the Bureau of Governmental Research and Service to place the fuel potential into Statewide perspective utilizing information from the received reports.

The conceptual refuse processing system felt to be applicable to Oregon is very similar to the one in St. Louis where a Federal Demonstration Grant has proven the positive feasibility of firing air-classified refuse as a supplementary fuel with coal. There are many hog fuel boilers unique to the Northwest that could use such a fuel and if such a fuel can be made economically competitive with hog fuel, which is presently forecasted in insufficient supply, capital costs to local governments for energy recovery systems can be reduced by as much as 70%.

The Statewide Solid Waste Management Plan is forecast to be completed by late fall of 1974. This date is somewhat behind original expectations and to a great degree due to the changing priorities placed upon energy and the difficulties of local governments in obtaining landfill sites.

Lane County has submitted application to the Department for \$3.5 million dollar grant-loan assistance from the Pollution Control Bond Fund to implement an Energy Recovery Program in conjunction with Eugene Water and Electric Board (EWEB) the intended fuel user. Douglas County has submitted a grant request (30% of total project costs) to the Department for \$219,000 to assist them in implementing a County wide system of transfer to more regionalized landfills. Both applications are asking for State financial aid through the authority of the Department contained in ORS 468.220(1)(d) and (e). These applications are under review and following Department approval they will be taken before the State Emergency Board as part of a request to increase the Pollution Control Bond Fund limitation for implementation of solid waste disposal facilities. Many smaller projects are expected to request maximum state financial aid and they shall be submitted for Emergency Board approval or dealt with through a blanket appropriation within the State Emergency Board's desires.



KESSLER R. CANNON
Director

GLG:mm
5/14/74
Attachment (1)

Department of Environmental Quality
Solid Waste Management Division

Status of State Planning Projects as of May 14, 1974

<u>REPORT STATUS</u>	<u>PLANNING AGENCY</u>
I. Final Reports Approved or in Approved Status	Lane County Gilliam County Morrow County Metropolitan Service District Douglas County
II. Final Reports Received and Under Review	Jackson County Umatilla County Josephine County Wallowa County Malheur County
III. Final Reports Ready and Awaiting Further Disposal Site Feasibilities	Clatsop-Tillamook Union County Grant County Wheeler County Klamath County Central Oregon (COIC) Intergovernmental Council
IV. Final Reports not Received, Awaiting Further Disposal Site Work or Implementation Decisions by Local Governments for Inclusion in the Reports	Coos-Curry Region Mid-Columbia Economic Development District Chemeketa Region Harney County Baker County Port of Umpqua
V. Final Reports not Received, Project Ongoing	Lincoln County Lake County Bureau of Governmental Research



ENVIRONMENTAL QUALITY COMMISSION

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Kessler R. Cannon
Director

MEMORANDUM

TO: Environmental Quality Commission

FROM: Director

SUBJECT: Agenda Item S, May 24, 1974 EQC Meeting

Authorization for Public Hearing to Consider Proposed
Regulations for State Financial Assistance to Public
Agencies for Pollution Control Facilities for the
Disposal of Solid Waste.

Background:

Regional Solid Waste Management Plans are now being finalized which when all are completed will comprise the State Solid Waste Management Action Plan. As the Commission is aware, this plan was largely financed by planning grants to local government from Pollution Control Bond Funds.

Many of the Regional plans call for requesting construction grants and loans from the State Pollution Control Bond Fund as made possible by ORS 468.220. Under this statute the Department may make up to 30% grants and up to 70% loans for construction of facilities for the disposal of solid wastes. As the final drafts of regional plans are being reviewed at this time, it is apparent that provision of the 30% grant will make the difference in financial capability between a good solid waste program or virtually no program in the sparsely populated counties; and the difference between an energy recovery program or a landfill program in western Oregon.

Discussion:

It is necessary that rules and guidelines be developed by the Department to control and direct the application for and eligibility of proposed solid waste facility projects. They are further necessary to facilitate allocation of Pollution Control Bond funds to the Department by the Emergency Board and Legislature and for the Department to pass on funds to local governments.



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A discussion draft of proposed rules for State Financial Assistance to Public Agencies for Pollution Control Facilities for the Disposal of Solid Wastes is being prepared very similar to the existing rules for State Financial Assistance for Water Pollution Control facilities. An additional document covering guidelines for eligible projects is proposed to supplement the rules.

Director's Recommendation:

It is anticipated that a draft of proposed rules and guidelines as outlined above will be available for public review by June 1, 1974 therefore authorization is respectfully requested to schedule a public hearing before the Environmental Quality Commission at the June 21, 1974 regular commission meeting to receive public testimony pertaining to and consider adoption of proposed Rules for State Financial Assistance to Public Agencies for Pollution Control Facilities for the Disposal of Solid Waste.



