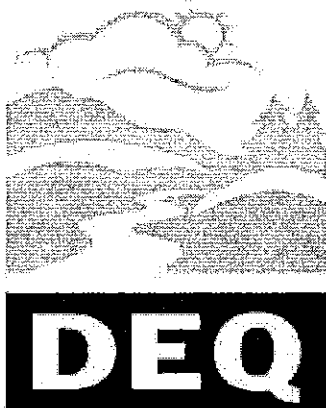


11/26/1973

**OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS**



**State of Oregon
Department of
Environmental
Quality**

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

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

AGENDA

ENVIRONMENTAL QUALITY COMMISSION

Meeting of

November 26-27, 1973

Public Service Building

920 S. W. Sixth Avenue, Portland, Oregon

November 26, 1973*

9 a.m.

Swearing in of Mrs. Jacklyn Hallock as a member of the Environmental Quality Commission

- A. Minutes of October 22, 1973, EQC Meeting
- B. Project Plans for the Month of October
- C. Authorization for Public Hearing to Consider Adoption of Rules Pertaining to the Subsurface Disposal of Sewage
- D. Variance Request--Western States Plywood Coop., Port Orford
- E. Presentation of Oregon CUP Renewal to Publishers Paper Company

10 a.m.

- F. Adoption of Proposed Amendments to OAR Chapter 340, Sections 25-255 through 25-290, Emission Standards for Primary Aluminum Plants

11 a.m.

- G. Public Hearing to Amend OAR Chapter 340, Section 24-100, Regulation Pertaining to Motor Vehicle Inspection
- H. Chem-Nuclear Systems, Inc., Application to Establish a Hazardous Waste Disposal Site in Gilliam County near Arlington, Oregon

noon - luncheon recess

Agenda - EQC Meeting
November 26-27, 1973

1:30 p.m.

I. Metropolitan Service District, Grant Application for Supplemental Funds

2 p.m.

J. Public Hearing to Consider Adoption of Special Air Pollution Control Rules for Clackamas, Columbia, Multnomah and Washington Counties

K. Portland General Electric Beaver Turbine Generator Installation, Application for an Air Contaminant Discharge Permit

L. Sewerage Works Construction Grants, Consideration of Project List

M. Tax Credit Applications

November 27, 1973

9 a.m.

N. Status of New Department of Environmental Quality Laboratory

10 a.m.

O. Public Hearing to Amend OAR Chapter 340, Sections 20-033.02 through 20-033.20, Air Contaminant Discharge Permits

* Agenda items scheduled for November 26, 1973 may continue to November 27, 1973, following Agenda Item O.

ENVIRONMENTAL QUALITY COMMISSION

Attendance Record

Meeting of November 26, 1973 in Portland, Oregon

<u>Name</u>	<u>Organization</u>	<u>Address</u>
<i>[Signature]</i> PETER SCHWELL	Publishers Paper Co	Oregon City, Oregon
JOHN C. PETERSON	MARTIN-MARIETTA ALUMA	TORRANCE, CAL.
David J. Abraham	Clatsop County	County Court House Oregon, Clatsop
George L. Voss	Pacific Resources Inc	Honolulu Hawaii
Smith Wilkell	Western State Plywood Corp	Portland Oregon
Dick Osborne	Burlington Northern	Portland
<i>[Signature]</i>	Retired	Portland
Clare H. Edner	NETARTS OREGON SIDE SANITARY DIST	BOARD NETARTS OREGON 97148
WALLACE G. DEBOER	NETARTS OREGON SIDE SANITARY DIST	BOARD NETARTS ORE 97141
Alton R. Andrews	City of Corvallis	City Hall Corvallis 97331
KEN FLAIG	CITY OF APRIL STEW	STANT ANKINGTON
Scott J. McCree	Georgia Pacific Corp.	Portland, Oregon
R.W. Jorist		Portland
Stanley Dempsey	AMAX	Denver
June Howarth	AMAX	Portland
W.L. Jensenkamp	AMAX	Astoria
P. Kuyper		Denver
R. Kasper	AMAX	Portland
Sen WM Holmstrom		Georgetown
Arch D. Morse	Chem Nuclear	Portland
Quentin Johnson	Chem Nuclear	Bellevue Wash
Abel Caldwell	Chem Nuclear	Corvallis Or.

Henry C Schutte	Chem Nuclear System Inc	Columbia SC
Mark Hart	Reynolds Metals Co	Portland Ore
Joseph L. Birnie	Martin Marietta Abram	The Dalles
J. L. McDonald	Chem Nuclear System	Belleme wash
JOHN VLASTELICIA	EPA/OREGON	
James J. [unclear]	Reynolds Metals	Troutdale, Ore
J. E. [unclear]	Reynolds Metals	11, 11
Richard P. Rater	DEQ - Eugene	
GARY L. CONKLING	The Daily Astorian	Astoria
John Phomb	Engn DEQ	
Roy Underwood	Chief Counsel, DEQ	AG Office
Hal Burtitt	DEQ	
Saral Patterson	"	
Fritz Skerwin	"	
Paul Johansen	"	
Robert L. Gay	"	
Stacye Howson	"	
Warren Westgate	"	
Ken Spica	"	
Jack Weathers	"	
Shirley Shoy	"	
Ronald L. Myles	"	
Log Johnson	"	
Al [unclear]	WATG	
Neil Kobbler	OSTIRG	
Larry Mart	OSPIRG	
B. J. Seymour	DEQ	

Mrs James Howarth		
Mrs Victor Norenkamp		
James Vlastakis	EPA - Oregon	
Robert Ross	Wasco County Trust & Savings League	
Bob Terry	Columbia County	
Mark E. Van Gordon	Columbia County City of Rainier - Mayor	
Don MILLER	Portland General Electric	Portland Oreg
ALBERT B. CHADDOCK	PORTLAND GENERAL ELECTRIC	PORTLAND, ORE
Tom Donaca	AOL	"

I wish to make a statement before the Environmental Quality Commission regarding

~~TOM DONACH~~

ADOPTED RULES FOR MULT., CLACK, COLE & WASH. COUNTIES

Name Tom Donach

Representing AOI

I wish to make a statement before the Environmental Quality Commission regarding

Hyster Company's Application for a tax credit

Name Margachka Sabir

Representing Hyster Company

I wish to make a statement before the Environmental Quality Commission regarding

Aluminum Plant

(Opposed)

Alan Hart

Name

Reynolds Metals Co.

Representing

I wish to make a statement before the Environmental Quality Commission regarding

THE PROPOSED EMISSION STD'S

FOR ALUMINUM PLANTS

OPPOSE

HARRY HELTON

Name

REYNOLDS METALS

Representing

I wish to make a statement before the Environmental Quality Commission regarding

EMMISSIONS from Intalco

J. Kepler

Name

AMAX

Representing

I wish to make a statement before the Environmental Quality Commission regarding

Agenda Item F - Primary Aluminum Plant Regulations

Neil Robblee

Name

OSPIRG

Representing

I wish to make a statement before the Environmental Quality Commission regarding

Proposed amendments - Emission Standards

for Primary Aluminum Plants

ROBERT M. KEAR

Name

WASCO COUNTY FRUIT &

Representing

PRODUCE LEAGUE

EQC Meeting - Nov 27, 1973

Cleo Hicks	Member School Board	Salem, Oregon
Harold C. Disher	Marion L.E.D.	Salem, Ore
Chas. D. Schmitt	Ore. School Board Assn	Salem, Ore.
Dick Osborne	Burlington Northern	Portland
Mel Thompson	PROTO TOOL	MILWAUKIE
Wayne Foster	Supt. of Schools	St. Helens Blvd #502
Wm. Thorn	OMACK IND. INC	MILWAUKIE OREG
J. Ronald Miles	Agric Expt.	Down Down Corvallis
DAVID ST. LOUIS	MID-WILLAMETTE VALLEY AR. POL. ASSN	SALEM, OREGON

I wish to make a statement before the Environmental Quality Commission regarding

Proposed Revisions

Cleo Hicks

Name

Salem School Board

Representing

I wish to make a statement before the Environmental Quality Commission regarding

special permits for No. emissions

Dan Eucken

Name

Eucken Lumber Co.

Representing

I wish to make a statement before the Environmental Quality Commission regarding

PERMIT RECS

Tom DONACH

Name

DOE

Representing

I wish to make a statement before the Environmental Quality Commission regarding

Air Contaminant Discharge Permit

Regulations

J. Ronald Miner

Name

Self

Representing

I wish to make a statement before the Environmental Quality Commission regarding

Fees & School Districts

Wayne Foster
Name

St. Helens School Dist 502
Representing

St. Helens, Ore 97051

I wish to make a statement before the Environmental Quality Commission regarding

Fees charged to local
school districts

Chas. D. Schmidt
Name

Ore. School Board Assn
Representing

MINUTES OF THE FIFTIETH MEETING
of the
Oregon Environmental Quality Commission
October 22, 1973

Pursuant to public notice mailed to the news media, to persons on a mailing list of the Department and to the Commission members, the fiftieth meeting of the Oregon Environmental Quality Commission was called to order by the Chairman at 1:30 p.m. on Monday, October 22, 1973, in the Vert Auditorium of the Henel McCune Junior High School, 400 S. W. Dorian Avenue, Pendleton, Oregon. The Commission members present were B. A. McPhillips, Chairman, Dr. Morris K. Crothers and Dr. Grace S. Phinney. Mr. Arnold M. Cogan, Vice Chairman, and Dr. Paul E. Bragdon were unable to attend because of other commitments.

The Department was represented by Director Diarmuid F. O'Scannlain, Deputy Director Ronald L. Myles, Fred Bolton, John E. Borden, M. J. Downs, Wayne Hanson, Ronald Householder, Harold M. Patterson, Harold L. Sawyer, Shirley Shay, James Van Domelen, Warren C. Westgarth, and Chief Legal Counsel Ray P. Underwood.

MINUTES OF THE SEPTEMBER 21, 1973 COMMISSION MEETING

It was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that the minutes of the forty-ninth meeting of the Commission held in Portland on September 21, 1973, be approved as prepared.

PROJECT PLANS FOR THE MONTH OF SEPTEMBER 1973

It was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that the actions taken by the Department during the month of September 1973, as reported by Mr. Myles regarding the following 73 domestic sewerage, 8 industrial waste, 24 air quality control and 6 solid waste management projects be approved:

Water Quality Control - September 1973

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
<u>Municipal Projects (73)</u>			
9-4-73	Green San. Dist.	Meadowbrook Subd. sewers	Prov. app.
9-4-73	Gresham	Sotogrande Subd. sewers	Prov. app.
9-4-73	East Salem Sewer & Drainage Dist. I	Yeakley's Addn. sewers	Prov. app.
9-5-73	Oregon Primate Research Center	Effluent irrigation piping (revised)	Prov. app.

Municipal Projects (73) - continued

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
9-5-73	Brookings	Harris Beach State Park pump station	Prov. app.
9-5-73	Dammasch State Hosp.	Rehabilitation Center sewers	Prov. app.
9-5-73	Klamath County	Round Lake Estates Subd. sewerage system, 3.5 acre sewage lagoon, disinfection and irrigation disposal	Prov. app.
9-6-73	Eugene	Royal Avenue sewer	Prov. app.
9-6-73	Portland	Addenda Nos.2-4, sewage treatment plant project	Approved
9-6-73	USA (Sunset)	Fire station sewer - health hazard	Prov. app.
9-6-73	Gresham	Bramblemead Subd. sewers	Prov. app.
9-10-73	Junction City	Third St. sewer & pump station	Prov. app.
9-10-73	Springfield	Sherry Park Subd. sewers	Prov. app.
9-10-73	USA (Forest Grove)	Doherty Ford sewer ext.	Prov. app.
9-10-73	Klamath Falls	West Oregon Avenue improvement unit 248	Prov. app.
9-13-73	Pendleton	Tutuilla Creek sewer	Prov. app.
9-13-73	Oak Lodge San. D.	Sanitary sewer extension	Prov. app.
9-13-73	Albany	Sanitary sewer projects (1) SS 73-10 (2) SS 73-17	Prov. app.
9-13-73	Hillsboro (Rock Cr.)	Twenty-four Maples Subd. sewers	Prov. app.
9-13-73	Gresham	Sage East Shopping Center sewer	Prov. app.
9-13-73	Springfield	Sanitary sewer projects (1) SP-125 (2) SP-126 (3) SP-128	Prov. app.
9-13-73	Gresham	Lorraine Subd. sewers	Prov. app.
9-13-73	Gresham	S.W. Towle Rd. san. sewer	Prov. app.
9-13-73	Jefferson	Tanglewood Drive sewer	Prov. app.
9-13-73	Bandon	Chicago Ave. & 12th St. sewers	Prov. app.
9-14-73	Pendleton	Bonbright Dev. - revised plans	Prov. app.
9-14-73	Oak Lodge San. D	Lucinda Estates Subd. sewers	Prov. app.
9-14-73	Hillsboro (Rock Cr.)	S.E. Cornell Rd. sewer	Prov. app.
9-14-73	North Bend	Lewis & Oak St. sewers	Prov. app.
9-14-73	Portland	Portnomah Pak Subd. sewers	Prov. app.
9-14-73	Gresham	Darling Park #2 Subd. sewers	Prov. app.
9-14-73	USA (Sherwood)	Lincoln St. & Park Row sewer	Prov. app.
9-14-73	Milwaukie	Interceptor, Schedule I	Prov. app.
9-17-73	Cedar Hills	Larry Brown, Inc. Industrial Property san. sewer	Prov. app.
9-17-73	Gresham	Shelburne Subd. sewers, Phase 2 and 3	Prov. app.
9-17-73	Gresham	Sommerwood Addn. sewers	Prov. app.
9-17-73	Lake Oswego	Gainer sewer extension and Red Fox Hills #2 Subd. sewers	Prov. app.
9-17-73	Lebanon	Laterals M-1, M-2, M-3, and Morton Place sewer	Prov. app.

Municipal Projects (73) - continued

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
9-19-73	Somerset West	Sewage treatment plant expansion - 31.2 acre lagoon	Prov. app.
9-21-73	Lake Oswego	Mountain Park, Phase 5-B sewers	Prov. app.
9-25-73	North Umpqua S. D.	Sewer lateral C-8.1	Prov. app.
9-26-73	Gresham	Aldercreek Subd. sewers	Prov. app.
9-26-73	Gresham	S.E. Hood Avenue sewer	Prov. app.
9-26-73	Gresham	Crisway Place Subd. sewer	Prov. app.
9-26-73	Central Point	Debrot Way sewers	Prov. app.
9-26-73	East Salem Sewer & Drainage Dist. I	(1) Denver Ct. Subd. sewers (2) Royal Oak Estates Subd. sewers	Prov. app.
9-26-73	Bear Cr. Valley San. Auth. (Talent)	Pacific Estates Subd., Unit 1 sewers	Prov. app.
9-26-73	USA (Tigard)	Webber Studio commercial sewer	Prov. app.
9-26-73	USA (Metzger)	Carmel sanitary sewer	Prov. app.
9-26-73	Tualatin	S. W. 65th Ave. sewer	Prov. app.
9-26-73	Sandy	Sandy Heights and Marcy Acres sewers	Prov. app.
9-26-73	Salem (Wallace Rd.)	Wallace Rd., N.W. sewer	Prov. app.
9-26-73	Salem (Willow Lake)	Monarch Estates Subd. sewers	Prov. app.
9-26-73	Portland	N. Ensign Street sewer	Prov. app.
9-26-73	Portland	S.W. 40th & Marigold St. sewer	Prov. app.
9-26-73	Jefferson	Promise Addn. Subd. sewers	Prov. app.
9-26-73	Ontario	Sunset Dr. & NW 4th St. sewer	Prov. app.
9-26-73	Hillsboro (Rock Cr.)	Minter Bridge Road sewer	Prov. app.
9-26-73	Hillsboro (Rock Cr.)	Edwards Meadows #3 Subd. sewer	Prov. app.
9-26-73	Josephine County	Manzanita Roadside Rest Area experimental sewage treatment plant - 0.04 MGD advanced waste treatment with water recycle	Prov. app.
9-26-73	Salem (Willow Lake)	Hawthorne Ave. sewer	Prov. app.
9-27-73	Salem (Willow Lake)	Brentwood Subd. sewers	Prov. app.
9-27-73	Salem (Willow Lake)	South Cedar Estates sewers	Prov. app.
9-27-73	Sutherlin	Duke, Gleason & South Comstock sewers	Prov. app.

Industrial Projects (8)

8-31-73	Yamhill	Lloyd Bansen Dairy, animal waste facilities	Prov. app.
9-7-73	Canby	Globe Union, Inc., waste treatment facilities	Prov. app.
9-12-73	Sherwood	Lloyd Koch, animal waste facilities	Prov. app.
9-19-73	Roseburg	Fred Prosser, animal waste facilities	Prov. app.
9-21-73	Nyssa	The Amalgamated Sugar Co., waste water control facility improvements	Prov. app.

Industrial Projects (8) - continued

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
9-25-73	Forest Grove	Stimson Lumber Company, preliminary concept proposal for modification of waste water treatment and control system	Prov. app.
9-26-73	Springfield	Widing Terminal, Inc., waste water control facilities	Prov. app.
9-28-73	Eugene	Pacific Resins and Chemicals Inc., waste water treatment facilities	Prov. app.

Air Quality Control (24)

9-6-73	Jackson	Permaneer Corporation - Construction of raw material storage fence enclosure to prevent wind-blown emissions	Approved
9-10-73	Coos	Georgia-Pacific Corporation - Installation of two Clarke baghouse filter units to control cyclone emissions	Approved
9-17-73	Josephine	Mountain Fir Lumber Company - Plans and specifications for new modified wigwam waste burner	Approved
9-17-73	Coos	Moore Mill and Lumber Company - Plans and specifications for installation of new modified wigwam waste burner	Approved
9-19-73	Umatilla	Pendleton Grain Growers, Inc. - Plans and specifications for the installation of a seed processing facility	Approved
9-24-73	Jackson	Timber Products Company - Plans and specifications for construction of structure to enclose particleboard plant truck dump area	Approved
9-25-73	Baker	Baker Valley Rendering - Plans and specifications for installation of a condenser for cooker odor control	Approved
9-27-73	Lane	Weyerhaeuser Company - Plans and specifications for installation of two scrubbers to control particulate emissions from the smelt dissolving tank vent	Approved
9-28-73	Marion	Boise Cascade Corporation - Plans and specifications for the installation of a pneumatic railcar unloading system	Approved

Air Quality Control (24) - continued

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
9-11-73	Multnomah	The Portland Clinic Medical Building 147-space parking facility	Approved
9-12-73	Multnomah	Transcorp Apartment 97-space parking facility	Requested Mass- Transit Incentive Prog. Requested Add. Information Req. Add. Info.
9-12-73	Multnomah	Moore Oregon Dry Kiln 36-space parking facility	Requested Add. Information Req. Add. Info.
9-12-73	Washington	Cal-Roof Wholesale 100-space parking facility	Req. Add. Info.
9-19-73	Washington	General Telephone Co. 90-space parking facility	Req. Add. Info.
9-20-73	Washington	Greentree Business Park 150-space parking facility	App. with conditions
9-20-73	Washington	Bernard's Beaverton Mall 191-space parking facility	App. with conditions
9-24-73	Multnomah	First Baptist Church of Parkrose - 64-space parking facility	Approved
9-20-73	Washington	Tanasbourne Town Center - Phase I - 705-space parking facility	Req. Add. Info.
9-20-73	Multnomah	Portland General Electric Office Building - 401-space parking facility	Req. Add. Info.
9-21-73	Washington	Washington Square Shopping Center - 3369-space parking facility	Req. Add. Info.
9-21-73	Clackamas	Kruse Way FAS 943 4-lane urban arterial	Req. Add. Info.
9-24-73	Multnomah	Portland Adventist Hospital 685-space parking facility	App. with conditions
9-27-73	Multnomah	Red Lion Hotel - Hayden Island 678-space parking facility	App. with conditions
9-28-73	Multnomah	Oregon Steel Mills 74-space parking facility	Req. Add. Info.

Solid Waste Management (6)

9-6-73	Clackamas	Crown Zellerbach Sorting Yard (Existing IW - Log Deck Clean-up Landfill)	Approved
9-17-73	Clackamas	Rossmann's Sanitary Landfill (Existing Garbage Sanitary Landfill)	Prov. App.
9-17-73	Clackamas	Sandy Transfer Station (Addition to Existing Transfer Station)	Approved
9-26-73	Lane	Low Pass Transfer Facility (New Transfer Station)	Approved

Solid Waste Management (6) - continued

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
9-26-73	Lane	Walton Transfer Facility (New Transfer Station)	Approved
9-26-73	Lane	Mapleton Transfer Facility (New Transfer Station)	Approved
9-28-73	MSD Region	Action Plan Interim Progress Report	Review and Comment

SPECIAL AIR POLLUTION CONTROL RULES FOR CLACKAMAS, COLUMBIA, MULTNOMAH AND WASHINGTON COUNTIES--AUTHORIZATION FOR PUBLIC HEARING

Mr. Hanson presented the Department's request dated October 11, 1973, for authorization by the Commission for a public hearing before the Commission on adoption of portions of the former Columbia-Willamette Air Pollution Authority (CWAPA) rules as permanent rules of the Commission for Clackamas, Columbia, Washington and Multnomah Counties, pertaining to:

1. Emission standards for commercial, industrial sources
2. Prohibited practices which pertain to open burning, incinerator operation, odor control and emissions from ships
3. The definitions pertaining to the above portions.