KESSLER R. CANNON
Director

EAS:mm
5/15/74

exhibits to be attached
to May 24, 1974 EQC minutes



Boise Cascade

Paper Group

P. O. Box 2089
Salem, Oregon 97308
(503) 362-2421

5/24/74

STATEMENT TO ENVIRONMENTAL QUALITY COMMISSION

Mr. Chairman, Ladies and Gentlemen

My name is Jim Fahlstrom. I am the Resident Manager of the Boise Cascade Salem Pulp and Paper Mill.

In regards to the request for modification to the Salem Mill Air Contaminant Discharge Permit, we agree that the wording change to Condition 1, Section A, does clarify the intent of the permit with regards to process SO₂ versus power generation SO₂ emission.

We do not, however, agree to the construction and demonstrated compliance dates as suggested by the staff for installation of a mist eliminator to control plume opacity. The compliance date of June 1, 1975 is the same as that we quoted in our April 1, 1974 proposal. It was contingent on the Commission's approval by April 30 and suppliers' delivery dates in effect at that time. Our suppliers now advise us that delivery times will be longer, so that should we receive your approval now, a July 1, 1975, compliance date is the best we can expect. We would attempt to improve this timing, but cannot, in good conscience, agree to dates that do not correspond to those quoted by our suppliers.

We therefore request that the completion of construction be set at May 15, 1975 instead of March 1, and that demonstrated compliance be set for July 1, 1975 instead of June 1. Attached is our proposed time schedule for each step.

In regard to the authorization of a public hearing to consider the proposed pulping expansion of our Salem Mill, we wish to impress the Commission with the urgency in regards to the timing of this hearing, if one is found to be necessary. We wish to point out that delivery dates of equipment are long and equipment costs are rapidly increasing. For example, since submission of our proposal on April 1, the cost of some equipment has increased by 15 to 20% and delivery dates have been extended by 1 to 3 months. We do not expect this situation to improve in the near term.

Since our expansion as proposed includes a reduction in both air and water contaminants over our present emissions, we suggest that a public hearing may not be necessary. If you believe one is required, then an earlier hearing than the proposed June 27 date would be highly appreciated and appropriate. As stated earlier, any time lost now in ordering equipment results in increased equipment costs, increased mill operating costs, and a longer implementation time for our overall pollution abatement program.

REVISED SCHEDULE FOR MIST ELIMINATOR INSTALLATION - 5-24-74

Preliminary Engineering submitted to DEQ	June 15, 1974
Approval from DEQ	July 15, 1974
Place order for Mist Eliminator and Fan	July 30, 1974
Start Foundation work	August 15, 1974
Detailed Engineering Completed	October 1, 1974
Start Erection of Mist Eliminator	March 1, 1975
Complete Installation & Start-up	May 15, 1975
In Compliance	July 1, 1975

The above compliance schedule is based upon best available delivery dates as currently promised by equipment suppliers. Any slippage in equipment delivery may require extension of compliance schedule.

TESTIMONY OF THE NORTHWEST ENVIRONMENTAL DEFENSE CENTER CONCERNING
PROPOSED NPDES RULE CHANGES TO OREGON ADMINISTRATIVE RULES BEFORE
THE ENVIRONMENTAL QUALITY COMMISSION 24 MAY 1974

I am Christopher Kittell, representing the Northwest Environmental Defense Center at this hearing. NEDC is a group of scientists and lawyers working for a better Oregon environment. I am also a party plaintiff in the case of NEDC v Train in which both the Department of Environmental Quality and the Environmental Protection Agency are defendants. The case challenges EPA's approval of DEQ's application for participation in the National Pollutant Discharge Elimination System (NPDES), the water pollution permit program. I have seen the proposed rule changes before--they were offered as part of our negotiations with EPA and DEQ. We rejected them. As far as they go, they are commendable changes, if somewhat late. However, unfortunately, they don't go far enough. I am here today in the hope that a few additional changes can be made, in addition to these proposed changes, such that our lawsuit will no longer be necessary. These precise changes I shall give the Commission at the conclusion of this talk.

On 22 December 1972, the Environmental Protection Agency, after having held public hearings, published regulation 40 CFR pt. 124 (1972) entitled State Program Elements Necessary for Participation in the National Pollutant Discharge Elimination System in the Federal Register. 37 Fed. Reg. 28390 (1972). This regulation was promulgated "pursuant to the authority contained in Section 304 (h)(2) (33 USCA Sec. 1314(h)(2) (Supp. 1973)) of the (Act) (to describe) the minimum procedural and other elements of any State program (approved) under section 402 of this Act." 40 CFR pt. 124, Introduction (1972).

40 CFR Part 124.4 (1972) requires:

(a) All procedures which the State proposes to establish and administer to conform with the requirements of the part shall be set forth in State statutes or lawfully promulgated State regulations. Such State statutes and regulations shall be in full force and effect at the time the Governor submits the State program to the Regional Administrator.

This regulation goes on to list the procedural elements required to attain EPA approval of a State permit program.

In three areas, even with the proposed rule changes, Oregon's law does not meet these Federal procedural safeguards.

Area number one is the Public Hearing requirement (40 CFR Part 124.36). The Federal regulations require that the "Director shall hold a hearing if there is a significant public interest (in the issuance of a permit). Instances of doubt should be resolved in favor of holding the hearing."

The Oregon regulations do not require a hearing in every case where there is significant public interest. Oregon requires only that the Director of the Department of Environmental Quality provide an opportunity to request a hearing and leaves it to his discretion to determine whether the hearing is "useful;" or, in the proposed change, whether there is a "significant public interest."

The Director shall provide an opportunity for the applicant, any affected state, or any interested agency, person, or group of persons to request or petition for a public hearing with respect to NPDES applications. If the Director determines that useful information may be produced thereby, or that there is a significant public interest in holding a hearing (proposed rule change), a public hearing will be held prior to the Director's final determination.

OAR ch. 340 Sec. 45-035(7) (1973).

Gone is any mandatory standard of "significant public interest."

Gone is any resolution of doubt in favor of providing the public forum. Left only are the words "usefulness," and "significant public interest," defined solely by the Director and applied again, solely in his discretion. It was not the intent of the precise wording of the federal regulations that such hearings be so heavily balanced in favor of the Director's discretion. The Oregon regulations should state that "the Director shall hold a hearing if there is a significant public interest. Instances of doubt shall be resolved in favor of holding the hearing."

Area number two is the Schedules of Compliance in Issued NPDES Permits requirement (40 CFR 124.44).

The federal regulations require adoption of schedules in NPDES permit conditions to achieve compliance with the applicable effluent or water quality standards. Required are:

1. a minimal schedule of compliance,
2. minimal interim dates of partial compliance if the period for total compliance exceeds nine months,
3. requirements that the permittee give written notice of his compliance or non-compliance with the interim or final permit requirements,
4. precise dates for the Director's notification of the federal Regional Administrator of lists of permittees who have failed or have refused to comply with the schedules, and,
5. that violation of a schedule constitutes sufficient grounds for modification, suspension or revocation of the permit. 40 CFR Part 124.44 (1972).

Oregon only has a statement that the draft of a tentatively approved permit shall include a "proposed schedule of compliance,"

"(a)nd other special conditions." OAR ch. 340 Sec. 45-035(2)(c) (1973). The dates of notice to the Regional Administrator of EPA, any notice requirements imposed upon the permittee, any provision for interim dates of partial compliance, any provision that violation of the schedule may cost the permittee the permit are all lacking in the approved Oregon plan. At a minimum, again, the Oregon plan should parallel the federal requirements. There is no mention of this very important area in the proposed rule change.

Area number three is the Monitoring, Recording, and Reporting requirements (40 CFR 12461-63).

Federal regulations require that the state adopt procedures consistent with the federal monitoring requirements, which include:

1. monitoring by the permittee of the flow (in gallons per day) of all pollutants, and the precise amounts of selected pollutants. 40 CFR Part 124.61 (1972).
2. record keeping by the permittee of its monitoring, including such details as the day, place, person monitoring, the analytical techniques used, and the results of such analyses. 40 CFR Part 124.62 (1972).
3. reporting by the permittee to the Director of monitoring results at least annually, and, when required by the Director, more often. 40 CFR Part 124.63 (1972).

Oregon only requires conformance with the federal monitoring requirements in connection with sewerage systems. OAR ch. 340 Sec. 45-015(4) (1973). Otherwise, Oregon statutes only mention monitoring requirements as discretionary with the department, Ore. Rev. Stat. Sec. 468.065-(1973); or in connection with community or public water supply systems. Ore. Rev. Stat. Sec. 448.215-448-240 (1973). The Oregon regulation dealing with owners of "sewage or industrial waste treatment or disposal plant(s)" requires tests and records "as are necessary to prove the effective operation of the treatment works." OAR ch. 340 Sec. 42-010 (1970).

The regulation gives the Director the discretion to require monthly reports which include "daily determinations of the sewage or waste flow, temperature and pH and the hours of labor spent in plant operation." Id. The sewage and waste flow are to be determined by flow measurement and recording devices. Id. "Additional information to be submitted will be specified by the (Director) depending upon the size and type of sewage or waste treatment plant." Id. While the regulation laudably would seek monthly reports, the discretion is left to the Director whether to require reports at all. The regulation does not specify reporting requirements as to specific pollutants, gallonage, or of the details, place, techniques and analyses used in monitoring. Again, these minimum requirements should be included in Oregon's plan.

Besides the fact that Oregon's Administrative Rules, even with the proposed changes, do not meet the federal standard; besides the fact that by not meeting these standards, a private citizen is left with the dubious benefit of discretionary regulations -- or no regulations at all-- in these three sensitive areas, there is another, perhaps more serious and innate reason that Oregon's Administrative Rules should, at the very least, comply with the requirements of the federal regulation.

Oregon has always prided herself in being a leader in the environmental field. These days especially, one hears a constant barrage of campaign spots proclaiming that this or that candidate will work hard to keep Oregon an environmental leader of other states, a model for them as well as the federal government

itself--- as our recent bottle bill history indicates.