It was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that as recommended by the Director, the Department be authorized to set a public hearing before the Commission for November 26, 1973, in Portland, Oregon, on the proposed CWAPA rules.

AUTHORIZATION FOR PUBLIC HEARING TO AMEND OAR CHAPTER 340, SECTION 24-100, REGULATION PERTAINING TO MOTOR VEHICLE INSPECTION

Mr. Householder presented the Department's request dated October 10, 1973, for authorization by the Commission for a public hearing before the Commission to amend the regulation pertaining to county designations for motor vehicle inspection program requirements. Mr. Householder noted that on March 2, 1973, the Commission held a public hearing and adopted a rule, pursuant to ORS 481.190, which designated Clackamas, Columbia, Multnomah and Washington Counties as within the vehicle emission control inspection program approved by the Commission at its meeting on October 25, 1972. Funds for implementing the program, which was to be established on January 1, 1974, were made available by the State Emergency Board on August 15, 1973, at which time the Emergency Board also requested that Columbia County be deleted from the inspection program requirements. Amendments for consideration at the requested public hearing would remove Columbia County from the list of designated counties and extend the effective date of the rule to May 31, 1974.

Mr. O'Scannlain explained that the Department proposed to delete Columbia County not only to comply with the Emergency Board request, but also because the amount of motor vehicle pollution contributed by cars registered in Columbia County would only increase the total amount of pollution in the Portland metropolitan area by approximately one percent.

After a brief discussion, it was MOVED by Dr. Phinney, seconded by Dr. Crothers and carried that as recommended by the Director, the Department be authorized to set a public hearing before the Commission for November 26, 1973, in Portland, Oregon, on the proposed amendments to the motor vehicle inspection rule.

AUTHORIZATION FOR PUBLIC HEARING TO AMEND OAR, CHAPTER 340, SECTIONS 20-033.02 THROUGH 20-033.20, AIR CONTAMINANT DISCHARGE PERMITS

Mr. Patterson presented the Department's request dated October 10, 1973, for authorization by the Commission for a public hearing to amend the regulation pertaining to air contaminant discharge permits, for the purpose of clarifying the designated sections and to add eight new source categories to the fee schedule which would be required to obtain an air contaminant discharge permit.

It was MOVED by Dr. Phinney, seconded by Dr. Crothers and carried that as recommended by the Director, the Department be authorized to set a public hearing before the Commission for November 27, 1973, in Portland, Oregon on proposed amendments to the air contaminant discharge permit rules.

REPORT FROM THE DIRECTOR ON REORGANIZATION AND DECENTRALIZATION OF THE DEPARTMENT OF ENVIRONMENTAL QUALITY

In summarizing his report, Mr. O'Scannlain noted that the reorganization and decentralization of the Department were designed to meet objectives expressed by the Commission, the Governor's office, the Oregon Legislative Assembly, and representatives of the private and public sectors of the state, as well as to be more responsive to the environmental needs of Oregon citizens.

The Director explained that the geographic areas of the five proposed regions incorporate boundaries established for the state's administrative districts and thus maintain the integrity of the Councils of Government. Present field office staffs will be expanded to administer department programs which on January 1, 1974 will include a statewide permit system for subsurface sewage disposal.

Mr. O'Scannlain pointed out that the administration of the Midwestern Region will mark a unique approach to intergovernmental cooperation since it will be

based on an agreement with the Lane Regional Air Pollution Authority to carry out DEQ functions and at the same time preserve Lane Regional's statutory responsibilities in air quality control. Mr. Vern Adkison, Administrator of Lane Regional, has agreed to serve as administrator of the Midwestern Region as well as the Lane Regional Air Pollution Authority.

Mr. McPhillips stated that he was heartily in accord with the concept outlined by the Director, but urged that the department retain headquarters control over grass seed burning. Mr. O'Scannlain agreed and said that no change in the administration of this program was planned, although enforcement activity in the area of illegal burning would be increased by expanded staffing in the Eugene office.

Further discussion focused on the size of the regions, the fact that their boundaries did not follow river basin drainage areas or natural air sheds, and the need for public comment on the reorganization proposal. The Commissioners recommended that at an appropriate time, the Director reevaluate the boundaries after consulting with local public and governmental officials in the regions.

Mr. O'Scannlain agreed, stating that additional regions would be considered in the future, but that presently the department must work within the framework of a limited staff and the legislative mandate contained in Senate Bill 77 to work with local governments on environmental matters.

It was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that the Director be authorized to proceed with the reorganization and decentralization of the department as outlined and discussed, and to request Emergency Board approval as required.

PUBLIC FORUM

Mr. McPhillips pointed out that the Commission was meeting for the first time in Pendleton to give members of the general public an opportunity to voice any environmental concerns they might have directly to the Commission members. He stated that time might not allow extensive discussion of individual items, but gave assurance that appropriate followup actions would be taken on questions or problems not answered or resolved at this meeting.

Mr. McPhillips introduced State Senator Michael Thorne of Pendleton, and State Representative Stafford Hansell of Hermiston.

Representative Hansell welcomed the Commission to Pendleton and the opportunity to learn firsthand about the uniqueness of the Eastern Oregon country and

related environmental concerns. He urged thoughtful deliberation of the proposed departmental reorganization before presentation to the Emergency Board or the Legislative Assembly, commenting that such broad changes in the area of environmental protection will have long-term application and must therefore be carefully considered. Mr. Hansell briefly explained the recycling of effluent utilized in his farming operations, and concluded his comments with general statements about the importance and significance of state and federal environmental legislation.

Mr. Forrest Bowman of Pendleton was the first person to make a statement regarding the request of 25 owners of summer homes in the Anthony Lakes area for a workable sewage disposal system. Mr. Bowman explained that the U.S. Forest Service designed and installed septic tanks for some residents but that this method had now been rejected because of poor soil conditions. Since the DEQ will assume responsibility for subsurface sewage disposal on January 1, 1974, Mr. Bowman wanted personally to inform the Commissioners of the problems.

Mr. O'Scannlain suggested that Mr. Bowman provide Mr. Jackman and Mr. Van Domelen, who were present, with more detailed information.

Mr. Dan Russell, plumbing inspector for the Oregon Department of Commerce (Pendleton), discussed problems associated with the construction of a sewer line from the City of Pendleton to the Indian Agency, the plans for which were approved by the department. Mr. Russell wanted to know who was paying for the line and why it was put through a residential area of about 200 homes without outlets. He also questioned the suitability of the materials used to bear the loads on the line which was installed below the water line and under several roads.

At the Director's request, Mr. Bolton commented on Mr. Russell's concerns. He stated that the Indian Agency had contracted with the City of Pendleton for sewer service to the reservation. He explained that both he and Mr. Van Domelen had inspected the site and affirmed that the plans submitted to the department had been approved. He stated further that the installation of the intercepter must be done on its own merit and that hookups for Riverside residents could be made by installing a sewer system in that area. The City would like to have the Riverside area annexed to the City or form its own district and contract with the city for service. He added that DEQ has on several occasions tried to explain to Mr. Russell that the department's authority is limited to plan review

and that it is the responsibility of the project engineer to meet contract conditions and requirements.

Although invited to do so by the Chairman, no other persons asked to be heard during this part of the meeting.

ENVIRONMENTAL STATUS REPORT ON JEFFERSON COUNTY

Mr. Borden presented the staff report on the environmental status of Jefferson County, which had been deferred from the September 21, 1973 Commission meeting.

No action was required regarding this matter.

STATEWIDE SOLID WASTE MANAGEMENT ACTION PLAN--GRANT AND PROGRAM STATUS

Mr. Jackman reviewed the status of the Statewide Solid Waste Management Action Plan, noting that 22 grants for projects representing 33 counties had been funded by the department with commitments of \$1,098,978 of the \$1,129,630 statewide planning grant fund. In addition, the Port of Umpqua Commission was granted \$75,000 by the department to research the feasibility of a power recovery system utilizing combustible solid wastes including wood wastes. Final draft and adoption of the statewide action plan is estimated for the fall of 1974.

No action was required regarding this matter.

AMENDMENTS TO EMERGENCY RULES GOVERNING THE SUBSURFACE DISPOSAL OF SEWAGE

Mr. Jackman presented the Department's request dated October 10, 1973, for approval of amendments to the emergency rules governing the subsurface disposal of sewage, adopted by the Commission at its September 21, 1973 meeting. The amendments proposed would transfer jurisdiction from the Health Division to the department for any appeals on denials of suitability for sites for subsurface sewage disposal, with hearings officers in such matters to be provided by the Health Division. The proposed amendments were outlined in a memorandum of understanding between the two agencies signed on October 5, 1973.

In presenting the proposed amendments, Mr. Jackman added the words "qualified agents" to Subsection (4) of Section 2. (A copy of these amendments is attached as part of the official record.) He explained that the addition was needed to cover the special situation in Clackamas County where the sanitarians work under the authority of the health officer but in the employ of the Public Works Department.

It was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that the amendments as modified be adopted.

VALLEY RIVER CENTER PARKING FACILITY

Mr. Downs presented the department's recommendation dated October 15, 1973 concerning the Valley River Center parking facility which had first come before the Commission at its July 26, 1973 meeting in Medford. At that time the Commission voted 2 to 2 on the recommendation and subsequently adopted an order prohibiting construction of Valley River Center's request for 872 additional parking spaces based on the contention that construction of the entire 872 spaces was not justified considering the level of existing transit service and planned improvements in service and patronage incentives.

Mr. Downs stated that a revised determination of the proper amount of additional parking to be allowed at Valley River Center was made on the basis of a reevaluation of the program for transit service and patronage incentives agreed to by the Lane Transit District and Valley River Center in the light of additional data just received, and the application of Washington Square's parking ratio to Valley River Center.

Mr. Downs said that both Washington Square and Valley River Center were designed as urban regional shopping centers with equivalent parking needs. Washington Square had requested construction of 5.0 spaces per 1,000 square feet of gross leasable area assuming no transit available, compared to Valley River Center's request for 5.23 spaces per 1,000 square feet of gross leasable area with transit available. In analyzing Valley River Center's parking needs, the staff applied the Washington Square ratio. Both shopping centers had previously agreed to a reduction of five spaces for each 40 persons using transit daily to the centers. Additional information received the morning of this meeting indicated that current projected transit ridership to Valley River Center should result in a reduction of 52 spaces. Mr. Downs said that the Director's recommendation for 677 spaces should therefore be changed to 625 additional spaces.

Valley River Center was represented by Mr. Vernon Gleaves, attorney for the center, with offices at 858 Pearl Street, Eugene, Oregon. He said he would also call on Messrs. Bruce Anderson, Glen Odell and Richard Hanson for portions of Valley River Center's presentation.

Mr. Gleaves reviewed the development of Valley River Center, pointing out that when it opened in 1969, there were no parking restrictions placed on regional

shopping centers. He reminded the Commissioners that the request for 872 additional parking spaces had received the approval of the department and the Lane Regional Air Pollution Authority, and yet a tie vote of the Commission on July 26, 1973, resulted in a denial of the request. He distributed to the Commissioners copies of a letter to Mr. O'Scannlain dated August 23, 1973 from Mr. W. H. Shields, a partner in Valley River Center, demanding a hearing before the full Commission to appeal the July decision. He also distributed copies of a letter dated October 22, 1973 to the Mayor and City Manager of Eugene, from officers of the Oregon Student Public Interest Research Group, questioning the Eugene City Council's ruling in the matter of Valley River Center's zoning change application.

Mr. Bruce Anderson, also an attorney for Valley River Center, with offices at 858 Pearl Street, Eugene, Oregon, took issue with the EQC order dated July 26, 1973, on the basis that the Commission acted "unlawfully and unreasonably." Mr. Anderson contended that the citations referenced in the order did not give the Commission jurisdiction over parking facilities, but that Valley River Center applied to DEQ for a permit to construct the parking spaces because it was directed to do so by the Lane Regional Air Pollution Authority. However, in doing so, the Center preserved what it contended to be a legal error and would thus retain its right of appeal in the event the request for 872 parking spaces was again denied by the Commission.

Mr. Anderson also contended that the Commission was bound by legal standard to act only on the evidence presented to it, all of which recommended approval of the construction of the requested 872 parking spaces.

Mr. Richard Hanson, Manager of Valley River Center, stated that the Center has been a leader in promoting and implementing transit, and that even on the basis of increased transit patronage, the nationally recommended ratio of 5.5 spaces per 1,000 square feet of gross leasable area was valid. He stated that the Center must draw on a population of 400,000 in order to survive, and that the additional spaces were needed particularly for the 8-10 day period before Christmas to alleviate a serious traffic problem.

Mr. Glen Odell, Consulting Engineer with offices in Portland, Oregon, examined the Valley River Center situation with respect to the ratio to be applied and the impact of reducing the number of spaces from the established ratio. He pointed out that the difference between the 5.5 spaces recommended by the Urban Land Institute and the 5.0 ratio used by the DEQ staff was the

difference between having an overloaded parking lot for three days for a total of 10 hours, or ten days for a total of 30 hours, with a net difference of five days of over-capacity, or a net total of 20 hours. He stated that the rationale for controlling parking is to provide an incentive for shopping center developers and managers to increase bus ridership by creating a "convenience disincentive." But Mr. Odell questioned the validity of this approach since peak periods amount to only 8-10 days a year. He said the issue should rather be a determination of the number of parking spaces based on Valley River Center's efforts to promote transit ridership.

Mr. Gleaves summarized the applicant's position by reiterating that in July, the staff had recommended approval of the 872 additional spaces contingent upon the Center's promoting transit ridership. He pointed out that the comparison with Washington Square was not valid since that shopping center's application for parking facilities covered the entire area and the Center's applied only to a portion of the area. He stated again that Valley River Center has been and would continue to be a leader in promoting mass transit in the Eugene-Springfield area, but that it has been the only facility penalized because of those efforts.

Director O'Scannlain asked Mr. Ray Underwood, Assistant Attorney General and Chief Counsel to the department, to comment on the legal aspects of the applicant's arguments. Mr. Underwood said that there is sufficient legal authority under the law and the rules for the Commission's determination of whether or not construction of new air contamination sources may go forward, and that this authority is supported by an official opinion of the Attorney General for Oregon, issued prior to the adoption of the regulations, defining parking facilities as air contamination sources.

With regard to what the Commission could properly consider at the July 26, 1973 meeting, Mr. Underwood stated that the Commissioners have the duty of making policy determinations based on their wide knowledge and experience, and that this knowledge of and experience in other matters may be considered by them legally as well as the specific matters in the record. He also explained that a tie vote was the equivalent of a rejection of the recommendation, and that the substantive issue before the Commission was the reconsideration of its previous decision in view of the fuller explanation made by the applicants at this meeting.

It was MOVED by Dr. Crothers and seconded by Dr. Phinney that the Commission approve the Director's recommendation of July 26, 1973, which approved the construction of 872 additional parking spaces at Valley River Center. Those voting aye, Dr. Crothers and Dr. Phinney; Mr. McPhillips voted no for the record, stating that Mr. Cogan favored the October recommendation and that he agreed with Mr. Cogan's position. Motion carried.

SEWERAGE WORKS CONSTRUCTION GRANTS, CONSIDERATION OF REVISED CRITERIA FOR PRIORITY RANKING OF PROJECTS

Mr. Sawyer presented the department's recommendations concerning the proposed priority criteria and priority listing of projects eligible for federal sewerage works grants and for use of state pollution control bonds for sewerage works planning and construction. He made the following changes on Attachment B, "Needs Priority Ranking": insert on page 2--Applicant, City of the Dalles-East Side Interceptor; Environmental Points (A), 250; River Segment Points (B), 69; Project Type Points (D), 40, Total Points, 359; On page 3, the applicant listed as "Medford-So. Medford Int." was corrected to read "Bear Creek Valley Sanitary Authority-So. Medford.Int."

Mr. Sawyer referred to a letter from Mr. Arthur R. Johnson, City Manager of Bend, taking issue with the number of priority points established for the Bend project. Mr. Sawyer explained that the Department's records showed this project to be an interceptor needed to replace an interim pump station. Information contained in Mr. Johnson's letter indicated this was an incorrect assessment, and the department has asked for more details to clarify the matter. Mr. Sawyer proposed that should any change in the number of points be warranted, that information would be brought to the Commission at its next meeting. Mr. Sawyer said that the department expected that other projects might be similarly affected and that adjustments would be made as required.

Referring to Attachment E, "Preliminary Priority Ranking, Sewerage Works Planning Advances," Mr. Sawyer added the Foster Midway Area outside the City of Sweet Home, with planning costs of approximately \$25,000 and in the 8-point category. He said the department expected more locations to be identified and noted that the number of requests for planning advances may exceed the amount to be requested from the Emergency Board. Therefore, the scheme for ranking such projects was based on the ability to pay.

Mr. Sawyer presented the Director's recommendations with the following additions:

In recommendations 2. and 5. following the word "approved" add "subject to later revision and refinement."

Mr. O'Scannlain requested that the Commission grant the department latitude to adjust the details of the priority list in the event additional information is brought to the attention of the DEQ.

It was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that the recommendations as modified be approved.

BLY SANITARY DISTRICT--GRANT REQUEST

Mr. O'Scannlain asked Mr. Sawyer to comment on Bly Sanitary District's request for a hardship grant for sewerage construction, a matter related to the agenda item previously presented. Mr. Sawyer distributed copies of a staff recommendation prepared in response to the request by Bly Sanitary District for a 30 percent construction grant, sent to the Department in a letter dated September 25, 1973, from Mr. B. J. Mautzen (Klamath Falls), attorney for the district.

Mr. Sawyer noted that the sanitary district was formed to provide adequate sanitary disposal of wastes from a community which currently has septic tank and drainage field systems which are unreliable and constitute a health hazard. The district lacks approximately \$100,000 to construct sewage collection and treatment facilities, and qualifies for a hardship grant under the guidelines just adopted by the Commission. Mr. Sawyer presented the Director's recommendations as follows:

1. The Commission approve subject to Emergency Board approval, the authorization of a grant not to exceed \$100,000 from state funds as authorized by House Bill 2438 for construction of the Bly Sanitary District sewage system, such grant not to exceed 30 percent of the cost of the collection system.
2. The Department should be directed by the Commission to submit a request to the Emergency Board for approval of such a grant to the District under the previously established hardship category.

Mr. B. J. Mautzen provided further background information in support of the staff recommendation. He asked the Commission for action today so that if granted, a request for the grant could be made to the Emergency Board in November, which would give the district the authorization necessary to request an extension on the bids which were opened September 15, 1973, and which would remain firm for only 60 days.

It was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that the recommendation for a hardship grant be approved and submitted to the Emergency Board in November.

TAX CREDIT APPLICATIONS

It was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that as recommended by the Director, Pollution Control Facility Tax Credit Certificates be issued to the following applicants for facilities claimed in the respective eight applications with the costs listed being 80 percent or more allocable to pollution control:

<u>Applicant</u>	<u>Appl. No.</u>	<u>Claimed Cost</u>
Reynolds Metals Company, Troutdale	T-299R	\$ 33,780.08
Menasha Corporation	T-452	3,925.00
Crown Zellerbach Corp., Lebanon	T-470	3,607.00
George F. Joseph & Estate of Victor H. M. Joseph dba Modoc Orchard Company	T-476	90,283.55
Simpson Timber Company, Albany	T-483	42,077.00
Bohemia, Incorporated	T-484	101,942.60
International Paper Company	T-485	685,456.49
Woolley Enterprises, Inc.	T-487	38,737.74

There being no further business the meeting adjourned at 5:30 p.m.

MINUTES OF THE FIFTY-FIRST MEETING
of the
Oregon Environmental Quality Commission
November 26-27, 1973

Public notice having been given to the news media, other interested persons and the Commission members as required by law, the fifty-first meeting of the Environmental Quality Commission was called to order by the Chairman at 9:00 a.m. on Monday, November 26, 1973 in the Second Floor Auditorium of the Public Service Building, 920 S.W. 6th Avenue, Portland, Oregon.

Governor Tom McCall was present and swore in Mrs. Jacklyn L. Hallock as member of the Commission. She succeeds Dr. Paul Bragdon, president of Reed College, who recently had resigned from the Commission because of other duties.

The other Commission members present were B.A. McPhillips, Chairman, Arnold M. Cogan, Dr. Morris K. Crothers and Dr. Grace S. Phinney.

The Department was represented by Director Diarmuid F. O'Scannlain, Deputy Director Ronald L. Myles, Assistant Directors Wayne Hanson and Harold L. Sawyer, Regional Administrator E.J. Weathersbee, staff members Harold M. Patterson, Paul Johansen, Harold H. Burkitt, F.A. Skirvin, Dr. Robert L. Gay, R.C. Householder, Ray Johnson, E.A. Schmidt, P.H. Wicks, Dr. Warren C. Westgarth, Shirley Shay, B.J. Seymour, K.H. Spies and John Kowalczyk, and Chief Legal Counsel Ray P. Underwood.