However, Oregon's present rules have a quite opposite effect. In their present deficient form, they act as a precedent which other states, historically less environmentally concerned than Oregon, will undoubtedly seek to rely upon as authority for approval of their program. In this manner, Oregon becomes a bellweather in the other direction, for weakened standards. I do not think that this is what this commission or this state should accept.

With that in mind, we offer the following rule changes:

DRAFT CHANGES IN OREGON NPDES REGULATIONS

1. Section 45-035(7).

a. Second sentence, after "If the Director determines that useful information may be produced thereby," add "or if there is a significant public interest in holding a hearing. (From your proposal, the underlined "if" replaces "that") Instances of doubt shall be resolved in favor of holding the hearing." (New sentence)

b. After "Instances of doubt shall be resolved in favor of holding a hearing." add: "There shall be public notice of such hearing." (New sentence.)

2. Section 45-035(2)(b): After ^{necessary} "proposed schedule of compliance, compiled and established in compliance with the Federal Act and regulations issued pursuant thereto."

3. Section 45-065: Add as a last sentence, as follows:
"Monitoring requirements and recording and reporting procedures shall comply with the Federal Act and regulations issued pursuant thereto." (New sentence.)

TESTIMONY OF ASSOCIATED OREGON INDUSTRIES, INC.
BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
MAY 24, 1974

SUBJECT: Sulfur by Weight Limitations of Residual Fuel Oils

My name is Thomas C. Donaca, General Counsel of Associated Oregon Industries, Inc.

We received, as did many suppliers, distributors and users, Mr. Cannon's letter of May 17, 1974 indicating generally that the sulfur by weight regulations which call for a reduction from the present 2.5% sulfur by weight limitation to 1.75% will remain unchanged and that variances will in all cases have to be applied for. If we could rely on history to furnish an answer as to any adverse affects of this change it would tell us that generally fuel oil arriving in this state has not exceeded the July 1, 1974 standard.

We are afraid that we are unable to rely on history for complete guidance in this situation because of complicating factors, such as:

1. Lack of availability of residual fuels as indicated by the fact that those of our members who have attempted to shift suppliers can find no alternate source.
2. Regulation by the Federal Energy Office which not only controls allocations of residual fuels, but on May 1, 1974 issued further regulations indicating that ^{no} ~~any~~ boiler, burner or other combustor of fuel having a total firing rate of 50 million BTU per hour, or greater in operation on or prior to December 7, 1973 shall use a petroleum product having a lower specified sulfur content by weight, than the average content of such fuels used during November 1973.

This regulation covers virtually all large boilers in Oregon and has two significant applications.

- A. If anyone was using any residual fuel in November 1973 in excess of the 1.75% sulfur by weight specified by you for July 1, 1974 they will be unable to use a lower sulfur fuel without Federal Energy Office approval; and

2.

B. Even if the fuel used was under 1.75% sulfur by weight, say 1.6% they may not accept a load of oil at 1.3% without approval of the FEO.

3. Natural gas will be curtailed to interruptible customers throughout the Northwest for 180 to 210 days in 1974-75 from the 130 to 150 day curtailment in 1973-74. This will put an even greater strain on tight supplies throughout the Northwest and will require the utilization of even more residual fuel, and even more if we have an extremely cold winter. Origin of such fuel is unknown.

4. In view of the short residual fuel oil supplies we must remember there are other markets, such as the East coast where their problem is maintaining federal primary air standards, and other uses such as for asphalt which is in short supply.

Our concern here today is to point out the difficulties that may be posed not only to you as the chief environmental body in this state, but to all suppliers, distributors and users if residual oil supplies should, in general, exceed the 1.75% sulfur by weight regulation. We are not here to roll back environmental standards but only to suggest that you consider continuance of the rule at current sulfur by weight levels. Oregon does not have any significant sulfur dioxide problem as shown by the fact that we are not exceeding even federal secondary ambient levels, let alone the primary standards which is a major concern discussed in the May 1 Federal Energy Office regulations. The regulation currently in effect has over two years of history, and, as noted before, sulfur content of residual fuels have been well below those levels. No one has been dumping high sulfur fuels in Oregon.

Four of six supplying oil companies have advised that they can only guarantee to meet certain specifications, all above the 1.75% sulfur by weight limitation. Your staff indicates that the Department does not have sufficient information to justify a specific recommendation. What if the information proves correct? Then it seems to us we are all in an impossible situation.

First, by suggesting the use of variances you are electing to use a system that has generally been held in disfavor by all parties--the agency, industry and environmental groups. Variances have only been used where there was clear and convincing need on a case by case basis. The facts here do not warrant this approach because we are not exceeding federal secondary ambient sulfur dioxide standards, nor is there any reason to believe that we will in the next few years even with increased use of residual fuel. In addition, as neither the distributor or user has any control over the sulfur content of fuels, nor in most cases, the ability to make tests to determine sulfur content, there is little likelihood that variance requests from either of those classes will be able to provide the kind of information you generally need in order to consider a variance request.

Second, if sulfur levels of fuels exceed the levels proposed for July 1, 1974 will your staff be able to properly process up to 3000 variance requests without jeopardizing other air quality programs? Your staff is already stretched thin meeting the added load imposed by the air quality permit program and responding to EPA.

Third, can this commission, which must authorize every variance, respond rapidly enough to assure continuance of supply? If the supply line breaks down, the supply will not be replaced in a day or a week and during that period of time there could be severe economic consequences for both industry and its workers, not to mention other persons affected by the loss of fuel supply.

Because of: (1) the changed conditions since the adoption of the sulfur by weight regulation, namely the energy crisis;

(2) the potential difficulties posed for this commission as well as suppliers, distributors and users if the sulfur by weight standards are exceeded (we were advised yesterday that the FEO will not act on increased fuel allocations until September 1974 which will coincide with the possible shut-off of interruptible gas);

(3) the fact that Oregon does not exceed federal secondary standards for sulfur dioxide; and

(4) more time is needed to ascertain what the actual supply situation will be; we request the Commission to consider the following recommendations:

That OAR22-010(2) be amended by deleting "1974" and inserting "1975". This amendment would extend for one year the present 2.5% sulfur by weight limitation.

That your air quality staff be instructed to undertake a study of SO^2 emissions and estimates of residual fuel supplies and report back to you prior to April 1, 1975 as to its findings and recommendations on future sulfur content of fuels, as well as alternatives to the present regulation which might better control SO^2 emissions or at least alleviate some of the administrative difficulty of the present regulation.

We believe this matter is potentially so serious in its implications to the citizens and industry of this state, as well as to this commission, that we must raise the question "What if?" and suggest an alternative to you which we believe will not impair Oregon's effective air quality program.

Statement
Jack R. Brown
Crown Zellerbach
Before
Oregon Environmental Quality Commission
May 24, 1974

Mr. McPhillips, members of the Commission, my name is Jack Brown, and I represent Crown Zellerbach.

As a major industrial user of residual fuel oil in Oregon, we are making every attempt to assure our pulp and paper mills sufficient supplies of fuel oil for this coming winter.

We believe it would be helpful to your deliberations to indicate briefly today the steps we have taken to acquire adequate supplies of fuel that will meet state environmental requirements.

First, you should be aware that Crown Zellerbach and other industrial users on interruptible natural gas schedules have been advised recently by Northwest Natural Gas to expect between 180 to 210 days of 100% gas curtailment between September 1, 1974 and May 31, 1975. This change from our original estimate of 155 days compounds our fuel oil problems for the remainder of this year and next year.

During the winter of 1969-70 we experienced only 31 days of 100% gas curtailment, and during that period our mills at West Linn, Wauna and Lebanon used an estimated 114,700 barrels of oil in their power boilers.

Last winter natural gas to our mills was curtailed 138 days, boosting our fuel oil usage to 510,600 barrels. Based on a mean of 195 days of curtailment this fall and winter and next spring, we estimate our fuel oil consumption at 720,000 barrels.

Statement
Jack R. Brown
Crown Zellerbach
Before
Oregon Environmental Quality Commission
May 24, 1974
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With the Federal Energy Office now controlling the availability of oil, we have reported to FEO base period purchases (1973 is the base year) of 327,333 barrels, and have applied to FEO for an assignment of a supplier to furnish the additional 392,667 barrels of residual oil we will require for our Oregon mills.

FEO's Region Ten office in Seattle notified us this month that allocation orders will be issued in sufficient time for suppliers to begin distribution of oil by September 1, 1974.

On three occasions over the past two years we have sought from various oil companies the sale to us of any quantity of our oil requirements. All companies contacted indicated they could not quote due to a lack of fuel oil. These companies, included: ARCO, EXXON, Mobil, Phillips, Shell, Standard of California and Texaco.

Our original purpose in making these contacts was to establish a second supplier in the Portland area to ease the logistics problem of moving increasingly larger volumes of oil from the refinery through our supplier's terminal to our mills. Since January, 1973 we have also been trying to establish a source of supply that would agree to provide oil which would meet the State of Oregon requirement of 1.75% sulphur maximum after July 1, 1974.

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Statement
Jack R. Brown
Crown Zellerbach
Before
Oregon Environmental Quality Commission
May 24, 1974
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The sulphur maximum concerns us as our supplier, Union Oil Company, has indicated it cannot meet the 1.75% specification during the 1974-75 winter period due to its need to process a higher proportion of Arabian crude in its refineries to meet demands.

In an effort to make us a more attractive customer on a year-around basis, we are building a new storage tank capable of storing 270,000 barrels at the McCall Oil Terminal in the Willbridge area in Portland. We now expect to have this tank completed by September 15.

This additional storage capacity will give us the capability to blend different sulphur content fuels in order to achieve the lowest possible sulphur content in fuel oil going to our Oregon and Washington mills. This is an important concept for us and one that we wish you to consider in any action you take. Given this ability to blend, we and our supplier, Union Oil, believe we can achieve a 2.5% sulphur level in oil shipped to all of our mills in the Portland airshed this winter.