MINUTES OF THE OCTOBER 22, 1973 COMMISSION MEETING

It was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that the minutes of the fiftieth meeting of the Commission held in Pendleton on October 22, 1973 be approved as prepared.

PROJECT PLANS FOR MONTH OF OCTOBER 1973

It was MOVED by Mr. Cogan, seconded by Dr. Phinney and carried that the actions taken by the Department during the month of October 1973, as reported by Mr. Myles regarding the following 64 domestic sewerage, 6 industrial waste, 24 air quality control and 17 solid waste management projects be approved:

Water Quality Control

Municipal Projects (64)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10-1-73	Gresham	Binford Homes, Phase I, Subdivision sewer	Prov. app.
10-1-73	Brookings	Change Order No. 7, sewage treatment plant contract	Approved
10-1-73	Baker	1973-74 sewer project, Phases 4 and 5	Prov. app.
10-1-73	Sunriver	1. Meadow Village, First Addition sewers	Prov. app.
10-1-73	USA (Durham)	2. Mt. Village East sewers Addenda 1-5, sewage treatment plant contract	Approved
10-1-73	Portland	S.E. 39th & S.E. Johnson Cr. Blvd. sanitary sewer district	Prov. app.
10-1-73	Astoria	Change Order No. 3, Schedule A, and Change Order No. 1, Schedule B	Approved
10-1-73	USA (Aloha)	Fallatin Subdivision sewers	Prov. app.
10-2-73	Aumsville	Wildwood Subd., Phases 2 and 3 sewers	Prov. app.
10-3-73	Wood Village	Air View Estates sewers	Prov. app.
10-3-73	St. Helens	Change Order No. C-1 to sewage treatment plant contract	Approved
10-3-73	Myrtle Point	Change Order No. 5 to sewage treatment plant contract	Approved
10-3-73	Gresham	Children's World Subd. sewers	Prov. app.
10-3-73	USA (Sunset)	114th Avenue L.I.D. sewers-- existing health hazard	Prov. app.
10-3-73	Springfield	Thurston Park Subd. sewers	Prov. app.
10-3-73	Wasco	0.04 MGD aerated lagoon sewage treatment plant with effluent disinfection and percolation	Prov. app.
10-4-73	Port Orford	Port interceptor sewer	Prov. app.
10-8-73	Bend (Ward Construction Co.)	Nottingham Square pump sta. C.O.I.D. canal crossing Tillicum Village Third Addn.	Prov. app.
10-9-73	Bandon	Lateral C-8	Prov. app.
10-9-73	Coos Bay	Change Order No. 1, Sewage Treatment plant No. 1 project	Approved
10-9-73	Lake Oswego	1. Mt. Park, Phase 5-B 2. Mt. Park No. 7, Lot 62 sewer relocation	Prov. app.
10-9-73	Pendleton	Edwards Addition Subd. sewers	Prov. app.
10-9-73	Monmouth	S.E. Monmouth & Lea Addition sewers	Prov. app.
10-10-73	USA (Sherwood)	Nottingham Townhouse Estates Subdivision sewers	Prov. app.
10-11-73	Newport	Yaquina Bay sewer crossing	Prov. app.

Municipal Projects - cont.

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10-11-73	Central Point	Freeman Road san. sewer	Prov. app.
10-11-73	Black Butte Ranch	South Meadow, Second & Third Additions, sewers	Prov. app.
10-12-73	Corvallis	26th Street sewer project	Prov. app.
10-12-73	Medford	D'Anjon Village #4 sewers	Prov. app.
10-12-73	USA (Tigard)	Summerfield, Phase II, sewers	Prov. app.
10-12-73	Woodburn	Elana Subd. sewers	Prov. app.
10-12-73	Wilsonville	Boones Ferry Road sewer	Prov. app.
10-12-73	Coos Bay	Pumping station #4	Prov. app.
10-15-73	USA (Beaverton)	7th Day Adventist Center sewer	Prov. app.
10-16-73	North Roseburg S.D.	BLM-Roseburg Office sewer	Prov. app.
10-16-73	Lincoln City	S.W. Harbor Avenue, Phase I sewers	Prov. app.
10-16-73	Woodburn	Elana Subd. sewers	Prov. app.
10-18-73	Wilsonville	Oregon Pacific Industries sewer	Prov. app.
10-18-73	Stanfield	Willow Drive sewers	Prov. app.
10-18-73	North Bend	Scotts Edgewood Terrace Sub-division sewer	Prov. app.
10-18-73	Woodburn	Cherry Orchard Heights sewers	Prov. app.
10-18-73	Springfield	Sunset Drive sewer	Prov. app.
10-18-73	Wilsonville	Charbonneau-single family first addition sewers	Prov. app.
10-22-73	Corvallis	Forest Heights Subd. sewers	Prov. app.
10-22-73	Oak Lodge San. D.	Mr. Steak Restaurant sewer	Prov. app.
10-23-73	Roseburg	Terrace Park Estates sewers	Prov. app.
10-23-73	Inverness	Skow Property	Prov. app.
10-23-73	Independence	Independence Air Park Subd. sewers	Prov. app.
10-24-73	Multnomah County	Pleasant Valley School sewage treatment plant additions, holding pond and pumping facilities	Prov. app.
10-24-73	Yachats	Change Order No. 1, sewage treatment plant contract	Approved
10-24-73	Sweet Home	Change Order No. 1, sewage treatment plant contract	Approved
10-24-73	Inverness	Space Industrial Park sewer	Prov. app.
10-24-73	Independence	Ash Brook Addition sewers	Prov. app.
10-24-73	McMinnville	Airport Rendezvous sewers	Prov. app.
10-24-73	Inverness	N.E. Rose Parkway sewers	Prov. app.
10-24-73	USA (Aloha)	Augusta Lane Subd. sewer	Prov. app.
10-24-73	USA (Metzger)	Carmel sanitary sewer	Prov. app.
10-25-73	Woodburn	Change Order No. 8, sewage treatment plant contract	Approved
10-25-73	Seneca	Addendum No. 1, sewage treatment plant contract	Approved
10-29-73	Astoria	Change Order No. 2, Schedule B, sewerage system	Approved
10-31-73	Gresham	Children's World-Linden Avenue and Regner Road sewers	Prov. app.

Industrial Projects (6)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10-2-73	Lebanon	Bauman Lumber Co., waste water control facilities	Prov. app.
10-2-73	Coos Bay	Texaco, Inc., Spill Prevention and Contingency Plan	Prov. app.
10-5-73	Dayton	Dayton Sand and Gravel, waste water system	Prov. app.
10-10-73	Multnomah County	Property Resources, Inc., animal waste facilities	Prov. app.
10-15-73	Toledo	Georgia Pacific Corp., chip spill prevention facilities	Prov. app.
10-23-73	Beaverton	Tektronix, Inc., proposed fluoride waste treatment facilities expansion	Prov. app.

Air Quality Control

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10-1-73	Lane County	Green-Lovegren Shopping Center 161-space parking facility	Approved
10-1-73	Lane County	Fifth & Q Shopping Center 55-space parking facility	Approved
10-1-73	Lane County	Walmart, Inc. 130-space parking facility	Approved
10-1-73	Lane County	Rodeway Inn of America 481-space parking facility	Approved
10-1-73	Lane County	Stellar Engineering & Design Condominium - 332-space parking facility	Approved
10-2-73	Washington	Park Plaza West Office park - 97-space parking facility	App. with conditions
10-4-73	Multnomah	Rockwood Industry Center Warehouse, office 150-space parking facility	Req. add'l info.
10-4-73	Multnomah	Norwest Publishing Co. 64-space parking facility	Req. add'l info.
10-4-73	Washington	Sequoia I Warehouse, office 63-space parking facility	Req. add'l info.
10-4-73	Washington	Sequoia II Warehouse, office 87-space parking facility	Req. add'l info.
10-8-73	Lane	Fred Meyer Shopping Center 671-space parking facility	Req. add'l info.
10-8-73	Multnomah	Macadam Investors Oreg., Ltd. Retail and office building 278-space parking facility	App. with conditions
10-10-73	Umatilla	General Foods Corp. Modification of cyclones	Cond. app.

Air Quality Control - continued

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10-12-73	Clatsop	Astoria Plywood Corp. Installation of Carter-Day baghouse filter to control sanderdust emissions	Approved
10-16-73	Clatsop	Crown Zellerbach Corp. Installation of package oil- fired boiler	Cond. app.
10-17-73	Grant	Prairie City Timber Co. Plans and specifications to modify wigwam waste burner	Approved
10-22-73	Lane	Valley River Center 872-space parking facility expansion	EQC approved
10-24-73	Multnomah	Transcorp Apartment Complex 97-space parking facility	App. with conditions
10-26-73	Multnomah	Moore Oregon Dry Kiln 36-space parking facility	Approved
10-26-73	Washington	Tigard Motel 340space parking facility	Req. add'l info.
10-29-73	Baker	Baker Valley Rendering Plans and specifications to install vapor condenser	Cond. app.
10-29-73	Washington	Fifth Avenue Business Park 79-space parking facility	App. with cond.
10-29-73	Multnomah	Verticare (Rockwood Center) Medical center - 67-space parking facility	App. with conditions
10-31-73	Multnomah	Halsey St. Office Bldg. and Restaurant - 153-space facility	Req. add'l info.

Solid Waste Management

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10-3-73	Columbia Co.	Santosh Landfill Existing sanitary landfill tire disposal operational plan	Prov. app.
10-3-73	Yamhill Co.	Whiteson Sanitary Landfill New sanitary landfill amendment to operational plan	Approved
10-3-73	Lane Co.	General Development Corp. New I.W. Site-letter authori- zation operational plan	Prov. app.
10-4-73	Lane Co.	Bohemia Inc. Coburg Landfill #2 New I.W. site-letter authorization operational plan	
10-5-73	Lane Co.	McKenzie Bridge Landfill Existing garbage site operational plan	Approved
10-10-73	Marion Co.	McCoy Creek Landfill Existing garbage site operational plan	Prov. app.

Solid Waste Management - cont.

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10-11-73	Clackamas Co.	Sayre Tire Landfill Existing tire disposal area operational plan for closure of site (letter authorization)	Prov. app.
10-15-73	Clatsop Co.	Lewis & Clark log sorting yard landfill - existing I.W. site operational plan	Prov. app.
10-16-73	Jackson Co.	Ashland sanitary landfill Existing garbage site operational plan	Prov. app.
10-23-73	Lane Co.	Walton Disposal Site Existing garbage site closure plan	Approved
10-24-73	Linn Co.	Holley Disposal Site Existing garbage site closure plan	Approved
10-25-73	Lane Co.	Erbs Disposal Site Existing garbage site closure plan	Approved
10-25-73	Lane Co.	Horton Disposal Site Existing garbage site closure plan	Approved
10-25-73	Clackamas Co.	Milwaukie Plywood Existing I.W. site closure plan	Prov. app.
10-25-73	Wasco Co.	Northern Wasco County Refuse Haulers Inc. Sanitary Land- fill. Existing garbage site operational plan	Approved

Planning Program

10-15-73	Coos Co.	First Interim Report	Approval
10-17-73	Malheur Co.	Second Interim Report	Approval

AUTHORIZATION OF PUBLIC HEARING FOR PROPOSED ADOPTION OF SUBSURFACE SEWAGE DISPOSAL RULES

In the absence of Assistant Director Robert D. Jackman, who was ill, Mr. O'Scannlain reviewed briefly the memorandum report dated November 14, 1973 regarding the matter of adoption of proposed permanent rules pertaining to the subsurface disposal of sewage.

It was MOVED by Dr. Phinney, seconded by Mr. Cogan and unanimously carried that as recommended by the Director the Commission hold a public hearing beginning at 2:00 p.m. on December 17, 1973 in Harris Hall, Corner of East 8th and Oak Street, Eugene, Oregon to consider the adoption of proposed rules pertaining

to standards for subsurface sewage disposal and that based on the testimony received at and prior to said hearing appropriate action be taken.

VARIANCE REQUEST OF WESTERN STATES PLYWOOD COOP.

Mr. Johansen presented the memorandum report dated November 19, 1973 pertaining to the request of the Western States Plywood Cooperative of Port Orford in Curry County for an extension of air contaminant discharge permit compliance dates. He said that in view of the fact that the plant is located in a well-ventilated, sparsely-populated area, that there have been no citizen complaints about atmospheric emissions from the plant and that the Cooperative presently has a crucial financial problem and may have to lay off more employees or shut down completely, it is the recommendation of the Director that the Cooperative be granted a variance until December 31, 1974 subject to certain specific conditions.

Mr. Smith Mitchell, President of the Cooperative, was present and answered questions raised by the Commission members regarding the financial condition of the Cooperative and its prospects for continued operation. He said their present problem is due to the recent extreme drop in the price of plywood which has affected the entire industry. He said further they get most of their timber from the U.S. Forest Service and BLM and currently have contracts for about a 3 year supply.

After further discussion it was MOVED by Mr. Cogan, seconded by Dr. Phinney and unanimously carried that as recommended by the Director Western States Plywood Cooperative of Port Orford be granted a variance from OAR Chapter 340, Sections 21-020 and 25-315(2) until December 31, 1974 subject to the conditions outlined in the aforementioned memorandum report dated November 19, 1973, a copy of which has been made a part of the Department's permanent records regarding this plant.

PRESENTATION OF OREGON CUP RENEWAL TO PUBLISHERS PAPER

Mr. Dan Williamson, Executive Vice President, was present and received from Mr. O'Scannlain the certificate of renewal for another year of the Oregon CUP Award which had initially been issued in 1972 to the Publishers Paper Company by the Department of Environmental Quality for its outstanding program of air and water quality control. Mr. Williamson commented that he hoped to be back again next year for another renewal of the award.

TAX CREDIT APPLICATIONS

This agenda item, shown as part of the afternoon session, was taken out of order in order to use effectively the time of the Commission members. Mr. Myles reviewed briefly the Department's evaluation of the tax credit applications Nos. T-412, T-433 and T-453 which had been submitted by the Weyerhaeuser Company, Hyster Company and International Paper Company, respectively. For reasons stated in the respective review reports, the Director in all three cases recommended that the applications be denied.

There were no representatives present to represent any of the applicants.

It was MOVED by Mr. Cogan, seconded by Dr. Phinney and unanimously carried that as recommended by the Director all three applications for tax credit certificates be denied.

During the afternoon session of the meeting Ms. Margaretta Eakin, legal counsel for the Hyster Company, appeared and requested that Application No. T-433 submitted by that company be reconsidered. She proceeded to present a legal argument that the waters in the pipes of the Portland city water system are public waters and that therefore the backflow prevention devices and other facilities installed by Hyster Company to protect the quality of the city water system qualify under the laws of the state of Oregon for tax credit. Mr. Underwood pointed out that the position of the Department in this matter was based on an opinion of the Attorney General which had been rendered some time ago.

After further discussion it was MOVED by Dr. Phinney, seconded by Dr. Crothers and carried that application T-433 submitted by the Hyster Company of 2902 N.E. Clackamas Street, Portland be reconsidered, that it be referred to the staff for re-evaluation and that a further opinion in this matter be requested of the Attorney General.

POSITION OF EQC RE: ENERGY CRISIS

At the request of the Chairman, Mr. Cogan presented the position of the Commission in regard to the energy crisis. He stated that the nation must find ways to produce energy without degrading the environment, that in Oregon industry and the public need to understand that the Environmental Quality Commission will not use the energy crisis as an excuse to back off from environmental quality standards, that both Governor McCall and Director O'Scannlain have taken stands

against the lowering of environmental standards, and that such a stand has the support of the Commission.

It was MOVED by Mr. Cogan, seconded by Mr. McPhillips and unanimously carried that the Commission fully supports Director O'Scannlain's stand that there be no compromising of Oregon's hard won environmental quality standards during or because of the energy crisis.

SEWAGE WORKS CONSTRUCTION GRANTS PROJECT LIST

Mr. O'Scannlain presented the list of 93 projects which had been prepared by the Department staff pursuant to the regulations of the Environmental Protection Agency (EPA) and based on the needs priority list approved by the Commission at its October 22, 1973 meeting.

There was no one present at the meeting who offered to comment on the project list.

It was MOVED by Mr. Cogan, seconded by Dr. Phinney and carried that as recommended by the Director the project list (Format #5 Construction Grants (Ref. 40 CFR Section 35.915)) as contained in Exhibit I of the Department's memorandum report dated November 13, 1973 be approved.

ADOPTION OF PROPOSED EMISSION STANDARDS FOR PRIMARY ALUMINUM PLANTS

On June 29, 1973 in Portland, July 26, 1973 in Medford, and October 24 and 25, 1973 in Astoria public hearings were held by the Commission for the purpose of receiving testimony relevant to proposed amendments to Primary Aluminum Plant Regulations, OAR Chapter 340, Sections 25-255 through 25-290.

Mr. O'Scannlain pointed out that the proposed amended rules being considered at this meeting will pertain to all aluminum plants built in the state of Oregon and not just to the proposed AMAX aluminum plant at Warrenton. He said a hearing regarding the application for permits for the latter plant will be held later, probably during the month of January 1974.

Dr. Robert Gay reviewed the Department's memorandum report dated November 19, 1973 regarding the proposed rules and discussed the changes which had been made in the proposed emission standards since October when the hearings were held in Astoria. These changes were based on a detailed and comprehensive analysis which had been made by Dr. Gay of available emission data and particularly data received recently from the Intalco aluminum plant at Ferndale, Washington.

In addition to the changes contained in the copies distributed prior to this meeting Dr. Gay proposed two additional changes in the rule covering definitions. In the definition of "annual average" the word "consecutive" is to be inserted after the word "recent". In the definition of "monthly average" the word "the" before the word "three" and the words "best valid" after the word "three" are to be deleted.

Mr. Peter Keppler, Attorney for AMAX, said they objected to the use of the data from the Intalco plant as the basis for establishment of emission standards. In this connection he read a letter dated November 1, 1973 from James A. Howarth to Mr. O'Scannlain. In that letter it was contended that the sampling was too limited to provide a reliable and accurate basis because only 3 of 102 wet scrubber emission points and 3 of 100 dry scrubber emission points were sampled over a 24 hour period and only once a month, and there was no measurement of the carbon baking emissions. It was claimed, therefore, that such sampling does not constitute a compliance type test.

Mr. Keppler stated further that the staff's analysis appears to be an 11th hour attempt to justify the standards proposed 2 years ago, that the staff report does not show the probable effects of the proposed emission standards on ambient air quality, and that the difference between the standards for existing and new plants should be based on health or injurious effects. He contended that technology is not now available to meet the proposed standards of 1.0 and 1.3 lbs F./T of aluminum produced. He said that hard factual data must be used as a basis for such rules and he asked that the hearing record be kept open for another 90 days to allow his company time to get more factual data.

In response to a question by Dr. Crothers, Mr. James A. Howarth, Project Manager for AMAX, said he did not know for sure what their monthly average figure of 1.5 lbs of F would mean on an annual average basis but he was confident that they could meet 1.3 lbs as an annual average and there was hope that they could do better. He said further that after the Astoria hearings their company had decided to install both primary and secondary control systems. He pointed out that the Intalco plant at Ferndale, Washington, is required to meet ambient air standards rather than emission standards and the sampling procedures used have been selected on that basis.

Mr. Allan Hart, Attorney for Reynolds Metals, asked that the Commission defer for at least 30 days making any decision in this matter in order to allow the Reynolds Metals officials more time to evaluate their situation. He said they had questions concerning the statistical analyses of their plant data made by the DEQ staff.

Mr. Harry Helton, Plant Manager, stated that Reynolds Metals is committed to spend some 12 to 15 million dollars for a new primary control system at the Troutdale aluminum plant and has no plans or intentions to shut down the operations in 10 years. He said that they need more time to analyze the DEQ staff report which they did not see until Thanksgiving eve, that they do not think they can meet the revised proposed emission standards for existing plants, that their figure of 5.4 lbs F. was a monthly average, not a maximum figure not to be exceeded (the DEQ staff had assumed the latter), that the 12% improvement assumed by DEQ would work an economic hardship on the company, and that they did not think the equipment and controls would be as efficient as the DEQ staff had indicated.

Mr. Neil Robblee made a brief statement for Oregon Students Public Interest Research Group (OSPIRG). He said that in general they supported the proposed standards except in a couple of respects they considered them too weak. They asked that a limit on gaseous fluoride emissions be reinstated and that the monthly limit of total pounds of fluorides emitted be lowered although he was not sure what the figure should actually be.

Mr. Robert Kerr, Attorney for the Wasco County Fruit Growers League, said his clients were pleased that the time limits given in the proposed rules are maximum and definite deadlines rather than target dates as otherwise the League would be greatly concerned about the length of times given. He urged that all of the monitoring of emissions and ambient air be under the strict control of the EQC to insure its integrity.

There being no other persons present who asked to be heard in this matter Dr. Crothers made a motion to delay action on the proposed standards for 30 days. The motion died for lack of a second.