In our previous contacts with members of the DEQ staff, concern has been expressed with the possibility that customers in Oregon would receive higher sulphur content oil than those in neighboring states. Let me assure you today that the fuel oil Crown Zellerbach contracts for its Port Townsend, Port Angeles and Camas, Washington mills will not be lower in sulphur content than that furnished our Oregon mills.

Statement
Jack R. Brown
Crown Zellerbach
Before
Oregon Environmental Quality Commission
May 24, 1974
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I mentioned earlier our need to have the Federal Energy Office assign us a supplier to meet our fuel oil needs. It appears now that supplies available to the FEO will be from sources not able to meet the 1.75% guarantee.

For this and other reasons expressed by us and others here today, we respectfully request that you continue the 2.5% sulphur maximum to July 1, 1975.

Mr. Cannon has notified us of his recommendation to handle through the normal waiver procedure variances from 1.75% after July 1. If you do not extend the present maximum sulphur level, it will be important to us that our requests for variances in emergency situations be acted upon within a minimum of 24 to 36 hours of our locating a source of oil in winter. Otherwise commitments necessary to keep the flow of oil to the Portland area cannot be made at the time the opportunity arises.

Based on our past experience in securing fuel oil for our Portland area facilities, we are convinced that circumstances surrounding the acquisition and transportation of oil supplies this winter will be extremely critical.

We can't emphasize enough the problems connected with making commitments and arranging transportation to coincide with need.

Statement
Jack R. Brown
Crown Zellerbach
Before
Oregon Environmental Quality Commission
May 24, 1974
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In any event, let me assure you that we are using the full resources of Crown Zellerbach to secure the necessary low sulphur content fuel oil for our Oregon mills and that we will continue our efforts.

Thank you.

Statement of
NORTHWEST FOOD PROCESSORS ASSOCIATION
Before the
OREGON ENVIRONMENTAL QUALITY COMMISSION
May 24, 1974

My name is David C. Klick, Secretary of Northwest Food Processors Association and I am speaking on behalf of 28 Oregon members of the Association, many of which are large users of residual fuel oil.

Oregon food processors, which last year accounted for 1.5 billion pounds of canned and frozen product, are deeply concerned over the possibility that enforcement of lower sulfur content levels in residual fuel oil this summer and fall may in fact, create a shortage of fuel oil. If such a shortage were to occur, it could spell disaster for the state's growers and processors and jeopardize a sizeable portion of the nation's supply of processed fruit and vegetables. Right now the national supply of canned food is at its lowest point in 20 years. We cannot afford anything that would further impair our food supply.

The primary source of boiler and processing fuel for most of the state's food processors is natural gas. On April 23, Northwest Natural Gas advised its interruptible customers, including food processors, that the supply of natural gas would be curtailed from 180 to 210 full days commencing as early as September, 1974 and extending through May, 1975. It is most significant to note that September for many crops is the peak of fall harvest and processors are absolutely dependent on a reliable source of fuel. If natural gas is curtailed the only other acceptable alternative is residual fuel oil.

During the three month period of September - November, a minimum of 16 fruit and vegetable crops are still being processed in the Northwest on a round-the-clock schedule. Each of these crops is highly perishable and must be processed within a matter of hours after harvest before spoilage occurs. If, for some reason, fuel were not available during this critical period, raw product losses alone would amount to as much as \$5,000 an hour per plant.

Further, if natural gas were to be curtailed in September, processor requirements for residual oil could increase 100% above last year's useage. There is serious doubt in our minds that suppliers would be readily able to meet this increased demand if required to meet a 1.75% sulfur content.

It should, however, be pointed out that food processors peak consumption of residual oil in September-October would not coincide with the peak winter requirements of residential oil and so should have a negligible affect on the environment even at levels above 1.75%.

Processing companies advise that it is difficult for them to predict if they can meet the lower sulfur content levels as this year's processing season has not yet commenced. Some suppliers have notified their customers that they may be unable to maintain sulfur content of residual fuel oils below 1.75%. Mr. Cannon acknowledged this fact in his May 12 letter to us. However, his correspondence further indicated the Department "did not have sufficient information to justify a specific recommendation to the Commission".

We submit that any shortage of residual fuel oil caused by DEQ's enforcement of a 1.75% limit which suppliers cannot meet would have an adverse affect on food processors, the supply of food and be directly reflected in higher food costs to the consumer.

We strongly recommend that the present level of 2.5% sulfur by weight be retained for at least another year while the Department evaluates the effect on air quality and all interested parties determine what steps should be taken to prevent any unnecessary hardships.



THE OIL HEAT INSTITUTE OF OREGON / 1927 N.W. KEARNEY / PORTLAND, OREGON 97209 / PHONE 224-4231

May 22, 1974

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
R E C E I V E D
MAY 23 1974

~~OFFICE OF THE DIRECTOR~~

Mr. Kessler R. Cannon, Director
Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Dear Mr. Cannon:

Thanks very much for your letter of May 17, 1974 with regard to the situation regarding sulfur content in residual fuel oils.

As you know, the Oil Heat Institute is an Association of independent fuel oil dealers who handle and distribute products to a variety of end users; chief of which is the individual home owner.

At this time, we would like to speak on behalf of the user of residual fuel in support of a variance.

As distributors of residual fuel, we cannot, of course control either the supply or its sulfur content, but we can speak with some authority with regard to the existing problem and our reasons for supporting a variance.

First, let me assure you that our industry fully supports the regulations effective July 1, 1974. We also recognize the need for high quality air standards and have done our best to support your efforts in this regard.

However, we would like to make these points with regard to the current situation:

- (1) The requiring of variances beyond the prime suppliers (of which there are approximately seven) would be unrealistic. In Oregon today there are approximately 2,500 end-users of residual fuel oils. Included are schools at all levels, institutions such as the State prison, Oregon State hospital, Portland Medical School, numerous apartment houses, hotels, rest homes and various major industries of all descriptions.



Mr. Kessler R. Cannon, Director
May 22, 1974
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If each of these people, as well as our member distributors, were required to seek a variance an unusual administrative problem would immediately arise as result of the necessity for a minimum of three variances for each unit of fuel.

- (2) There seems to be a genuine need for at least a one-year moratorium on imposition of the regulations, not because the regulations are being opposed as such, but merely because adequate time has not been given to all concerned to develop the statistical picture which will show the depth of the impact on Oregon's economy. This is evidenced by the deep uncertainty among our suppliers as to whether there will be enough product available to meet the new requirement.
- (3) We must also recognize the hard fact that the gas utilities have notified many of their interruptible customers that they can anticipate anything from 180 to 210 days without gas this winter. The number of days historically in which these customers have been without gas has averaged approximately 70 days. Oil, traditionally, has been back-up fuel. Now, with the projected extension of cut-off many customers will be without gas, we are looking at a situation in which they could potentially be without fuel during the entire heating season which is normally calculated in Oregon at 212 days.

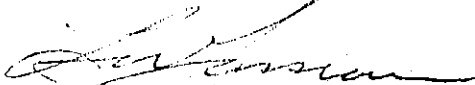
Therefore, we would recommend that the regulations of July, 1972 remain in effect and that implementation of the July, 1974 regulations be withheld for a period of one year until there can be:

- (a) a more accurate evaluation of the supply situation and;
- (b) the differences between the Department of Environmental Quality and the prime suppliers of this fuel be more satisfactorily resolved as result of the opportunity to develop the statistical information so necessary to a wise decision on a problem of this magnitude.

We stand ready to at any time supply any information that will help you toward a solution satisfactorily to the needs of the environment, the people and the economy of Oregon.

Sincerely yours,

OIL HEAT INSTITUTE OF OREGON


Leonard Gassner
Executive Director

LG/sf

Union Oil Company of California
P. O. Box 76, Portland, Oregon 97207
Telephone (503) 224-7600



May 23, 1974

Department of Environmental Quality
1234 S. W. Morrison St.
Portland, Oregon 97205

Gentlemen:

In response to your letter of May 17, 1974 regarding regulations on the sulfur content of residual fuels, please be advised that the Union Oil Company of California intends to file an application for a variance with the Department prior to June 10, 1974. We will also have representatives of the Company in attendance at the June 21, 1974 meeting of the Environmental Quality Commission. They will be prepared to comment on our application.

Very truly yours,

*C. R. Warnock*_{os}
C. R. Warnock
Division Sales Manager

CRW:va

Hanna Nickel Smelting Company
Riddle, Oregon, 97469

May 23, 1974

Mr. B. A. McPhillips, Chairman
Environmental Quality Commission
Oregon Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Dear Mr. McPhillips:

State regulations which limit the amount of sulfur in petroleum fuels, more specifically Bunker "C," will make it necessary for Hanna Nickel Smelting Company to obtain a variance in order to continue operation after July 1, 1974. Union Oil Company, our historical supplier, has stated that they could not meet the 1.75% sulfur limitation that becomes effective July 1, 1974.

In addition to the above and due to the current energy crisis, FEO has forbid the use of any petroleum fuel that has a lesser sulfur content than that which was used in November of 1973. Our usage during that time averaged 1.89% sulfur or 0.14% sulfur higher than the limit set by the State regulation. This puts us in a position of being in conflict with either the State or the Federal Energy Office. Therefore, we will have to file for a variance.

We respectfully request the Commission delay implementation of the 1.75% sulfur limitation for one year. During the interim period, the staff of DEQ will have had time to study the SO₂ levels around the state and determine the sulfur content limitations in fuels necessary to prevent exceeding ambient air standards.