It was then MOVED by Mr. Cogan and seconded by Dr. Phinney that the proposed amendments to OAR Chapter 340, Sections 25-255 through 25-290, Emission Standards for Primary Aluminum Plants, as revised and recommended by the Director be approved and adopted.

Dr. Crothers moved to amend the motion by substituting the figures "1.3" and "1.5" for the figures "1.0" and "1.3", respectively. The motion to amend died for lack of a second.

The original motion by Mr. Cogan was approved by a vote of 4 to 1 with Dr. Crothers voting "No". A copy of the rules as adopted is attached to and made a part of these minutes.

PUBLIC HEARING FOR AMENDMENT OF MOTOR VEHICLE INSPECTION RULES

Proper notice having been given as required by state law and administrative rules, the public hearing scheduled for 11:00 a.m. on this date of November 26, 1973 in the matter of adoption of proposed amendments to OAR Chapter 340, Section 24-100, Regulation Pertaining to Motor Vehicle Inspection was opened by the Chairman in the Second Floor Auditorium of the Public Service Building, 920 S.W. 6th Avenue, Portland, Oregon with all members of the Commission in attendance.

Mr. Householder presented the Department's memorandum report in this matter dated October 10, 1973 and reviewed the reason for and wording of the proposed amendment.

State Representative Dick Magruder of Columbia County appeared before the Commission and urged adoption of the proposed amendment.

Mr. Charles E. Van Gorder, Mayor of the City of Rainier, also testified in support of the amendment.

A written statement was received from Fred Foshaug, Chairman of the Columbia County Board of Commissioners urging adoption of the amendment as proposed.

No other testimony was offered.

It was MOVED by Mr. Cogan, seconded by Mrs. Hallock and carried that OAR Chapter 340, Section 24-100 be amended as recommended by the Director including elimination of the words "Columbia County" and by extension of the effective date to May 31, 1974.

A copy of the rule as adopted is attached to and made a part of these minutes.

AMAX PERMIT APPLICATION

Mr. Cogan brought up the subject of the proposal by the AMAX Corporation to construct an aluminum reduction plant at Warrenton. He said that if this plant is built there may be more of an environmental impact created by its effect on the energy problem than from the plant itself. It was agreed by all of the Commission members that before any decision could be reached

regarding the company's application for the necessary permits from DEQ a comprehensive Environmental Impact Statement covering all aspects should be prepared by the company and under the supervision of DEQ. Mr. Keppler stated that the company has for some time been engaged in the preparation of an Environmental Impact Statement and that they hoped to have it completed within the next 2 or 3 weeks.

The meeting was then recessed at 12:20 p.m. and reconvened at 1:40 p.m.

METROPOLITAN SERVICE DISTRICT SUPPLEMENTAL GRANT APPLICATION

Mr. Schmidt presented the Department's memorandum report dated November 14, 1973 regarding the Metropolitan Service District's (MSD) grant application for supplemental funds needed to meet all the implementation and organizational planning requirements leading to actual construction of the regional solid waste management facilities.

Mr. Chuck Kemper of the MSD staff was present and answered questions regarding the progress made thus far by the district under the original state grant.

It was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that as recommended by the Director the Commission authorize a request to the State Emergency Board for an increase in the limitation established in Chapter 771, Section 4(3), Oregon Laws 1973 to allow a supplemental grant of \$350,000 to the Metropolitan Service District for advance planning of solid waste facilities.

CHEM-NUCLEAR SYSTEMS, INC. HAZARDOUS WASTE DISPOSAL SITE

Mr. Wicks presented the Department's memorandum report and Director's recommendations dated November 15, 1973 regarding the application of Chem-Nuclear Systems, Inc. for a license to establish and operate an environmentally hazardous waste disposal site in Gilliam County near Arlington, Oregon. The company is presently storing low-level radioactive wastes but no chemical wastes at this 320 acre site which the company owns. These storage operations are regulated by the State Health Division which issued a license to the company in 1970. Mr. Wicks explained that low-level radioactive wastes in general have a half-life of 50 years or less and that after 5 to 10 half lifes the degree of hazard is insignificant.

Dr. Marshall Parrott of the State Health Division was present and answered questions raised by the Commission members. He discussed the matter of integrity of the metal containers being used to store the wastes at the Arlington site. He said the high level wastes from the Trojan project will be disposed of at a site in South Carolina, not in the state of Oregon. He stated also that he agrees with the Department's report presented by Mr. Wicks, that the Arlington site is considered most acceptable for burial of low-level rad wastes, and that if it is used for that purpose the State Health Division will continue to monitor it.

Mr. John Mosser, attorney for Chem-Nuclear, discussed the relative hazard of chemical versus low-level rad wastes and pointed out that toxic metals last forever. He said that because of its characteristics the Arlington site is not only a good site but one of the best in the United States for disposal of low-level rad wastes. He pointed out that the area has a negative water balance, that is, more water evaporates than falls as precipitation, and that the ion exchange capacity of the soil is extremely high. He expressed confidence that the system which the company proposes to use for treatment of pesticide wastes will be entirely successful. He said incineration had been investigated but not recommended because it has too many problems.

With regard to the financial status of the company he stated it now has 3 million dollars in assets and has a profitable operation in South Carolina.

Mr. Mosser said that basically the company supports the Director's recommendation except that in Item No. 1 they think that a financial limitation would be preferable to a volume limitation for controlling the amount of rad wastes received per year. Also he asked that Item No. 3 be changed to read as follows: "Condition said license to require notification of the Director and, if he determines it necessary, a formal application and public hearing be required to amend the initial license before disposing of any additional wastes or constructing new disposal facilities which are not included as part of the initial license."

Mr. Bruce W. Johnson, President, was also present to represent Chem-Nuclear Systems, Inc. He estimated that the Arlington site would have a 60 to 100 year life for disposal of both chemical and rad wastes.

After further discussion of reasons for having a combined chemical and rad waste disposal site in Oregon it was MOVED by Mr. Cogan, seconded by Dr. Crothers and carried that the Director's recommendations as presented in the Department's November 15, 1973 memorandum report be approved with a revision to Item No. 1 that a formula be developed for limiting the amount of rad wastes to be handled but insuring the profitability of the operation and also with a revision to Item No. 3 as proposed by Mr. Mosser.

PUBLIC HEARING RE SPECIFIC AIR POLLUTION CONTROL RULES FOR CLACKAMAS, COLUMBIA, MULTNOMAH AND WASHINGTON COUNTIES

Proper notice having been given as required by state law and administrative rules, the public hearing in the matter of proposed adoption of Specific Air Pollution Control Rules for Clackamas, Columbia, Multnomah and Washington Counties scheduled for 2:00 p.m. on Monday, November 26, 1973 was called to order by the Chairman in the Second Floor Auditorium of the Public Service Building, 920 S.W. Sixth Avenue, Portland, Oregon with all Commission members in attendance.

Mr. Wayne Hanson reviewed the Department's memorandum report dated November 16, 1973 and the proposed specific rules. He presented proposed changes to the printed copies of Sections 28-003, 28-055 and 28-085.

Mr. Tom Donaca, Attorney, was present and read a prepared statement for the Air Quality Committee of the Associated Oregon Industries, a copy of which has been made a part of the Department's permanent files in this matter. He asked for no further modifications in the proposed rules at this time.

No other testimony was offered regarding the proposed rules.

It was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that the proposed Specific Air Pollution Rules for Clackamas, Columbia, Multnomah and Washington Counties with the revisions presented at this hearing be adopted.

A copy of the rules as adopted is attached to and made a part of these minutes.

PGE BEAVER TURBINE GENERATOR INSTALLATION

Mr. John Kowalczyk presented the Department's memorandum report and Director's recommendations regarding the application received from PGE for an air contaminant discharge permit for installation and operation of an oil-fired 433 megawatt 6-unit turbine electric generating plant to be located at Port Westward, the former Beaver Military Reservation Site in Columbia County.

He stated that in view of the facts that the Department has previously recommended issuance of a stringent air contaminant discharge permit, that a public hearing in this matter has been held, that public and PGE testimony regarding this matter has been considered, and that a revised permit based on said testimony has been prepared, it is recommended by the Director that the revised permit be issued.

Mr. Hull Phillips, Attorney, was present to represent PGE,

It was MOVED by Mr. Cogan, seconded by Dr. Crothers and carried that the revised air contaminant discharge permit as proposed by the Department be approved and issued.

STATUS OF DEQ LABORATORIES

Dr. Westgarth submitted and discussed a written memorandum report dated November 21, 1973 pertaining to the status and particularly the gross inadequacies of the Department's present laboratory facilities. His report contained a general layout and cost estimate of establishing new laboratory facilities on state-owned property. The proposal calls for an initial development of 12,000 square feet of laboratory space, 14,438 square feet of storage and office space and 6,500 square feet of parking area. The preliminary cost estimate for such a project is \$2,666,000.

The present laboratory facilities consist of 10,284 square feet of laboratory-office-storage space and 3,300 square feet of parking area.

Dr. Crothers said he is well aware of the urgent need for new and better facilities and intends to do everything he can to obtain the necessary financing and construction at the earliest possible date. An attempt will be made to present this matter to the State Emergency Board in January 1974.

The other Commission members also indicated their full support. It was MOVED by Mrs. Hallock, seconded by Dr. Crothers and carried that the Department be authorized to pursue the expeditious acquisition of new laboratory facilities through the State Emergency Board.

There being no further business the meeting was recessed at 4:55 p.m.

PUBLIC HEARING RE AIR CONTAMINANT DISCHARGE PERMIT REGULATIONS

Proper notice having been given as required by state law and administrative rules, the public hearing in the matter of proposed revisions to the Air Contaminant Discharge Permit Regulations, OAR Chapter 340, Sections 20-033.02 through 20-033.20, was called to order by Commission member Dr. Grace S. Phinney at 10:00 a.m., Tuesday, November 27, 1973 in the Second Floor Auditorium of the Public Service Building, 920 S.W. 6th Avenue, Portland, Oregon. Others present included Mrs. Jacklyn Hallock, Commission member and Department Director Diarmuid F. O'Scannlain.

Mr. Burkitt presented the Department's memorandum report dated November 8, 1973 containing the Director's recommendations and explained the extent and purpose of the proposed revisions. He also read additional changes to be made in the printed copies of the proposed amendments.

Mr. Burkitt then read into the record a letter dated November 26, 1973 from Mr. Thomas D. Wogaman, Superintendent-Clerk of the Corvallis School District No. 509J objecting to the District's being required to get a fuel burning permit on a fee basis.

Mr. Cleo Hicks, School Board member of Salem District 24J; Charles D. Schmidt, representative of the Oregon School Board Association, and Wayne Foster, Superintendent of St. Helens District 502 each testified in opposition to the requirement that school districts pay fees for air contaminant discharge permits for their fuel burning equipment.

A resolution that school districts be exempt from paying the permit fees was received from 10 school districts in Yamhill County.

Mr. Tom Donaca, Attorney, read a written statement from the Air Quality Committee of the Associated Oregon Industries, a copy of which has been made a part of the Department's permanent records in this matter.

Mr. J. Ronald Miner, Associate Professor, Department of Agricultural Engineering from Oregon State University, was the next person to make a statement regarding the proposed amendments. In a letter dated November 16, 1973 addressed to the DEQ and in his oral testimony he expressed concern about requiring permits for contaminant sources which emit "malodorous odors". He asked that such a requirement not be adopted until some degree of definition

of odors, such as intensity and frequency, could be established. He said that although agricultural operations, including livestock production, are exempt from the statutory requirements such interests should expect to comply with them sometime in the future and with the present wording as proposed in this particular requirement he did not know how agriculture could comply with it.

Mr. Dan Erickson of Erickson Lumber Company was the last person to make a statement regarding this matter. He stated that his company operates a sawmill which has no air contaminant sources and yet because it is included in Table A of the rules they must make application for a permit and pay the required fee. He did not think it is proper to make them pay the fee under such circumstances.

Following Mr. Erickson's statement there was further discussion by the school district representatives about their having to pay permit fees. In response to their questions, Mr. Underwood said he could see no way under the existing laws that school districts could be exempt from this requirement. Likewise he knew of no way that the fees for school districts could be reduced even if they monitored themselves.

There being no further testimony offered at this hearing Dr. Phinney announced that the record would remain open for another 10 days to allow time for the receipt of additional written statements, if any, and that a final decision would be expected to be made at the next Commission meeting in Eugene on December 17, 1973.

Proceedings of the meeting and public hearings covered by these minutes were recorded on tapes which are a part of the Department's official records.

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY CONTROL DIVISION

OAR Chapter 340, Division 2, Sections 25-255 through 25-290:

25-255 STATEMENT OF PURPOSE.

In furtherance of the public policy of the state as set forth in ORS 449.765, it is hereby declared to be the purpose of the Commission in adopting the following regulations to:

- (1) Require, in accordance with a specific program and time table for each operating primary aluminum plant the highest and best practicable collection, treatment and control of atmospheric pollutants emitted from primary aluminum plants through the utilization of technically feasible equipment, devices and procedures necessary to attain and maintain desired air quality.
- (2) Require effective monitoring and reporting of emissions, ambient air levels of fluorides, fluoride content of forage and other pertinent data. The Department will use these data, in conjunction with observation of conditions in the surrounding areas, to develop emission and ambient air standards and to determine compliance therewith.
- (3) Encourage and assist the aluminum industry to conduct a research and technological development program designed to reduce emissions, in accordance with a definite program, including specified objectives and time schedules.
- (4) Establish standards which based upon presently available technology, are reasonably attainable with the intent of revising the standards as needed when new information and better technology are developed.

25-260 DEFINITIONS.

- (1) All Sources - Means sources including, but not limited to, the reduction process, alumina plant, anode plant, anode baking plant, cast house, and collection, treatment and recovery systems.
- (2) Ambient Air - The air that surrounds the earth, excluding the general volume of gases contained within any building or structure.
- (3) Annual Average - Means the arithmetic average of the twelve most recent consecutive monthly averages reported to the Department.
- (4) Anode Baking Plant - Means the heating and sintering of pressed anode blocks in oven-like devices, including the loading and unloading of the oven-like devices.
- (5) Anode Plant - Means all operations directly associated with the preparation of anode carbon except the anode baking operation.
- (6) Commission - Means Environmental Quality Commission.
- (7) Cured Forage - Means hay, straw, ensilage that is consumed or is intended to be consumed by livestock.
- (8) Department - Means Department of Environmental Quality.
- (9) Emission - Means a release into the outdoor atmosphere of air contaminants.
- (10) Emission Standard - Means the limitation on the release of a contaminant or multiple contaminants to the ambient air.
- (11) Fluorides - Means matter containing fluoride ion.
- (12) Forage - Means grasses, pasture and other vegetation that is consumed or is intended to be consumed by livestock.

- (13) Monthly Average - Means the arithmetic average of three test results obtained during any calendar month, utilizing test methods and procedures approved by the Department.
- (14) Opacity - Means the degree to which an emission reduces transmission of light or obscures the view of an object in the background.
- (15) Particulate Matter - Means a small, discrete mass of solid or liquid matter, but not including uncombined water.
- (16) Primary Aluminum Plant - Means those plants which will or do operate for the purpose of or related to producing aluminum metal from aluminum oxide (alumina).
- (17) Pot Line Primary Emission Control Systems - Means the system which collects and removes contaminants prior to the emission point. If there is more than one such system, the primary system is that system which is most directly related to the aluminum reduction cell.
- (18) Regularly Scheduled Monitoring - Means sampling and analyses in compliance with a program and schedule approved pursuant to Section 25-280.
- (19) Ringelmann Smoke Chart - Means the Ringelmann Smoke Chart with instructions for use as published in May 1967 by the U.S. Department of Interior, Bureau of Mines.
- (20) Standard Dry Cubic Foot of Gas - Means that amount of the gas which would occupy a cube having dimensions of one foot on each side, if the gas were free of water vapor at a pressure of 14.7 P.S.I.A. and a temperature of 60°F.

25-265 EMISSION STANDARDS.

- (1) The exhaust gases from each primary aluminum plant constructed on or after January 1, 1973, shall be collected and treated as necessary so as not to exceed the following minimum requirements:
 - (a) Total fluoride emissions from all sources shall not exceed:
 - (1) a monthly average of 1.3 pounds of fluoride ion per ton of aluminum produced; and (2) an annual average of 1.0 pound of fluoride ion per ton of aluminum produced; and (3) 12.5 tons of fluoride ion per month from any single aluminum plant without prior written approval by the Department.
 - (b) The total of organic and inorganic particulate matter emissions from all sources shall not exceed: (1) a monthly average of 7.0 pounds of particulate per ton of aluminum produced; and (2) an annual average of 5.0 pounds of particulate per ton of aluminum produced.
 - (c) Visible emissions from any source shall not exceed ten (10) percent opacity or 0.5 on the Ringelmann Smoke Chart at any time.
- (2) Each primary aluminum plant constructed and operated after January 1, 1973, shall be in full compliance with these regulations no later than 180 days after completing potroom start-up and shall maintain full compliance thereafter.
- (3) The exhaust gases from each primary aluminum plant constructed on or before January 1, 1973, shall be collected and treated as necessary so as not to exceed the following minimum requirements:
 - (a) 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; and (2) an annual average of 2.5

pounds of fluoride ion per ton of aluminum produced; and
(3) 22.0 tons of fluoride ion per month from any single aluminum plant without prior written approval by the Department.

- (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; and (2) an annual average of 10.0 pounds of particulate per ton of aluminum produced.
 - (c) Visible emissions from any source shall not exceed 20 percent opacity or 1.0 on the Ringelmann Smoke Chart at any time.
- (4) Each existing primary aluminum plant shall proceed promptly with a program to comply as soon as practicable with these regulations. A proposed program and implementation plan shall be submitted by each plant to the Department not later than 180 days after the effective date of these amended regulations. The Department shall establish a schedule of compliance for each existing primary aluminum plant. Each schedule shall include the dates by which compliance shall be achieved but in no case shall full compliance be later than the following dates:
- (a) Existing plants shall comply with emission standards in Section 25-265(3) by January 1, 1977;
 - (b) Existing plants shall comply with emission standards in Section 25-265(1) by January 1, 1984, pending a review by the Commission as described in 25-265(5).

- (5) The Commission shall review during calendar year 1979 the feasibility of applying Section 25-265(4)(b) based on their conclusions regarding:
- (a) the then current state of the art of controlling emissions from primary aluminum plants;
 - (b) the progress in controlling and reducing emissions exhibited at that time by then existing aluminum plants;
 - (c) the need for further emissions control at those facilities based on discernible environmental impact of emissions up to that time.

25-270 SPECIAL PROBLEM AREAS.

The Department may require more restrictive emission limits than the numerical emission standards contained in Section 25-265 for an individual plant upon a finding by the Commission that the individual plant is located or is proposed to be located in a special problem area. Such more restrictive emission limits for special problem areas may be established on the basis of allowable emissions per ton of aluminum produced or total maximum daily emissions to the atmosphere, or a combination thereof, and may be applied on a seasonal or year-round basis.

25-275 HIGHEST AND BEST PRACTICABLE TREATMENT AND CONTROL REQUIREMENT.

In order to maintain the lowest possible emissions of air contaminants, the highest and best practicable treatment and control currently available shall in every case be provided, but this section shall not be construed to allow emissions to exceed the specific emission limits set forth in Section 25-265.

25-280 MONITORING.

- (1) Each primary aluminum plant constructed and operated on or before January 1, 1973, shall submit, within sixty (60) days after the effective date of these amended regulations, a detailed, effective monitoring program. The program shall include regularly scheduled monitoring and testing by the plant of emissions of gaseous and particulate fluorides and total particulates. The plant shall take and test a minimum of three (3) representative emission samples each calendar month. The samples shall be taken at specified intervals. A schedule for measurement of fluoride levels in forage and ambient air shall be submitted. The Department shall establish a monitoring program for the plant which shall be placed in effective operation within ninety (90) days after written notice to the plant by the Department of the established monitoring program.
- (2) Each primary aluminum plant proposed to be constructed and operated after January 1, 1973, shall submit a detailed pre-construction of post-construction monitoring program as a part of the air contaminant discharge permit application.

25-285 REPORTING.

- (1) Unless otherwise authorized in writing by the Department, data shall be reported by each primary aluminum plant within thirty (30) days of the end of each calendar month for each source and station included in the approved monitoring program as follows:
 - (a) Ambient air: Twelve-hour concentrations of gaseous fluoride in ambient air expressed in micrograms per cubic meter of air, and in parts per billion (ppb); also 28-day test

results using calcium formate ("limed") paper expressed in micrograms of fluoride per centimeter squared per cubic meter ($\mu\text{g}/\text{cm}^2/\text{m}^3$).