Sincerely,



R. D. Carter
Smelter Superintendent

pb

cc: Kessler R. Cannon

STATEMENT OF COMMISSIONER DONALD E. CLARK
MULTNOMAH COUNTY, OREGON, BEFORE THE
ENVIRONMENTAL QUALITY COMMISSION
PORTLAND, MAY 24, 1974

I have been having increasing concerns about Portland Community College's proposed Rock Creek Campus, as more and more serious questions about the plan have been brought to my attention. I want to share my concerns with you, and urge that you issue an order prohibiting construction of the parking lot under consideration here today until such time as all of the questions are answered and concerns are resolved:

First of all, to address myself specifically to the issue you have before you now, I want to point out that your approval of this application would result in planning in a piecemeal sort of way, and that is a poor way to plan. All you have here is the Phase I application for 450 parking spaces. What will Phase II be? And Phase III? Phase IV? You would have a much more accurate picture of the entire huge scope of this project if you were to consider applications simultaneously for all of the phases of parking lot construction.

Were you to have the full view of this project you would see what a tremendous stimulus to development of prime agricultural land, the kind of land which most people now think we must preserve, this campus would be. And you would be struck by the incredible incentive this project will offer to increased use of the automobile. Now is not the time to be granting approval for schemes which will open so much more precious farm land to development, and which will give such massive encouragement to the use of the automobile.

Now, if you deny this application, some people will charge that your action today will delay creation of the reservoir proposed

for this area, and that this reservoir cannot be built if the Rock Creek Campus is not built. Well, I want to point out that not everybody thinks the reservoir is the neatest thing going. It, too, will cover prime farm land, just as effectively as would houses and buildings. It would open up access onto various private properties which can cause certain ^{trespass} problems, and sanitation problems as well. You should not look on this reservoir as an unmixed blessing by any means, and you should not let that issue cloud your decision on the parking lot application.

Multnomah County is a participant in the joint watershed development of of the reservoir, and Department of Environmental Services is having greater and greater concern about this issue and the whole range of issues involved, and will be encouraging a reexamination of the whole package.

Let me turn to a bigger issue, that of whether or not we even need a new community college in this area. I am not at all convinced yet that we do. I am not persuaded that it is wise to spend our society's limited capital on new classrooms when classrooms are being shut down, such as at Marylhurst College. That simply does not strike me as a wise thing to do.

Nevertheless, let us assume that it is determined that a new campus is needed. Then the next most important question is, Where is the least damaging place to put it? Well, two major criteria have been among those stated as to location. One is that agricultural land is needed, since this is in large part an agricultural school. The other is that a noise insensitive environment is needed, since there will be work on jet engines and similar loud pieces of equipment.

I would like to suggest that there are other places than the

proposed location where these locational factors can be met without causing adverse developmental pressures on prime farm land, and where there will not be such a greatly increased need for the faculty and students to use cars. I'm sure there are possible places in Washington County, and I think that there might well be a possible location even in Multnomah County. The location that springs to mind is out on Port of Portland land by the Portland International Airport. There is agricultural land out there which might be used for educational purposes; in that area noise is less likely to be a problem (although PCC should realize that governmental entities around here are planning to tighten up on noise regulations); and there would not be the problem about opening up an environmentally sensitive area for development.

I want to emphasize that this location is only one of a number of possibilities, and perhaps it would be proven unsatisfactory. I bring it up only to illustrate the fact that no one has made a survey of alternative locations in the Portland metropolitan area for a new community college campus. And that is what I strongly recommend should be done now. I have a recommended process to follow, too:

The Columbia Region Association of Governments will assume its new and expanded powers in just a few days. I recommend that this matter be referred to them for resolution. CRAG should summon together representatives of Washington County, the D. E. Q., and Portland Community College to review other locations. When one is settled upon, then everyone can go through the various hoops together in seeking the approval of all involved jurisdictions and entities.

Perhaps you are familiar with the fact that CRAG's first draft of its Regional Comprehensive Plan will be coming out in July. It's not out yet, but the goals and assumptions lying behind it have been

approved by the CRAG General Assembly and sent on to all jurisdictions for their implementation. And a few weeks ago, the Executive Board adopted the "Radial Corridors" concept as the plan for further detailing of a land use concept. All of these actions contain within them ideas which conflict with the proposed campus.

You should know that CRAG took the position a year ago that the initial zone change should not be approved. Now CRAG is in a stronger position to influence local plans, and I emphatically believe that CRAG is the agency which now should lead the way in a complete new look at this proposal.

In summary, then, there are many unresolved questions here; and it would be premature for the Environmental Quality Commission to grant a parking lot permit when everything is so unsettled-- and bound to get more unsettled in the near future. What we have here is an extremely large project which lacks consensus about it, and when you're trying to do something on this big of a scale, without consensus, you're bound to run into problems. I urge that no parking permit be issued until after that consensus is reached.

Thank you for giving me this opportunity to share my concerns with you.

cc: Washington County Board of Commissioners
Multnomah County Board of Commissioners
Larry Rice, Executive Director, CRAG
All Members, Executive Board, CRAG
Arnold Cogan, Executive Director, LCDC
All Members, Executive Committee, LCDC
Larry Williams, Executive Director, OEC
Governor Tom McCall