- (b) Forage: Concentrations of fluoride in forage expressed in parts per million (ppm) of fluoride on a dried weight basis.
 - (c) Particulate emissions: Results of all emission sampling conducted during the month for particulates, expressed in grains per standard dry cubic foot, in pounds per day, and in pounds per ton of aluminum produced. The method of calculating pounds per ton shall be as specified in the approved monitoring programs. Particulate data shall be reported as total particulates and percentage of fluoride ion contained therein.
 - (d) Gaseous emissions: Results of all sampling conducted during the month for gaseous fluorides. All results shall be expressed as hydrogen fluoride in micrograms per cubic meter and pounds per day of hydrogen fluoride, and in pounds per ton of aluminum produced.
 - (e) Other emission and ambient air data as specified in the approved monitoring program.
 - (f) Changes in collection efficiency of any portion of the collection or control system that resulted from equipment or process changes.
- (2) Each primary aluminum plant shall furnish, upon request of the Department, such other data as the Department may require to evaluate the plant's emission control program. Each primary

aluminum plant shall report the value of each emission test performed during that reporting period, and shall also immediately report abnormal plant operations which result in increased emission of air contaminants.

- (3) No person shall construct, install, establish or operate a primary aluminum plant without first applying for and obtaining an air contaminant discharge permit from the Department. Addition to, or enlargement or replacement of, a primary aluminum plant or any major alteration thereof shall be construed as construction, installation or establishment.

25-290 deleted by EQC on 11-26-73.

REGULATION PERTAINING
TO MOTOR VEHICLE INSPECTION

24-100 C O U N T Y DESIGNATIONS.

(1) Pursuant to the requirements of ORS 449.957, Clackamas, Multnomah and Washington Counties are hereby designated by the Environmental Quality Commission as counties in which all motor vehicles registered therein, unless otherwise exempted by statute or by rules subsequently adopted by the Commission, shall be equipped with a motor vehicle pollution control system and shall comply with motor vehicle emission standards adopted by the Commission.

(2) The effective date of this regulation is May 31, 1974.

Adopted by the Environmental Quality Commission at the November 26, 1973 Meeting.

(Note: The section numbers are subject to change following filing with the Secretary of State)

DIVISION 2

AIR POLLUTION CONTROL

Subdivision 8

SPECIFIC AIR POLLUTION CONTROL RULES FOR CLACKAMAS, COLUMBIA, MULTNOMAH AND WASHINGTON COUNTIES

28-001 PURPOSES AND APPLICATION: The rules in this subdivision shall apply in Clackamas, Columbia, Multnomah and Washington Counties. The purposes of these rules are to provide continuity of the air quality control program previously administered by the Columbia-Willamette Air Pollution Authority and to deal specially with the critical and unique air quality control needs of the four county area. These rules shall apply in addition to all other rules of the Environmental Quality Commission. The adoption of these rules shall not, in any way, affect the applicability in the four county area of all other rules of the Environmental Quality Commission and the latter shall remain in full force and effect, except as expressly provided otherwise. In cases of apparent duplication, the most stringent rule shall apply.

28-003 EXCLUSIONS: The requirements contained in this subdivision shall apply to all activities conducted in Clackamas, Columbia, Multnomah and Washington Counties, other than those for which specific

industrial standards have been adopted (Subdivision 5 of this Division 2),
except for the reduction of animal matter, Section 25-055(1) and (2).

28-005 DEFINITIONS:

As used in this Subdivision:

- (1) "Domestic Rubbish" means rubbish generated by a private dwelling housing four families or less.
- (2) "Fuel burning equipment" means a device which burns a solid, liquid, or gaseous fuel, the principal purpose of which is to produce heat, except marine installations and internal combustion engines that are not stationary gas turbines.
- (3) "Odor" means the property of a substance which allows its detection by the sense of smell.
- (4) "Open outdoor fire" means the burning of any material outdoors in an open fire, a burn barrel or any similar device.
- (5) "Rubbish" means non-putrescible wastes consisting of both combustible and non-combustible wastes, such as but not limited to ashes, paper, cardboard, yard clippings, wood, glass, cans, bedding, household articles and similar materials.
- (6) "Special Restricted Area" means a special area established to control specific practices or to maintain specific standards.
 - (a) In Columbia, Clackamas and Washington Counties, Special Restricted Areas are all areas within Rural Fire Protection Districts, including the areas of incorporated cities within or surrounded by said Districts, but excluding the Timber and Tri-City Rural Fire Protection Districts.
 - (b) In Multnomah County, the Special Restricted Area is all area west of the Sandy River.

28-010 OPEN OUTDOOR FIRES - GENERAL:

- (1) No person shall cause or permit to be ignited or maintained any open outdoor fire which is specifically prohibited by any rule of the Department.
- (2) Open outdoor fires in violation of any rule of the Department shall be extinguished by the person in attendance upon notice by the Department.

28-015 OPEN OUTDOOR FIRES - DOMESTIC: No person shall cause or permit to be ignited or maintained any open outdoor fire containing domestic rubbish within Special Restricted Areas, except such open outdoor fires are permitted:

- (1) Until 1 July 1974 in Columbia County,
- (2) Until 1 July 1974 in Clackamas County in
 - a) Clarkes Rural Fire Protection District
 - b) Estacada Rural Fire Protection District No. 69
 - c) Colton-Springwater Rural Fire Protection District
 - d) Molalla Rural Fire Protection District
 - e) Hoodland Rural Fire Protection District
 - f) Monitor Rural Fire Protection District
 - g) Scotts Mills Rural Fire Protection District
 - h) Aurora Rural Fire Protection District
- (3) Until 1 January 1975 for the burning of wood, needle or leaf materials from trees, shrubs or plants, during the period commencing with the last Friday in October and terminating at sundown on the last Sunday in November, and the period commencing the second Friday in April and terminating at sundown on the third Sunday in May. Such burning shall be conducted in strict compliance with the applicable rules, regulations and ordinances of fire protection agencies. No open outdoor fire shall be conducted on any day when the Department advises fire permit issuing agencies not to issue permits because of adverse meteorological or air quality conditions.

28-020 OPEN OUTDOOR FIRES - LAND CLEARING:

No person shall cause or permit to be ignited or maintained any

open outdoor fire as part of any land clearing operation:

- (1) In Washington County within Rural Fire Protection Districts including incorporated cities within or surrounded by said Districts.
- (2) In Control Areas in Clackamas and Multnomah Counties established as:
 - a) Any area in or within three (3) miles of the boundary of any city of more than 1,000 population, but less than 45,000 population.
 - b) Any area in or within six (6) miles of the boundary of any city of 45,000 or more population.
 - c) Any area between areas established by this rule where the distance between the boundaries is three miles or less.
- (3) Whenever two or more cities have a common boundary, the total population of these cities will determine the Control Area classification and the municipal boundaries of each of the cities shall be used to determine the limits of the Control Area.
- (4) Whenever the boundary of a Control Area passes within the boundaries of a city, the entire area of the city shall be deemed to be in the Control Area. If the Control Area boundary within a city is between Control Area (b) and Control Area (a), the entire city shall be deemed to be in Control Area (b).

- (5) The annual population estimate issued by the Center for Population Research and Census, Portland State University, shall establish which municipalities will be used for determination of Control Areas.

28-025 INCINERATORS AND REFUSE BURNING EQUIPMENT:

- (1) No person shall cause, permit or maintain any emission from any refuse burning equipment which does not comply with the emission limitations of these Rules.
- (2) Refuse Burning Hours
 - a) No person shall cause, permit or maintain the operation of refuse burning equipment at any time other than one-half hour before sunrise to one-half hour after sunset, except with prior approval of the Department.
 - b) Approval of the Department for the operation of such equipment may be granted upon the submission of a written request stating:
 - i) Name and address of the applicant
 - ii) Location of the refuse burning equipment
 - iii) Description of refuse burning equipment and its control apparatus
 - iv) Type and quantity of refuse
 - v) Good cause for issuance of such approval
 - vi) Hours during which the applicant seeks to operate the equipment
 - vii) Time duration for which approval is sought

28-030 CONCEALMENT AND MASKING OF EMISSIONS:

- (1) No person shall willfully cause or permit the installation or use of any device or use of any means such as dilution, which, without resulting in a reduction in the total amount of air contaminant emitted, conceals an emission of air contaminants which would otherwise violate rules of the Department.
- (2) No person shall cause or permit the installation or use of any device or use of any means designed to mask the emission of an air contaminant, which air contaminant causes or is likely to cause detriment to health, safety or welfare of any person.

28-040 EFFECTIVE CAPTURE OF AIR CONTAMINANT EMISSIONS:

Air contaminants which are, or may be, emitted to the atmosphere through doors, windows or other openings in a structure or which are or may be emitted from any process not contained in a structure, shall be captured and transferred to air pollution control equipment using the most efficient and best practicable hooding, shrouding or ducting equipment available. New sources shall comply at the time of installation.

28-045 ODOR CONTROL MEASURES:

- (1) Control apparatus and equipment, using the highest and best practicable treatment currently available, shall be installed and operated to reduce to a minimum odor-bearing gases or odor-bearing particulate matter emitted into the atmosphere.

- (2) Gas effluents from incineration operations and process after-burners shall be maintained at a temperature of 1,400 degrees fahrenheit for at least 0.5 second, or controlled in another manner determined by the Department to be equally or more effective.

28-050 STORAGE AND HANDLING OF PETROLEUM PRODUCTS:

- (1) In volumes of greater than 40,000 gallons, gasoline or any volatile petroleum distillate or organic liquid having a vapor pressure of 1.5 p.s.i.a. or greater under actual storage conditions shall be stored in pressure tanks or reservoirs or shall be stored in containers equipped with a floating roof or vapor recovery system or other vapor emission control device.
- (2) Gasoline or petroleum distillate tank car or tank loading facilities handling 20,000 gallons per day or more shall be equipped with submersible filling devices or other vapor emission control systems.
- (3) Gasoline tanks with a capacity of 500 gallons or more, installed after 1 January 1970, shall be equipped with submersible filling device or other vapor emission control systems.

28-055 SHIPS:

While in those portions of the Willamette River and Columbia River

which pass through or adjacent to Clackamas, Columbia and Multnomah Counties, each ship shall minimize emissions from soot blowing and shall be subject to the emission standards and rules for visible emissions and particulate matter size.

28-060 UPSET CONDITION: Emission of air contaminants in excess of applicable standards as a result of equipment breakdown shall not be considered a violation of said standards provided the conditions of section 21-075 are met.

28-065 EMISSION STANDARDS, GENERAL: Compliance with any specific emission standard in these rules does not preclude required compliance with any other applicable emission standard or requirement contained in any of the rules of the Department.

28-070 VISIBLE AIR CONTAMINANT STANDARDS: No person owning, operating or maintaining non-fuel burning equipment sources of emissions shall discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than thirty (30) seconds in any one hour which is equal to or greater than 20 percent opacity.

28-075 PARTICULATE MATTER WEIGHT STANDARDS:

(1) The maximum allowable emission of particulate matter from any fuel burning equipment shall:

a) Be a function of maximum heat input and shall be determined

from Figure 1, except from existing fuel burning equipment utilizing wood residue, it shall be 0.2 grain, and from new fuel burning equipment utilizing wood residue, it shall be 0.1 grain for each standard cubic foot of exhaust gas, calculated to 12 percent carbon dioxide.

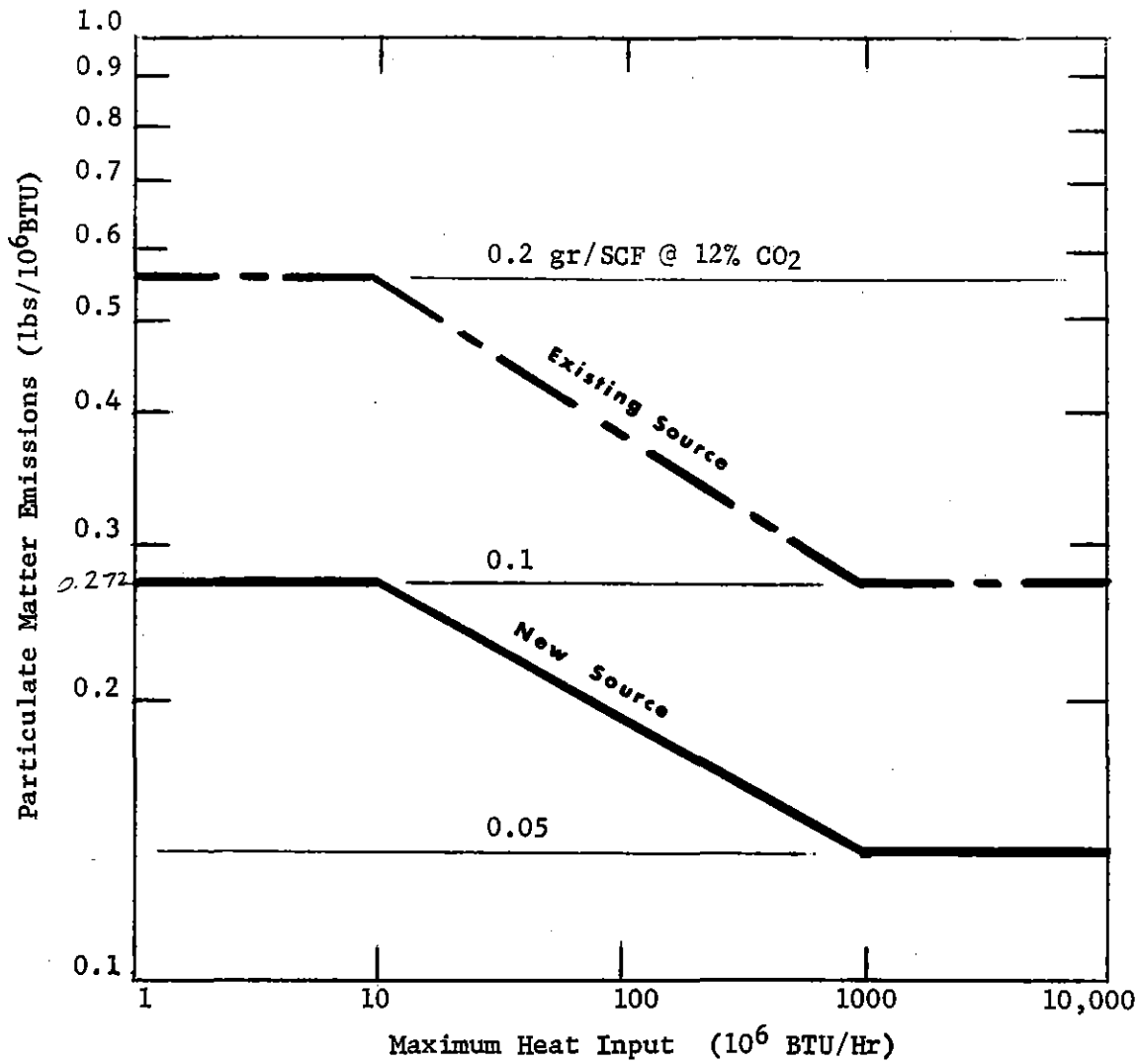
b) Not exceed Smoke Spot #2 for distillate fuel and #4 for residual fuel, measured by ASTM D2156-65, "Standard Method for Test for Smoke Density of the Flue Gases from Distillate Fuels".

(2) The maximum allowable emission of particulate matter from any refuse burning equipment shall be a function of the maximum heat input from the refuse only and shall be determined from Figure 2.

28-080 PARTICULATE MATTER SIZE STANDARD: No person shall cause or permit the emission of any particulate matter which is larger than 250 microns in size provided such particulate matter does or will deposit upon the real property of another person.

28-085 SULFUR DIOXIDE EMISSION LIMITATIONS:

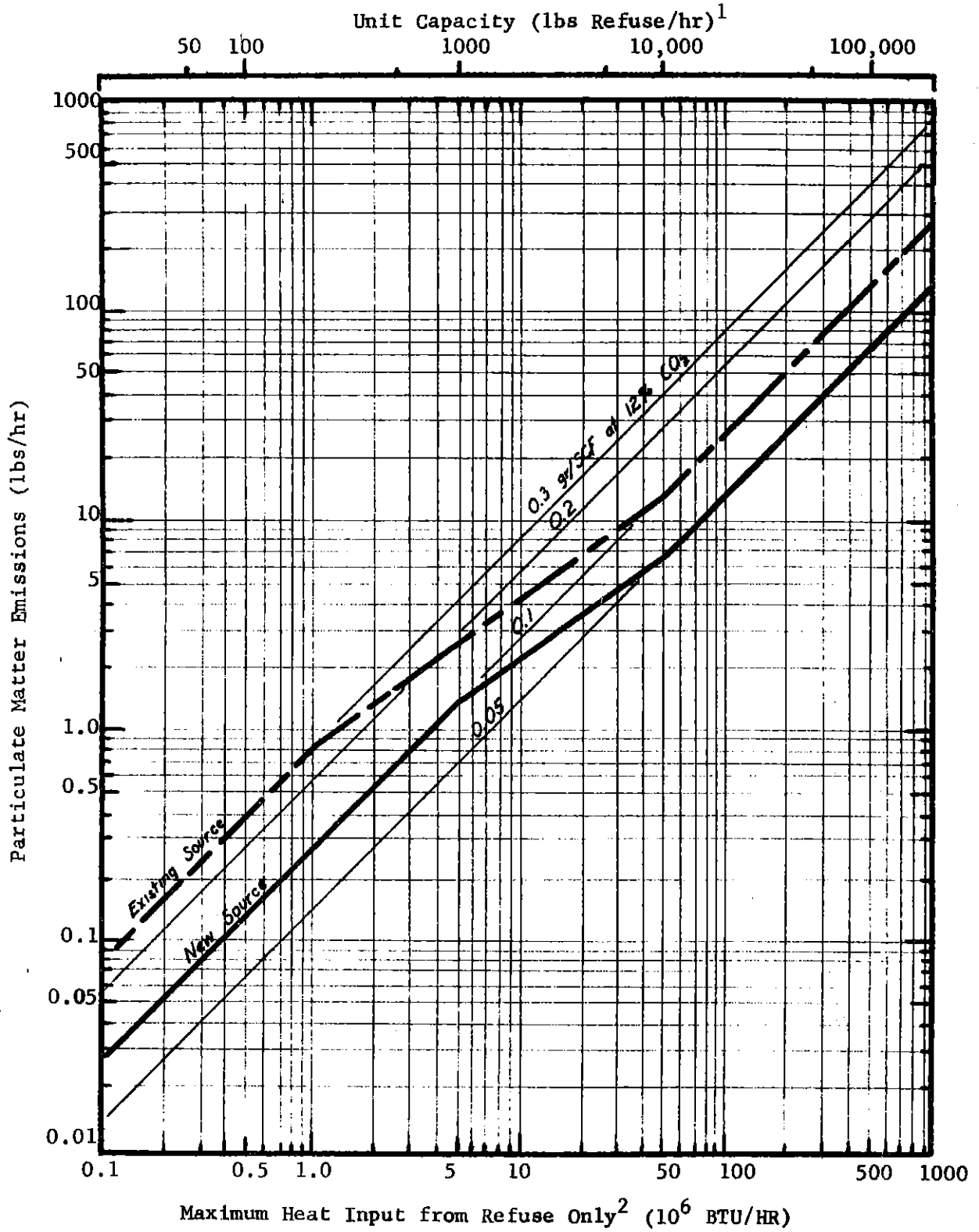
No person shall cause or permit emission of sulfur dioxide in excess of 1000 ppm from any air contamination source, except those persons burning fuel conforming to provisions of rules relating to the sulfur content of fuels. This rule is applicable to sources installed, constructed or modified after October 1, 1970.



PARTICULATE MATTER EMISSION STANDARDS FOR FUEL BURNING EQUIPMENT

Figure 1

PARTICULATE MATTER EMISSION STANDARDS FOR REFUSE BURNING EQUIPMENT



¹ For refuse having heat content of 5000 BTU/lb as fired

² Excluding any auxiliary heat

Figure 2

28-090 ODORS:

(1) No person shall cause or permit the emission of odorous matter in such manner as to contribute to a condition of air pollution, or exceed:

- a) A scentometer No. 0 odor strength or equivalent dilution in residential and commercial areas.
- b) A scentometer No. 2 odor strength or equivalent dilution in all other land use areas.

Scentometer Readings

<u>Scentometer No.</u>	<u>Concentration Range No. of Thresholds</u>
0	1 to 2
1	2 to 8
2	8 to 32
3	32 to 128

(2) A violation of this Rule shall have occurred when two measurements made within a period of one hour, separated by at least 15 minutes, off the property surrounding the air contaminant source exceeds the limitations of subsection (1).

Taken From Minutes
of the
Oregon Environmental Quality Commission
November 26-27, 1973

POSITION OF EQC RE: ENERGY CRISIS

At the request of the Chairman, Mr. Cogan presented the position of the Commission in regard to the energy crisis. He stated that the nation must find ways to produce energy without degrading the environment, that in Oregon industry and the public need to understand that the Environmental Quality Commission will not use the energy crisis as an excuse to back off from environmental quality standards, that both Governor McCall and Director O'Scannlain have taken stands against the lowering of environmental standards, and that such a stand has the support of the Commission.

It was MOVED by Mr. Cogan, seconded by Mr. McPhillips and unanimously carried that the Commission fully supports Director O'Scannlain's stand that there be no compromising of Oregon's hard won environmental quality standards during or because of the energy crisis.

NORTHWEST REGION OFFICE
RECEIVED

DEC 1

DEPARTMENT OF
ENVIRONMENTAL QUALITY



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

PAUL E. BRAGDON
Portland

MORRIS K. CROTHERS
Salem

ARNOLD M. COGAN
Portland

—
DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

To : Environmental Quality Commission
From : Director
Subject: Agenda Item No. B, November 26, 1973
Project Plans for October 1973

During the month of October, staff action was taken relative to the attached itemized list of plans, specifications and reports as follows. These actions are summarized as follows:

Water Quality Control

1. Sixty-four (64) domestic sewage projects were reviewed:
 - a. Provisional approval was given to:
 - 50 plans for sewer extensions
 - 2 plans for sewage treatment works improvements
 - b. Approval without conditions was given to:
 - 12 change orders and addenda for sewage treatment plant projects.
2. Six (6) industrial waste treatment plans were reviewed:
 - a. Provision approval was given to:
 - 1 Animal Waste Facility
 - 5 miscellaneous projects
 - 1) Bauman Lumber Company, Lebanon (waste water control facilities)
 - 2) Texaco, Inc., Coos Bay (spill prevention and contingency plan)
 - 3) Dayton Sand and Gravel, Dayton (waste water system)
 - 4) Georgia Pacific Corporation, Toledo (chip spill prevention facilities)
 - 5) Tektronix, Inc., Beaverton (proposed fluoride waste treatment facilities expansion)

Air Quality Control

1. Twenty-four (24) project plans, reports or proposals were reviewed:

a. Approval was given to:

7 Parking Space Facilities

- 1) Green-Lovegren Shopping Center, Lane County
(161-space parking facility)
- 2) Fifth and Q Shopping Center, Lane County
(55-space parking facility)
- 3) Waremart, Inc., Lane County
(130-space parking facility)
- 4) Rodeway Inn of America, Lane County
(481-space parking facility)
- 5) Stellar Engineering & Design, Lane County
(Condominium-332-space parking facility)
- 6) Valley River Center, Lane County
(872-space parking facility expansion, EQC approved)
- 7) Moore Oregon Dry Kiln, Multnomah County
(36-space parking facility)

2 Miscellaneous Projects

- 1) Astoria Plywood Corporation, Clatsop County
(installation of Carter-Day baghouse filter to
control sanderdust emissions)
- 2) Prairie City Timber Co., Grant County
(plans and specifications to modify wigwam waste burner)

b. Conditional approval was given to:

5 Parking Space Facilities

- 1) Park Plaza West, Washington County
(office park - 97-space parking facility)
- 2) Macadam Investors Oreg., Ltd., Multnomah County
(retail and office building, 278-space parking facility)
- 3) Transcorp Apartment Complex, Multnomah County
(97-space parking facility)
- 4) Fifth Avenue Business Park, Washington County
(79-space parking facility)
- 5) Verticare (Rockwood Center), Multnomah County
(medical center, 67-space parking facility)

3 Miscellaneous Projects

- 1) General Foods Corporation, Umatilla County
(modification of cyclones)
- 2) Crown Zellerbach Corporation, Clatsop County
(installation of package oil-fired boiler)
- 3) Baker Valley Rendering, Baker County
(plans and specifications to install vapor condenser)

c. Additional information was requested from:

7 Parking Space Facilities

- 1) Rockwood Industry Center, Multnomah County
(warehouse, office--150-space parking facility)
- 2) Norwest Publishing Co., Multnomah County
(64-space parking facility)
- 3) Sequoia I, Washington County
(warehouse, office--63-space parking facility)
- 4) Sequoia II, Washington County
(warehouse, office--87-space parking facility)
- 5) Fred Meyer Shopping Center, Lane County
(671-space parking facility)
- 6) Tigard Motel, Washington County
(340-space parking facility)
- 7) Halsey Street Office Building and Restaurant, Multnomah County
(153-space parking facility)

Solid Waste Disposal

1. Seventeen (17) project plans were reviewed:

a. Approval was given to:

15 miscellaneous projects

- 1) Whiteson Sanitary Landfill, Yamhill County
(new sanitary landfill, amendment to
Operational Plan)
- 2) McKenzie Bridge Landfill, Lane County
(existing garbage site, Operational Plan)
- 3) Walton Disposal Site, Lane County
(existing garbage site, Closure Plan)
- 4) Holley Disposal Site, Linn County
(existing garbage site, Closure Plan)
- 5) Erbs Disposal Site, Lane County
(existing garbage site, Closure Plan)
- 6) Horton Disposal Site, Lane County
(existing garbage site, Closure Plan)
- 7) Northern Wasco County Refuse, Wasco County
(Haulers Inc. sanitary landfill, existing garbage site,
Operational Plan)

b. Conditional approval was given to:


8 miscellaneous projects

- 1) Ashland Sanitary Landfill, Jackson County
(existing garbage site, Operational Plan)
- 2) Milwaukie Plywood, Clackamas County
(existing I.W. site, Closure Plan)

- 3) Santosh Landfill, Columbia County
(existing sanitary landfill, tire disposal
Operational Plan)
 - 4) General Development Corp., Lane County
(new I.W. site-letter authorization,
Operational Plan)
 - 5) Bohemia Inc. Coburg Landfill #2, Lane County
(new I.W. site-letter authorization,
Operational Plan)
 - 6) McCoy Creek Landfill, Marion County
(existing garbage site, Operational Plan)
 - 7) Sayre Tire Landfill, Clackamas County
(existing tire disposal area, Operational Plan
for closure of site-letter authorization)
 - 8) Lewis & Clark Log Sorting Yard, Clatsop County
(landfill - existing I.W. site, Operational Plan)
2. Two (2) Action Plan Interim Progress Reports were reviewed and approved:
- a. Coos County
 - b. Malheur County

Director's Recommendation

It is recommended that the Commission give its confirming approval to staff action on project plans and reports for the month of October 1973.



DIARMUID F. O'SCANNLAIN

Attachments

ss:11/19/73

PROJECT PLANS

Water Quality Division

During the month of October, 1973, 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 (64)</u>			
10-1-73	Gresham	Binford Homes, Phase I, Subdivision sewer	Prov. approval
10-1-73	Brookings	Change Order No. 7, sewage treatment plant contract	Approved
10-1-73	Baker	1973-74 sewer project, Phases 4 and 5	Prov. approval
10-1-73	Sunriver	1. Meadow Village, First Addition sewers 2. Mt. Village East sewers	Prov. approval
10-1-73	USA (Durham)	Addenda 1-5, sewage treat- ment plant contract	Approved
10-1-73	Portland	S.E. 39th and S.E. Johnson Cr. Blvd. sanitary sewer district	Prov. approval
10-1-73	Astoria	Change Order No. 3, Schedule A, and Change Order No. 1, Schedule B	Approved
10-1-73	USA (Aloha)	Fallatin Subdivision sewers	Prov. approval
10-2-73	Aumsville	Wildwood Subd., Phases 2 & 3 sewers	Prov. approval
10-3-73	Wood Village	Air View Estates sewers	Prov. approval
10-3-73	St. Helens	Change Order No. C-1 to sewage treatment plant contract	Approved
10-3-73	Myrtle Point	Change Order No. 5 to sewage treatment plant contract	Approved
10-3-73	Gresham	Children's World Subd. sewers	Prov. approval
10-3-73	USA (Sunset)	114th Avenue L.I.D. sewers-- existing health hazard	Prov. approval

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10-3-73	Springfield	Thurston Park Subd. sewers	Prov. approval
10-3-73	Wasco	0.04 MGD aerated lagoon sewage treatment plant with effluent disinfection and percolation	Prov. approval
10-4-73	Port Orford	Port interceptor sewer	Prov. approval
10-8-73	Bend (Ward Construction Co.)	Nottingham Square pump sta. C.O.I.D. canal crossing Tillicum Village Third Addn.	Prov. approval
10-9-73	Bandon	Lateral C-8	Prov. approval
10-9-73	Coos Bay	Change Order No. 1, Sewage Treatment Plant No. 1 project	Approved
10-9-73	Lake Oswego	1. Mt. Park, Phase 5-B 2. Mt. Park No. 7, Lot 62 sewer relocation	Prov. approval
10-9-73	Pendleton	Edwards Addition Subd. sewers	Prov. approval
10-9-73	Monmouth	S.E. Monmouth & Lea Addition sewers	Prov. approval
10-10-73	USA (Sherwood)	Nottingham Townhouse Estates Subdivision sewers	Prov. approval
10-11-73	Newport	Yaquina Bay sewer crossing	Prov. approval
10-11-73	Central Point	Freeman Road san. sewer	Prov. approval
10-11-73	Black Butte Ranch	South Meadow, Second and Third Additions, sewers	Prov. approval
10-12-73	Corvallis	26th Street sewer project	Prov. approval
10-12-73	Medford	D'Anjon Village #4 sewers	Prov. approval
10-12-73	USA (Tigard)	Summerfield, Phase II, sewers	Prov. approval
10-12-73	Woodburn	Elana Subd. sewers	Prov. approval
10-12-73	Wilsonville	Boones Ferry Road sewer	Prov. approval
10-12-73	Coos Bay	Pumping station #4	Prov. approval
10-15-73	USA (Beaverton)	7th Day Adventist Center sewer	Prov. approval
10-16-73	North Roseburg S.D.	BLM-Roseburg Office sewer	Prov. approval

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10-16-73	Lincoln City	S.W. Harbor Avenue, Phase I sewers	Prov. approval
10-16-73	Woodburn	Elana Subd. sewers	Prov. approval
10-18-73	Wilsonville	Oregon Pacific Industries sewer	Prov. approval
10-18-73	Stanfield	Willow Drive sewers	Prov. approval
10-18-73	North Bend	Scotts Edgewood Terrace Sub-division sewer	Prov. approval
10-18-73	Woodburn	Cherry Orchard Heights sewers	Prov. approval
10-18-73	Springfield	Sunset Drive sewer	Prov. approval
10-18-73	Wilsonville	Charbonneau-single family first addition sewers	Prov. approval
10-22-73	Corvallis	Forest Heights Subd. sewers	Prov. approval
10-22-73	Oak Lodge San. D.	Mr. Steak Restaurant sewer	Prov. approval
10-23-73	Roseburg	Terrace Park Estates sewers	Prov. approval
10-23-73	Inverness	Skow Property	Prov. approval
10-23-73	Independence	Independence Air Park Subd. sewers	Prov. approval
10-24-73	Multnomah County	Pleasant Valley School sewage treatment plant additions, holding pond and pumping facilities	Prov. approval
10-24-73	Yachats	Change Order No. 1, sewage treatment plant contract	Approved
10-24-73	Sweet Home	Change Order No. 1, sewage treatment plant contract	Approved
10-24-73	Inverness	Space Industrial Park sewer	Prov. approval
10-24-73	Independence	Ash Brook Addition sewers	Prov. approval
10-24-73	McMinnville	Airport Rendezvous sewers	Prov. approval
10-24-73	Inverness	N. E. Rose Parkway sewers	Prov. approval
10-24-73	USA (Aloha)	Augusta Lane Subd. sewer	Prov. approval

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10-24-73	USA (Metzger)	Carmel sanitary sewer	Prov. approval
10-25-73	Woodburn	Change Order No. 8, sewage treatment plant contract	Approved
10-25-73	Seneca	Addendum No. 1, sewage treatment plant contract	Approved
10-29-73	Astoria	Change Order No. 2, Schedule B, sewerage system	Approved
10-31-73	Gresham	Children's World-Linden Avenue and Regner Road sewers	Prov. approval

Water Quality Division

Industrial Projects (6)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10/2/73	Lebanon	Bauman Lumber Company, waste water control facilities	Prov. Approval
10/2/73	Coos Bay	Texaco, Inc., Spill Prevention and Contingency Plan	Prov. Approval
10/5/73	Dayton	Dayton Sand and Gravel, waste water system	Prov. Approval
10/10/73	Multnomah County	Property Resources, Inc., animal waste facilities	Prov. Approval
10/15/73	Toledo	Georgia Pacific Corporation, chip spill prevention facilities	Prov. Approval
10/23/73	Beaverton	Tektronix, Inc., proposed fluoride waste treatment facilities expansion	Prov. Approval

AP-7 PROJECT PLANS, REPORTS, PROPOSALS FOR AIR QUALITY CONTROL
DIVISION FOR OCTOBER, 1973

<u>DATE</u>	<u>LOCATION</u>	<u>PROJECT</u>	<u>ACTION</u>
1	Lane County	<u>Green-Lovegren Shopping Center</u> 161-space parking facility	✓ Approved ✓
1	Lane County	<u>Fifth and Q Shopping Center</u> 55-space parking facility	✓ Approved ✓
1	Lane County	<u>Waremart, Inc.</u> 130-space parking facility	✓ Approved ✓
1	Lane County	<u>Rodeway Inn of America</u> 481-space parking facility	✓ Approved ✓
1	Lane County	<u>Stellar Engineering & Design</u> Condominium - 332-space parking facility	✓ Approved ✓
2	Washington	<u>Park Plaza West</u> Office park - 97-space parking facility	✓ Approved with conditions ✓
4	Multnomah	<u>Rockwood Industry Center</u> Warehouse, office 150-space parking facility	✓ Requested Add'l info ✓
4	Multnomah	<u>Norwest Publishing Co.</u> 64-space parking facility	✓ Requested Add'l info ✓
4	Washington	<u>Sequoia I</u> Warehouse, office 63-space parking facility	✓ Requested Add'l info ✓
4	Washington	<u>Sequoia II</u> Warehouse, office 87-space parking facility	✓ Requested Add'l info ✓
8	Lane	<u>Fred Meyer Shopping Center</u> 671-space parking facility	✓ Requested Add'l info ✓
8	Multnomah	<u>Macadam Investors Oreg., Ltd.</u> Retail and office building 278-space parking facility	✓ Approved with conditions ✓
10	Umatilla	<u>General Foods Corporation</u> Modification of cyclones	✓ Cond. approval ✓

AP-7 PROJECT PLANS, REPORTS, PROPOSALS FOR AIR QUALITY CONTROL
DIVISION FOR OCTOBER, 1973 (continued)

<u>DATE</u>	<u>LOCATION</u>	<u>PROJECT</u>	<u>ACTION</u>
12	Clatsop	<u>Astoria Plywood Corporation</u> Installation of Carter-Day baghouse filter to control sanderdust emissions	✓ Approved ✓
16	Clatsop	<u>Crown Zellerbach Corporation</u> Installation of package oil-fired boiler	✓ Cond. approval ✓
17	Grant	<u>Prairie City Timber Co.</u> Plans and specifications to modify wigwam waste burner	✓ Approved ✓
22	Lane	<u>Valley River Center</u> 872-space parking facility expansion	✓ EQC approved ✓
24	Multnomah	<u>Transcorp Apartment Complex</u> 97-space parking facility	✓ Approved with conditions ✓
26	Multnomah	<u>Moore Oregon Dry Kiln</u> 36-space parking facility	✓ Approved ✓
26	Washington	<u>Tigard Motel</u> 340-space parking facility	Requested Add'l info ✓
29	Baker	<u>Baker Valley Rendering</u> Plans and specifications to install vapor condenser.	✓ Conditional approval ✓
29	Washington	<u>Fifth Avenue Business Park</u> 79-space parking facility	✓ Approved with conditions ✓
29	Multnomah	<u>Verticare (Rockwood Center)</u> Medical center - 67-space parking facility	✓ Approved with conditions ✓
31	Multnomah	<u>Halsey St. Office Building and Restaurant</u> 153-space parking facility	✓ Requested Add'l info. ✓

PROJECT PLANS
SOLID WASTE MANAGEMENT DIVISION

During the month of October 1973, the following project plans and specifications and/or reports were reviewed by the staff. The disposition of each project is shown, pending confirmation by the Environmental Quality Commission.

<u>PERMIT PROGRAM</u>			
<u>DATE</u>	<u>LOCATION</u>	<u>PROJECT</u>	<u>ACTION</u>
3	Columbia Co.	✓ Santosh Landfill Existing Sanitary Landfill Tire Disposal Operational Plan	<i>misc</i> Prov. Approved
3	Yamhill Co.	✓ Whiteson Sanitary Landfill New Sanitary Landfill Amendment to Operational Plan	Approved
3	Lane Co.	✓ General Development Corp. New I.W. Site-Letter Authorization Operational Plan	<i>misc</i> Prov. Approved
4	Lane Co.	✓ Bohemia Inc. Coburg Landfill #2 New I.W. Site-Letter Authorization Operational Plan	<i>misc</i> Prov. Approved
5	Lane Co.	✓ McKenzie Bridge Landfill Existing Garbage Site Operational Plan	<i>misc</i> Approved
10	Marion Co.	✓ McCoy Creek Landfill Existing Garbage Site Operational Plan	<i>misc</i> Prov. Approved
11	Clackamas Co.	✓ Sayre Tire Landfill Existing Tire Disposal Area Operational Plan for Closure of Site (Letter Authorization)	Prov. Approved
15	Clatsop Co.	Lewis & Clark Log Sorting Yard Landfill - Existing I.W. Site Operational Plan	Prov. Approved

PROJECT PLANS
SOLID WASTE MANAGEMENT DIVISION

During the month of October 1973, the following project plans and specifications and/or reports were reviewed by the staff. The disposition of each project is shown, pending confirmation by the Environmental Quality Commission.

<u>DATE</u>	<u>LOCATION</u>	<u>PROJECT</u>	<u>ACTION</u>
16	Jackson Co.	✓ Ashland Sanitary Landfill Existing Garbage Site Operational Plan	Prov. Approved
23	Lane Co.	✓ Walton Disposal Site Existing Garbage Site Closure Plan	Approved
24	Linn Co.	✓ Holley Disposal Site Existing Garbage Site Closure Plan	Approved
25	Lane Co.	✓ Erbs Disposal Site Existing Garbage Site Closure Plan	Approved
25	Lane Co.	✓ Horton Disposal Site Existing Garbage Site Closure Plan	Approved
25	Clackamas Co.	✓ Milwaukie Plywood Existing I.W. Site Closure Plan	Prov. Approved
25	Wasco Co.	✓ Northern Wasco County Refuse Haulers Inc. Sanitary Landfill Existing Garbage Site Operational Plan	Approved
<u>PLANNING PROGRAM</u>			
15	Coos Co.	First Interim Report	Approval
17	Malheur Co.	Second Interim Report	Approval



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

PAUL E. BRAGDON
Portland

MORRIS K. CROTHERS
Salem

ARNOLD M. COGAN
Portland

DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

To : Environmental Quality Commission

From : Director

Subject: Agenda Item No. C, November 26, 1973, EQC Meeting
Request for Authorization to Hold a Public Hearing to Consider Adoption of Rules Pertaining to the Subsurface Disposal of Sewage

Background

Effective January 1, 1974, Chapter 835, Oregon Laws 1973 establishes a subsurface sewage disposal permit program and transfers jurisdiction of subsurface sewage disposal from the State Health Division to the Department of Environmental Quality.

Because the same legislative act terminated the Health Division's authority in subsurface sewage disposal on October 5, 1973, the Commission adopted the Health Division's rules with minor modifications as temporary rules of the Department. The Department also contracted with the Health Division for administrative enforcement until January 1, 1974. The emergency rules were filed with the Secretary of State and became effective October 5, 1973. Such rules are effective for 120 days and therefore must be permanently replaced prior to February 2, 1974.

In order to develop the proposed rules, the Department's staff conducted workshops with field staff working with the temporary rules, with many county and city officials, home builders and realtors throughout the state during the month of October 1973, to gather information on proposed changes with the present temporary rules.

On the basis of these workshops, recent information submitted to the Department and a complete review of the temporary rules and Chapter 835, Oregon Laws 1973, proposed rules have been prepared for a public hearing before the Commission.


The Department proposes to conduct hearings before a hearings officer prior to a public hearing before the Commission in order to gather testimony throughout the State of Oregon. This testimony will be summarized and presented to the Commission at their public hearing. Hearings are scheduled in the following cities on the dates as indicated:

<u>City</u>	<u>Date</u>
Albany	November 28, 1973
Eugene	November 29, 1973
Coos Bay	December 4, 1973
Grants Pass	December 5, 1973
Medford	December 5, 1973
Klamath Falls	December 6, 1973
Pendleton	December 11, 1973
Portland	December 12, 1973
Newport	December 13, 1973

A public hearing to consider adoption of rules pertaining to subsurface sewage disposal must be authorized by the Commission.

Director's Recommendation

It is the Director's recommendation that the Commission authorize that public testimony be heard to consider adoption of proposed rules pertaining to standards for subsurface sewage disposal at their meeting in Eugene on December 17, 1973 at 2 p.m., and that appropriate action be taken on the proposed rules after giving consideration to the testimony received and presented.


DIARMUID F. O'SCANNLAIN
Director

FMB:s
11/14/73

Attachment

SYNOPSIS

PROPOSED SUBSURFACE SEWAGE DISPOSAL RULES

The Environmental Quality Commission will hold a public hearing to consider the adoption of subsurface sewage disposal.

Testimony may be submitted orally or in written form at the public hearing before the Environmental Quality Commission at 2 o'clock p.m. on the 17th day of December 1973 in the Main Floor, Harris Hall, Corner of East 8th and Oak Street, Eugene, Oregon, 97401.

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 subsurface sewage disposal rules at a public hearing at 2 o'clock p.m. on the 17th day of December, 1973, in Harris Hall, Main Floor, Corner of East 8th and Oak Street, Eugene, Oregon 97401.

The Department adopted Emergency rules on October 5, 1973. Such rules must be permanently replaced before February 2, 1974. The rules which the Department proposes to adopt will be similar to the present Emergency rules, with modifications including the proposal to incorporate consideration of regional differences.

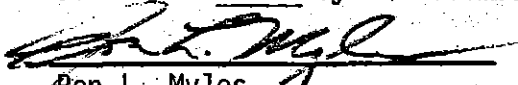
Copies of the proposed rules are available for public inspection, or may be obtained by request, from the Department of Environmental Quality, Land Quality Program, 1234 S. W. Morrison Street, Portland, Oregon 97205.

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 Department of Environmental Quality, Land Quality Program, 1234 S. W. Morrison Street, Portland, Oregon 97205, prior to the hearing.

The Department further proposes to conduct hearings before a hearing officer at other locations, yet to be determined, prior to the December 17, 1973 hearing before the Environmental Quality Commission.

Notice of these hearings will be given by the best available method. Testimony received at these hearings will be summarized and presented to the Commission at their public hearing.

Dated this 2nd day of November, 1973


Ron L. Myles
Deputy Director



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5284

TOM McCALL
GOVERNOR

MEMORANDUM

DIARMUID F. O'SCANNLAIN
Director

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. D, November 26, 1973, EQC Meeting

Variance Request, Western States Plywood Cooperative,
Port Orford, Curry County, SIC 2432, Extension of Air
Contaminant Discharge Permit Compliance Dates

Background:

Western States Plywood is a cooperative corporation located approximately 6½ miles northeast of the town of Port Orford, Oregon, in Curry County. The plant produces plywood and 2 x 4 studs. It has a normal work force of 240 employees and currently operates 16 hours/day, 5 days/week, 50 weeks/year. The plant has been in operation for 22 years.

An Air Contaminant Discharge Permit (application No. 0073) was approved for issuance to Western States Plywood at a public hearing held on September 24, 1973. This pending permit contains compliance demonstration schedules for the two (2) hog fuel boilers, three (3) cyclones, and two (2) veneer driers located at the plywood plant. The pending permit specifies that by no later than September 30, 1973, emission tests were to have been conducted, and the results submitted to the Department of Environmental

Quality, in order to demonstrate that the hog fuel boilers are in compliance with OAR, Chapter 340, Section 21-015 and 21-020, and that the plywood plant is in compliance with OAR, Chapter 340, Section 25-315(2). The pending permit also specifies that the veneer driers shall be demonstrated to be in compliance with OAR, Chapter 340, Section 25-315(1) by no later than December 31, 1974.

A modified wigwam waste burner is also located on the plant site and is utilized by the company to burn excess wood wastes. This burner was demonstrated to be capable of operation in compliance with OAR, Chapter 340, Section 25-020, and was approved for operation on October 5, 1972.

On October 18, 1973, and October 24, 1973, letters were received informing the Department of the Cooperative's serious financial difficulties. Due to the depressed condition of the plywood market, the company had a net operating loss of \$409,340.00 for the three months preceeding September 30, 1973. On October 18, 1973, production was curtailed by approximately 36% and 80 employees were laid off. The Cooperative informed the Department that it presently does not have the capital needed to conduct emission compliance tests or to purchase pollution control devices (if necessary). Until the market improves, any additional drain on their cash flow for financially non-productive improvements could result in closing the plant.

Current Program:

Due to recent serious financial losses as a result of the depressed plywood market, Western States Plywood Cooperative has requested an extension of the compliance demonstration dates specified in their pending Air Contaminant Discharge Permit. They will continue to search for

economically feasible methods to bring their plant into compliance and will do so as soon as their financial condition allows. The Cooperative hopes to be in full compliance with all required standards by no later than December 31, 1974.

Factual Analysis:

1. The Cooperative's pending Air Contaminant Discharge Permit specified that compliance be demonstrated for the two (2) hog fuel boilers by no later than September 30, 1973. Particulate emission tests were conducted on the boilers on April 12, 1973, and it was determined that they were not in compliance with OAR, Chapter 340, Section 21-020. To date, no compliance program for these boilers has been developed nor have they been re-tested to demonstrate compliance. The Roseburg Assistant District Engineer reports that emissions from these boilers generally average about 15% opacity (visible emission limitation for this source is 40% opacity).

2. The Cooperative's pending permit specified that compliance be demonstrated for the three (3) plywood plant cyclones by no later than September 30, 1973. To date, no compliance tests have been conducted on the cyclones, nor have any control devices been installed on them. The Roseburg Assistant District Engineer reports that emissions from these cyclones are generally less than 20% opacity (visible emission limitation for this source is 40% opacity).

3. The Assistant District Engineer reports that emissions from the two (2) veneer driers generally average between 40% and 50% opacity. These driers are not required to be in compliance until December 31, 1974. The Cooperative has submitted written notice to the Department as required by OAR, Chapter 340, Section 25-315(1c) delineating their veneer drier emission

control program.

4. The plant site is located in a sparsely populated area, far-removed from any large population centers. It is situated in a valley with good circulation and the prevailing westerly winds generally carry plant emissions away from the nearest town (Port Orford, $6\frac{1}{2}$ miles southwest of the plant). The Department has received no formal citizen complaints regarding this plant.

5. The recent instabilities in the plywood market resulted in a reported net operating loss to the cooperative of \$409,340.00 for the three months preceeding September 30, 1973. The resulting curtailment in production forced the company to lay off 80 of its 240 employees.

6. It is reported that utilization of the Cooperative's remaining working capital at this time to purchase emission control equipment and conduct compliance tests could result in the shut down of the plant. Plant closure would seriously affect the economy of the surrounding area.

7. Modification of the pending permit will be necessary if the variance is granted so that compliance and compliance determination dates conform to the variance period.

Conclusions:

1. Particulate emission tests conducted on Western States Plywood's hog fuel boilers indicate that these boilers do not comply with OAR, Chapter 340, Section 21-020.

2. The Cooperative has never conducted particulate emission tests on the plywood plant in order to demonstrate compliance with OAR, Chapter 340, Section 25-315(2).

3. Western States Plywood does not, at this time, have the necessary capital to conduct compliance demonstration tests or to purchase emission control equipment. They state that to do so, could result in additional layoffs and possible plant closure.

4. The plant is located in a well-ventilated, sparsely-populated area. Plant emissions are blown away from the nearest town, and, as evidenced by the lack of citizen complaints, are not causing any problems.

Director's Recommendation:

It is recommended that Western States Plywood Cooperative be granted a variance from OAR Chapter 340, Sections 21-020 (Fuel Burning Equipment Particulate Limitations) and 25-315(2) (Other Emission Sources from Veneer and Plywood Manufacturing Operations) until December 31, 1974 subject to the following conditions:

A. At the earliest practicable date, but in no case later than July 1, 1974, the Cooperative shall either: 1) conduct and submit emission test results to the Department of Environmental Quality to demonstrate compliance for the boilers and plywood plant, or 2) submit a compliance program and schedule designed to bring these sources into compliance on or before December 31, 1974.

B. Demonstrate that this variance continues to be necessary by submitting to the Department on January 1, March 1, and May 1, 1974, a statement of the Cooperative's financial status and a report on what efforts are being conducted to bring the plant emission sources into compliance.

C. Continue to make every effort to operate the plant in such a manner that the emissions are as low as practicable with current control and operating equipment.

It is also recommended that Western State's pending Air Contaminant Discharge Permit be amended to reflect the above variance dates. The hog fuel boiler and plywood plant compliance demonstration dates would become July 1, 1974. The veneer drier compliance program dates would be changed to:

- 1) July 1, 1974, for submitting plans and specifications,
- 2) August 1, 1974, for issuing purchase orders,
- 3) October 1, 1974, for commencing construction,
- 4) December 1, 1974, for completing construction.

The final veneer drier compliance demonstration date (December 31, 1974) shall remain unchanged.

DIARMUID F. O'SCANNLAIN

Date

Department of Environmental Quality
Air Quality Control Division

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

WESTERN STATES PLYWOOD COOPERATIVE
P. O. Box 86
Port Orford, OR 97465

WESTERN STATES PLYWOOD operates a sawmill, planing mill, plywood plant, modified wigwam waste burner and steam generating boiler at Port Orford, Oregon.

SECTION A - SAWMILL AND PLANING MILL

Background

1. Existing visible and particulate emission sources at the sawmill and planing mill plant site consist of one (1) cyclone.
2. Wood waste residues are sold for further utilization whenever any market exists. Unsalable wood waste residues are disposed of in the wigwam waste burner or hog fuel boilers at the plywood plant.

Evaluation

3. As demonstrated by the Department's observations to date, the company currently has an effective air pollution control program and the sawmill and planing mill are judged to be capable of full operation in compliance with limitations established by regulations and the proposed permit.
4. Production operations at the sawmill and planing mill are conducted on a 3 shift, 6 days per week, 50 weeks per year basis.

SECTION B - PLYWOOD PLANT

Background

1. Existing visible and particulate emission sources at the plywood plant site consist of the following:
 - a. Two (2) hog fuel boilers,

- b. One (1) modified wigwam waste burner,
 - c. Three (3) cyclones,
 - d. Two (2) veneer dryers.
2. Wood waste residues are sold for further utilization whenever any market exists. Unsalable wood waste residues are disposed of in the modified wigwam waste burner or hog fuel boilers.
 3. The solid waste ash residues from the hog fuel boilers and wigwam waste burner are disposed of in an approved landfill at the county dump.
 4. The company has demonstrated that the modified wigwam waste burner is capable of continuous operation in compliance with the emission limitations.

Evaluation

5. The company will conduct tests of particulate emissions from the hog fuel boiler discharge sources. These tests will be made before September 30, 1973.
6. Measurements of actual amounts of particulate emissions from the plant cyclones will be made by the company and reported to the Department on or before September 30, 1973.
7. Installation of the new veneer dryer modifications in accordance with Department approved plans and specifications will be completed on or before September 1, 1974. Tests to demonstrate operation in compliance with emission limitations will be made and submitted to the Department for review on or before December 31, 1974.
8. Total particulate emissions from the plywood plant, other than emissions from fuel or refuse burning equipment, and the veneer dryers, are limited to 13 lbs/hr. based on a maximum production capacity of 13,000 square feet per hour of plywood (3/8 inch basis).
9. Production operations at the plywood plant, other than the wigwam waste burner, are conducted on a 3 shift, 6 days per week, 50 weeks per year basis. Total allowable particulate emissions from the plywood plant site, other than emissions from fuel or refuse burning equipment and the veneer dryers, are calculated to be 47 tons/year.

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: WESTERN STATES PLYWOOD COOPERATIVE P. O. Box 86 Port Orford, OR 97465</p> <p>PLANT SITE: Port Orford, Oregon</p> <p>ISSUED BY DEPARTMENT OF ENVIRONMENTAL QUALITY</p> <hr style="width: 100%;"/> <p style="display: flex; justify-content: space-between;">Diarmuid F. O'Scannlain <i>Director</i>Date</p>	<p>REFERENCE INFORMATION</p> <p>Application No. <u>0073</u></p> <p>Date Received <u>May 23, 1973</u></p> <p>Other Air Contaminant Sources at this Site:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 20%; text-align: center;">SIC</th> <th style="width: 20%; text-align: center;">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>		SIC	Permit No.	(1) _____			(2) _____		
	SIC	Permit No.								
(1) _____										
(2) _____										

SOURCE(S) PERMITTED TO DISCHARGE AIR CONTAMINANTS:

Name of Air Contaminant Source	Standard Industry Code as Listed
SAWMILL AND PLANING MILL	2421
PLYWOOD MANUFACTURING	2432

Permitted Activities

Until such time as this permit expires or is modified or revoked, WESTERN STATES PLYWOOD, COOPERATIVE 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 Section A through C of this permit from its sawmill, planing mill, plywood plant, veneer dryers, modified wigwam waste burner, and steam generating facilities, located at Port Orford, 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.

<u>Divisions of Permit Specifications</u>	<u>Page</u>
Section A - Sawmill and Planing Mill	2
Section B - Plywood Plant	3
Section C - General Requirements	6

PROPOSED
AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Issued by the
Department of Environmental Quality for
WESTERN STATES PLYWOOD COOPERATIVE (Port Orford)

Expiration Date 6/1/78
Page 2 of 7
Appl. No.: 0073
File No.: 08-0005 & 08-0014

SECTION A - SAWMILL AND PLANING MILL
(Includes (1) cyclone)

Performance Standards and Emission Limits

1. Particulate emissions from any single air contaminant source shall not exceed the following:

- a. 0.2 grains per standard cubic foot for sources existing prior to June 1, 1970,
- b. 0.1 grains per standard cubic foot for sources installed, constructed, or modified after June 1, 1970, or
- c. An opacity equal to or greater than twenty percent (20%) for a period or periods aggregating more than three (3) minutes in any one (1) hour.

SECTION B - PLYWOOD PLANT
 (Includes (1) Wigwan Waste Burner,
 (2) Steam Generating Facilities, (2) Veneer
 Dryers, and (3) Cyclones)

Performance Standards and Emission Limits

1. Particulate emissions from all sources on a plant site basis, other than the wigwan waste burner, the steam generating boilers, and the veneer dryers, shall not exceed thirteen (13) pounds per hour based on a maximum hourly production rate of 13,000 square feet per hour on a 3/8 inch basis.
2. Particulate emissions from any single air contaminant source other than the steam generating boilers and the veneer dryers shall not exceed the following:
 - a. 0.2 grains per standard cubic foot for sources existing prior to June 1, 1970,
 - b. 0.1 grains per standard cubic foot for sources installed, constructed, or modified after June 1, 1970, or
 - c. An opacity equal to or greater than twenty percent (20%) for a period or periods aggregating more than three (3) minutes in any one (1) hour.
3. Wigwan waste burner visible emissions shall not exceed an opacity equal to or greater than twenty percent (20%) for a period or periods aggregating more than three (3) minutes in any one (1) hour.
4. The permittee shall operate and control the steam generating boiler(s) in accordance with the following listing of boiler operating parameters and emission limitations:

Boiler Identification	Operating Parameters		Maximum Allowable Emission Limitations	
	Fuel to be used (1)	Max. Steaming Capacity (2)	Opacity (3)	Particulates (4)
1	H.F.	To Be Established by 9/30/73	40%	0.2
2	H.F.		40%	0.2

- (1) H.F. means wood residues commonly referred to as hog fuel; R.O. means residual oil; D.O. means distillate oil; S.D. means sanderdust; N.G. means natural gas; and LPG means liquefied petroleum gas.
- (2) Steam production in pounds per hour.
- (3) Maximum opacity that shall not be equalled or exceeded for a period or periods aggregating more than three minutes in any one hour, excluding uncombined water vapor.
- (4) Emission limitation for particulates which shall not be exceeded and is stated in grains per standard cubic foot, corrected to 12% Carbon Dioxide (CO₂) or at 50% excess air.

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Issued by the
Department of Environmental Quality for
WESTERN STATES PLYWOOD COOPERATIVE (Port Orford)

Expiration Date: 6/1/78
Page 4 of 7
Appl. No.: 0073
File No.: 08-0005 & 08-0014

5. The permittee shall not operate the boiler(s) with other fuels or at greater steam generating rates than those specified in Condition 4. without prior written approval from the Department.
6. After December 31, 1973, the two (2) veneer dryers shall be controlled and operated so that there shall not be:
- Any visible emission at a distance greater than fifty (50) feet from the veneer dryer or the edge of the building housing said dryer, whichever is greater,
 - An opacity equal to or greater than twenty percent (20%) from any single stack on the same veneer dryer,
 - An opacity equal to or greater than ten percent (10%) as an arithmetic mean from all stacks on the same veneer dryer, and
 - A grain loading of greater than 0.1 grains per standard cubic foot corrected to 12% Carbon Dioxide (CO₂) or at 50% excess air for any combustion source supplying heat to the veneer dryers with return exhaust incineration.

Compliance Demonstration Schedule

7. The permittee shall demonstrate by no later than September 30, 1973, that the plywood plant is capable of operating in continuous compliance with Conditions 1. and 2. by submitting all test data and results to the Department of Environmental Quality for review. These tests shall be conducted in accordance with testing procedures on file at the Department of Environmental Quality or in conformance with recognized applicable standard methods approved in advance by the Department.
8. The permittee shall demonstrate by no later than September 30, 1973, that the steam generating boilers are capable of continuous operation at normal maximum steaming rates in compliance with Condition 4. by submitting all test data and results to the Department of Environmental Quality for review. These tests shall be conducted in accordance with testing procedures on file at the Department of Environmental Quality or in conformance with recognized applicable standard methods approved in advance by the Department.
9. The permittee shall submit written notice by no later than July 1, 1973, to the Department of Environmental Quality for Department approval that he is participating in a study to sufficiently identify the emissions from one (1) representative veneer dryer and to design an air cleaning device to achieve compliance with Condition 6.

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Issued by the
Department of Environmental Quality for
WESTERN STATES PLYWOOD COOPERATIVE (Port Orford)

Expiration Date: 6/1/78

Page 5 of 7

Appl. No.: 0073

File No.: 08-0005 & 08-0014

10. The permittee shall provide controls for the two (2) veneer dryers so as to limit emissions in accordance with Condition 6. and the following schedule:

- a. By no later than December 31, 1973, submit plans and specifications to the Department of Environmental Quality for all necessary construction and/or modification work,
- b. By no later than March 1, 1974, issue all purchase orders for components and control equipment,
- c. By no later than June 1, 1974, commence construction and/or modification work,
- d. By no later than September 1, 1974, complete all construction and/or modification work, and
- e. By no later than December 31, 1974, demonstrate that the two (2) veneer dryers are operated in compliance with Condition 6.

Issued by the
Department of Environmental Quality for
WESTERN STATES PLYWOOD COOPERATIVE (Port Orford)

SECTION C - GENERAL REQUIREMENTS
(for all manufacturing activities listed
in this permit)

Monitoring and Reporting

1. The permittee shall submit temperature charts recording the operation of the wigwam waste burner for the preceding month to the Department of Environmental Quality by no later than the fifth (5th) day of each month.
2. The permittee shall promptly notify the Department of Environmental Quality by telephone or in person, with written confirmation when requested by the Department of Environmental Quality, of any scheduled maintenance or malfunction of air pollution control equipment that may cause or tend to cause a significant increase of air contaminant emissions. Such notice shall include:
 - a. The nature and quantity of increased air contaminant emissions that are likely to occur during the maintenance or repair period,
 - b. The expected length of time that the air pollution control equipment will be out of service,
 - c. The corrective action that shall be taken, and
 - d. The precautions that shall be taken to prevent a future recurrence of a similar condition.

Prohibited Activities

3. The permittee is prohibited from conducting any open burning at the plant site.
4. 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.

Special Conditions

5. 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.
6. (NOTICE CONDITION) The permittee shall dispose of all solid wastes or residues in manners and at locations approved by the Department of Environmental Quality.
7. 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.

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Issued by the

Department of Environmental Quality for

WESTERN STATES PLYWOOD COOPERATIVE (Port Orford)

Expiration Date: 6/1/78

Page 7 of 7

Appl. No.: 0073

File No.: 08-0005 & 08-0014

8. The permittee is prohibited from altering, modifying or expanding the subject sawmill and plywood plant production facilities so as to affect emissions to the atmosphere without prior notice to and written approval from the Department of Environmental Quality.

9. 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.

10. 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>
\$150.00	June 1, 1974
\$150.00	June 1, 1975
\$150.00	June 1, 1976
\$150.00	June 1, 1977

11. 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.

WESTERN STATES PLYWOOD COOPERATIVE

INTERIOR

Superior Plywood Products

EXTERIOR

P. O. BOX 86

D.F.P.A.

WESTPLYCO

PORT ORFORD, OREGON 97465

TELEPHONE 332-3711

October 24, 1973

Environmental Quality Commission
1234 Morrison Street
Portland, Oregon 97205

Attention: Mr. Diamuid F. O'Scannlain, Director

Dear Mr. O'Scannlain;

We hereby request a variance, from the Environmental Quality Commission, regarding the compliance date specified in the air contamination discharge permit application No. 0073.

In our letter of October 18, 1973, we outlined various facts and explained, to some extent, the present circumstances under which we are operating our plant. In addition thereto, we submit the following information for the Commission to review in making a determination on our request, and to justify our continued existence.

- (1) There are very few homes within miles of the plant and to my knowledge, we have never had a complaint from anyone in the area.
- (2) At no time in the past, to my knowledge, has the County Health Department, or other local Governmental Agencies issued any detrimental reports.
- (3) The firm has had a net operating loss of \$409,340.00 for the three months ended September 30, 1973. The drastic lay-off and other steps that have now been taken, were necessary to minimize this rapid deterioration of working capital and the firm must continue on a partial curtailment program until the plywood market improves and stabilizes. Any additional drain on our cash flow at the present time for non-productive improvements could very well create a financial disaster.
- (4) We have every intent to comply with all Environmental requirements at the earliest date our financial condition will allow. We hope that our firm can be in full compliance with all required standards on or before December 31, 1974.

Environmental Quality Commission
Mr. Diamuid O'Scannlain, Director
October 24, 1973
Page 2

(5) We are continuing efforts to determine the most feasible method to correct our problems.

(6) As stated in our letter of October 18, 1973, the economy of this sparsely populated area of Northern Curry County is greatly effected by the Mills annual payroll of over \$2,500,000.00, at normal operating capacity. The economic impact can be expressed in terms of what 1,000 ft of logs produced, will generate for the economy of the area:

Western States Plywood Cooperative requires approximately 24,000 M ft. annual log production for normal operations.

The normal annual payroll of the mill in the amount of \$2,500,000, indicates that for every 1,000 ft. of logs produced \$104.00 is generated in wages, at the mill level.

Local contract loggers and haulers are paid approximately \$1,400,000, annually or \$58.00 per M, of which a substantial amount is paid out for wages. These amounts affect the local area directly and help support local sales and service establishments.

Also, some 1 million dollars is expended directly for supplies and services, furnished by other Oregon industries and service establishments, local and state-wide.

Nearly \$2,800,000 is disbursed for raw materials, including logs from the U.S. Forest Service, State of Oregon, Bureau of Land Management and local entities. \$1,400,000 was realized from the sale of logs in the past year.

Sales of finished products (plywood, studs and chips) amounted to \$8,000,000, during the past 12 months, thus contributing to the overall economy of the United States, from truckers and railroads, to plywood commission brokers, etc., etc. The logs and chips exported, contribute to internal trade balances.

Environmental Quality Commission
Mr. Diamuid O'Scannlain, Director
October 24, 1973
Page 3

In summary:
1,000 feet of Logs Generates:

Mill Payroll	\$104
Loggers & Hauling Contractors	58
Local Sales & Services	54
Suppliers and service industries	42
Raw Material Turnover	117
Log sales	58
Sale of Finished Products	333
	<u>\$766.00</u>
Total Generated	<u>\$766.00</u>
Average Basic Stumpage Cost	<u>\$106.00</u>
Annual Turnover Rate Generated by 1,000 ft. of Logs	<u>7 Times</u>

(7) Western States Plywood was organized under the laws of the State of Oregon on August 21, 1951, as a Cooperative Corporation. Authorized capital stocks consists of 300 Membership Certificates of which 295 have been issued to date. Forty nine of these certificates have been repurchased by the Cooperative, leaving 246 shares outstanding.

During the twenty two years, the mill has operated, the members, all with substantial cash investments, have sacrificed several drastic wage curtailments for long periods of time, to prevent the mill from closing, during depressed conditions of the market. Of the normal work force of 240 employees, 119 are members, many of whom helped build the plant and who have put 22 years of their life with the organization. Many have retired and a good number will be considering retirement within the next few years.

Management understands the problems and hardships these individuals have been through, and also recognizes their right to continue with their jobs in their community.

It would be greatly appreciated, if your office could furnish a complete summary of just exactly what is required in order to meet all the standards necessary to bring our plant into compliance.

Sincerely,

Don Page Smith
Don Page Smith
General Manager

WESTERN STATES PLYWOOD COOPERATIVE

INTERIOR

Superior Plywood Products

EXTERIOR

P. O. BOX 86

D.F.P.A.

WESTPLYCO

PORT ORFORD, OREGON 97465

TELEPHONE 332-3711

October 18, 1973

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

R E C E I V E D

OCT 19 1973

Dept. of Environmental Quality
1234 Morrison Street
Portland, Oregon 97205

OFFICE OF THE DIRECTOR

Subject: Air Contamination Discharge
Permit application No. 0073

Attention: Mr. Diarmuid F. O'Scannlain

Dear Mr. O'Scannlain:

On September 27, 1973, our Plant Engineer and myself had the opportunity to meet with Mr. Harold H. Burkitt of your engineering Department. We had a lengthy discussion pertaining to the environmental problems of our firm and Mr. Burkitt was very helpful.

We outlined the enormous operational problems facing the organization, in attempts to continue operations of the plywood mill, the major controlling factors being the cost impact of the State and Federal Environmental control regulations combined with the depressed condition of the plywood market. The varying and unstable market has been a constant factor that this organization has lived with throughout the past twenty-two years.

With our normal work force of 240 employees, the economy and livelihood of the residents of this small community are dependent upon the continued operations of the firm.

Our personnel have spent a great deal of travel, time and expense in viewing many other mills throughout Oregon, Washington, Northern California, and in Canada, gathering data and information pertinent to our own problems so that we may proceed in an economic manner, within the means of our financial ability, to correct our problems and maintain the mill within the required standards.

We have thus far been unsuccessful in our search to find economically feasible methods to meet all the required standards. We will continue to make every effort to comply therewith, as soon as possible.

Mr. Diarmuid F. O'Scannlain
October 18, 1973
Page 2 of 2 pages

We further advise you, that it was with deep regret that on October 18, 1973, due to the continuing depressed condition of the plywood market, together with the high timber costs and related factors, we were forced to curtail our production by approximately 36%. This affected a lay-off of 80 employees, a very drastic action for our small community. Lay-offs were based upon a seniority basis and included the Plant Engineer.

Under present circumstances, we must request an extension of time for meeting our obligations relative to Environmental Control regulations, until the current depressed market conditions improves.

We trust that you will be able to grant us a reasonable extension. We will do everything in our power to comply with requirements as soon as our financial position allows. We deeply appreciate the information and help afforded by your staff.

If we can furnish additional information, please contact us at any time.

Sincerely,

Don Page Smith
Don Page Smith
General Manager

DPS/cl

cc: Harold H. Burkitt, Chief
Engineering Services Section



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

PAUL E. BRAGDON
Portland

MORRIS K. CROTHERS
Salem

ARNOLD M. COGAN
Portland

DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM OF INFORMATION

To : Environmental Quality Commission
From : Director
Subject: Agenda Item No. E, November 26, 1973, EQC Meeting
Presentation of Oregon CUP Renewal to Publishers
Paper Company

Renewal of Publishers Paper Company application for the Oregon CUP Award was approved by the Commission at its meeting in Portland on September 21, 1973.

Director O'Scannlain will make the presentation.

Presentation of Oregon CUP Renewal Plaque
to Publishers Paper
Agenda Item E - 11/26/73

The Oregon CUP Award is our highest recognition for environmental excellence. Its full name is the Oregon Cleaning Up Pollution Award and it goes only to industries that go beyond our basic pollution control requirements.

Recipients of the award have the right to use the Oregon CUP symbol on their product labels. Its purpose is to tell the consumer which products are made by "environmental good guys."

I'm particularly pleased to present this renewal plaque to Publishers Paper Company. Publishers was one of the first two industrial recipients of the award. They were the first to use the CUP symbol on their products: newsprint labels, paper bags and paper towels are now on the market with the Oregon CUP insignia.

This is our first presentation of a renewal plaque. It means Publishers Paper has not only achieved environmental excellence but maintained it throughout the succeeding year.

The initial award, presented in 1972, covered the remainder of that year and the entire year of 1973. This renewal entitles the company to the use of the Oregon CUP symbol for calendar year 1974 on their products and on the flags flying over their plants at Oregon City and Newberg.

To Mr. Williamson, Executive Vice-President of Publishers Paper, who is here to accept the award in behalf of the company, and to Publishers' entire staff, may I

present this renewal award along with hearty
congratulations and the hope that I'll be presenting
similar plaques annually for many years to come.

#



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

PAUL E. BRAGDON
Portland

MORRIS K. CROTHERS
Salem

ARNOLD M. COGAN
Portland

—
DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

To : Environmental Quality Commission

From : Director

Subject: Agenda Item No. F, November 26, 1973, EQC Meeting

Adoption of Proposed Amendments to OAR Chapter 340, Sections 25-255 through 25-290, Emission Standards for Primary Aluminum Plants

Background

On June 29, 1973, the EQC held a public hearing for the purpose of receiving testimony relevant to the proposed amendment to the Primary Aluminum Plant Regulations, OAR Chapter 340, Sections 25-255 through 25-290. Draft standards were proposed at that time which would limit emissions from all aluminum plants to 0.3 pounds of gaseous fluoride ion per ton of aluminum produced, 1.0 pound of total fluoride ion per ton of aluminum produced, and 8.0 pounds of total particulate per ton of aluminum produced.

In addition to meetings with aluminum company representatives and reviewing additional data submitted to the Department on October 24 and 25, 1973, another public hearing was held in Astoria to receive additional public testimony concerning the proposed regulations.

Discussion

The presently proposed regulation will limit the total quantity of fluoride materials, particulates emission, and visible emissions from all emission sources at primary aluminum plants.

Based upon Department staff experience, public testimony and information received, the proposed regulations have been revised to allow for fluctuation in monthly sampling data and provide a reasonable time for existing plants to achieve compliance of the proposed regulations and yet insure protection of adverse effects on plant and animal life. The Department Technical Report is attached.

Summary and Conclusions:

It is recognized that the establishment of aluminum fluoride standards based exclusively on available technical data leaves room for challenge on the grounds of both insufficient data and the number of approaches to the data's interpretation which can be taken. Certainly the Intalco aluminum plant data over the coming months may indicate significant fluctuations over that which has been available to the staff in the preparation of its findings. However, two significant factors -- unapproachable from existing available data -- should readily offset variances in statistical findings with regard to Intalco:

1.) Intalco is a converted plant and its findings have been considered in terms of newly constructed plants. It is felt reasonable to presume that the absence of any constraints associated with converting an existing plant permits sufficient engineering capability to improve on a new plant's capability;

2.) Even should a new plant be started in Oregon immediately following the adoption of these regulations, the technological changes and potentials for change in the period between when engineering ended on the Intalco installation and when engineering on any new Oregon plant would be completed are likely to improve on new plant capabilities to meet the proposed Oregon standards.

The standards proposed now are attached and can be summarized thusly:

For new plants (constructed on or after January 1, 1973):

1.) Total fluoride emissions shall not exceed one (1) pound per ton of aluminum produced, expressed as an annual average.

2.) Those emissions shall not exceed one point three (1.3) pounds per ton expressed as a monthly average.

3.) Total particulate matter emissions shall not exceed five (5) pounds particulate per ton of aluminum produced, expressed as an annual average.

4.) Total particulate emissions shall not exceed seven (7) pounds particulate per ton of aluminum produced, expressed as a monthly average.

5.) Total tons of fluoride emissions from any plant is also limited to 12.5 tons per month, with any increase above this requiring written approval by the Department.

6.) Visible emissions from any source shall not exceed ten (10) per cent opacity (Ringleman 0.5) at any time.

Compliance is to be achieved within 180 days of plant start-up.

For existing plants (constructed on or before December 31, 1973):

1.) Total fluoride emissions shall not exceed two point five (2.5) pounds per ton of aluminum produced, expressed as an annual average.

2.) Those emissions shall not exceed three point five (3.5) pounds per ton expressed as a monthly average.

3.) Total particulate emissions shall not exceed 10.0 pounds particulate per ton of aluminum produced, expressed as an annual average.

4.) Total particulate emissions shall not exceed 13.0 pounds particulate per ton of aluminum produced, expressed as a monthly average.

5.) Total fluoride emissions at existing plant sites shall not exceed 22.0 tons per month.

6.) Visible emissions from any source shall not exceed 20 per cent opacity (Ringleman 1.0) at any time.

Existing plants must submit an acceptable compliance schedule to the Department within 180 days of the effective date of the proposed regulations that demonstrate compliance will be achieved on or before January 1, 1977. Based upon a re-evaluation by the Commission in 1979, existing plants are required to comply with the proposed new plant standards on or before January 1, 1984.

Director's Recommendation:

It is recommended by the Director that OAR, Chapter 340, Sections 25-255 through 25-290 be amended as proposed herein.


DIARMUID F. O'SCANNLAIN

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY CONTROL DIVISION

November 1973

Proposed
Amendments to OAR, Chapter 340, Division 2

OAR, Chapter 340, Division 2, Sections 25-255 through 25-290 is proposed to be amended as follows:

25-255 STATEMENT OF PURPOSE.

In furtherance of the public policy of the state as set forth in ORS 449.765, it is hereby declared to be the purpose of the Commission in adopting the following regulations to:

- (1) Require, in accordance with a specific program and timetable for each operating primary aluminum plant the highest and best practicable collection, treatment and control of atmospheric pollutants emitted from primary aluminum plants through the utilization of technically feasible equipment, devices and procedures necessary to attain and maintain desired air quality.
- (2) Require effective monitoring and reporting of emissions, ambient air levels of fluorides, flouride content of forage and other pertinent data. The Department will use these data, in conjunction with observation of conditions in

the surrounding areas, to develop emission and ambient air standards and to determine compliance therewith.

- (3) Encourage and assist the aluminum industry to conduct a research and technological development program designed to reduce emissions, in accordance with a definite program, including specified objectives and time schedules.
- (4) Establish standards which based upon presently available technology, are reasonably attainable with the intent of revising the standards as needed when new information and better technology are developed.

25-260 DEFINITIONS.

- (1) All Sources - Means sources including, but not limited to, the reduction process, alumina plant, anode plant, anode baking plant, cast house, and collection, treatment and recovery systems.
- (2) Ambient Air - The air that surrounds the earth, excluding the general volume of gases contained within any building or structure.
- (3) Annual Average - Means the arithmetic average of the twelve most recent monthly averages reported to the Department.

- [(3)] (4) Anode Baking Plant - Means the heating and sintering of pressed anode blocks in oven-like devices, including the loading and unloading of the oven-like devices.
- [(4)] (5) Anode Plant - Means all operations directly associated with the preparation of anode carbon except the anode baking operation.
- [(5)] (6) Commission - Means Environmental Quality Commission.
- [(6)] (7) Cured Forage - Means hay, straw, ensilage that is consumed or is intended to be consumed by livestock.
- [(7)] (8) Department - Means Department of Environmental Quality.
- [(8)] (9) Emission - Means a release into the outdoor atmosphere of air contaminants.
- [(9)] (10) Emission Standard - Means the limitation on the release of a contaminant or multiple contaminants to the ambient air.
- [(10)] (11) Fluorides - Means matter containing fluoride ion.
- [(11)] (12) Forage - Means grasses, pasture and other vegetation that is consumed or is intended to be consumed by livestock.
- (13) Monthly Average - Means the arithmetic average of the three best valid test results obtained during any calendar month, utilizing test methods and procedures approved by the Department.
- (14) Opacity - Means the degree to which an emission reduces transmission of light or obscures the view of an object in the background.

- [(12)] (15) Particulate Matter - Means a small, discrete mass of solid or liquid matter, but not including uncombined water.
- [(13)] (16) Primary Aluminum Plant - Means those plants which will or do operate for the purpose of or related to producing aluminum metal from aluminum oxide (alumina).
- [(14)] (17) Pot Line Primary Emission Control System[s] - Means the system which collects and removes contaminants prior to the emission point. If there is more than one such system, the primary system is that system which is most directly related to the aluminum reduction cell.
- [(15)] (18) Regularly Scheduled Monitoring - Means sampling and analyses in compliance with a program and schedule approved pursuant to Section [25-275] 25-280.
- (19) Ringelmann Smoke Chart - Means the Ringelmann Smoke Chart with instructions for use as published in May 1967 by the U.S. Department of Interior, Bureau of Mines
- [(16)] (20) Standard Dry Cubic Foot of Gas - Means that amount of the gas which would occupy a cube having dimensions of one foot on each side, if the gas were free of water vapor at a pressure of 14.7 P.S.I.A. and a temperature of 60°F.

25-265 EMISSION STANDARDS.

- [(1)] Visible emissions from all sources shall not exceed twenty (20) percent opacity (Ringelmann 1).

(2) Each primary aluminum plant shall proceed promptly with a program to comply with this regulation. A proposed schedule of compliance shall be submitted by each plant to the Commission not later than one hundred and eighty (180) days after the effective date of this regulation. After receipt of the proposed schedule, the State shall establish a schedule of compliance for each plant. Such schedule shall include the date by which full compliance must be achieved but, in no case, shall full compliance be later than January 1, 1975.]

(1) The exhaust gases from each primary aluminum plant constructed on or after January 1, 1973, shall be collected and treated as necessary so as not to exceed the following minimum requirements:

(a) Total fluoride emissions from all sources shall not exceed: (1) a monthly average of 1.3 pounds of fluoride ion per ton of aluminum produced; and (2) an annual average of 1.0 pound of fluoride ion per ton of aluminum produced; and (3) 12.5 tons of fluoride ion per month from any single aluminum plant without prior written approval by the Department.

(b) The total of organic and inorganic particulate matter emissions from all sources shall not exceed: (1) a monthly average of 7.0 pounds of particulate per ton of aluminum produced;

and (2) an annual average of 5.0 pounds of particulate per ton of aluminum produced.

(c) Visible emissions from any source shall not exceed ten (10) percent opacity or 0.5 on the Ringelmann Smoke Chart at any time.

(2) Each primary aluminum plant constructed and operated after January 1, 1973, shall be in full compliance with these regulations no later than 180 days after completing potroom start-up and shall maintain full compliance thereafter.

(3) The exhaust gases from each primary aluminum plant constructed on or before January 1, 1973, shall be collected and treated as necessary so as not to exceed the following minimum requirements:

(a) 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, and

(2) An annual average of 2.5 pounds of fluoride ion per ton of aluminum produced, and

(3) 22.0 tons of fluoride ion per month from any single aluminum plant without prior written approval by the Department.

(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, and

(2) An annual average of 10.0 pounds of particulate per ton of aluminum produced.

(c) Visible emissions from any source shall not exceed 20 percent opacity or 1.0 on the Ringelmann Smoke Chart at any time.

(4) Each existing primary aluminum plant shall proceed promptly with a program to comply as soon as practicable with these regulations. A proposed program and implementation plan shall be submitted by each plant to the Department not later than 180 days after the effective date of these amended regulations. The Department shall establish a schedule of compliance for each existing primary aluminum plant. Such schedule shall include the dates by which compliance shall be achieved but, in no case, shall full compliance be later than the following dates:

(a) Existing plants shall comply with emission standards in 25-265(3) by January 1, 1977;

(b) Existing plants shall comply with emission standards in 25-265(1) by January 1, 1984, pending a review by the Commission as described in 25-265(5).

(5) The Commission shall review during calendar year 1979 the feasibility of applying section 25-265(4)(b) based on their conclusions regarding:

- (a) the then current state of the art of controlling emissions from primary aluminum plants;
- (b) the progress in controlling and reducing emissions exhibited at that time by then existing aluminum plants;
- (c) the need for further emissions control at those facilities based on discernible environmental impact of emissions up to that time.

25-270

SPECIAL PROBLEM AREAS.

The Department may require more restrictive emission limits than the numerical emission standards contained in Section 25-265 for an individual plant upon a finding by the Commission that the individual plant is located or is proposed to be located in a special problem area. Such more restrictive emission limits for special problem areas may be established on the basis of allowable emissions per ton of aluminum produced or total maximum daily emissions to the atmosphere, or a combination thereof, and may be applied on a seasonal or year-round basis.

[25-270]

25-275

HIGHEST AND BEST PRACTICABLE TREATMENT AND CONTROL REQUIREMENT.

[Notwithstanding the specific emission limits set forth in Section 25-265 of these regulations, in] In order to

maintain the lowest possible emissions of air contaminants, the highest and best practicable treatment and control currently available shall in every case be provided [.] but this section shall not be construed to allow emissions to exceed the specific emission limits set forth in Section 25-265.

[25-275]

25-280 MONITORING.

(1) Each primary aluminum plant constructed and operated on or before January 1, 1973, shall submit, within sixty (60) days after [an] the effective date of [this] these amended regulations, a detailed, effective monitoring program. [The proposed program shall be subject to revision and approval by the Commission.] The program shall include regularly scheduled monitoring and testing by the plant of [for] emissions of gaseous and particulate fluorides and total particulates. The plant shall take and test a minimum of three (3) representative emission samples each calendar month. The samples shall be taken at specified intervals.

A schedule for measurement of fluoride levels in forage and ambient air shall be submitted. The Department shall establish a monitoring program for the plant which shall be placed in effective operation within ninety (90) days after written notice to the plant by the Department of the established

monitoring program.

- (2) [Necessary sampling and analysis equipment shall be ordered or otherwise provided for within thirty (30) days after the monitoring program has been approved in writing by the Commission. The equipment shall be placed in effective operation in accordance with the approved program within ninety (90) days after delivery.] Each primary aluminum plant proposed to be constructed and operated after January 1, 1973, shall submit a detailed preconstruction and post-construction monitoring program as a part of the air contaminant discharge permit application.

[25-280]

25-285

REPORTING.

- (1) Unless otherwise authorized in writing by the [Commission] Department, data shall be reported by each primary aluminum plant within thirty (30) days of the end of each calendar month for each source and station included in the approved monitoring program as follows:
- (a) Ambient air: Twelve-hour concentrations of gaseous fluoride in ambient air expressed in micrograms per cubic meter of air [.] and in parts per billion (ppb). Also 28 day test results using calcium formate ("limed") paper expressed in micrograms of fluoride per centimeter squared per cubic meter ($\mu\text{g}/\text{cm}^2/\text{m}^3$).

- (b) Forage: Concentrations of fluoride in forage expressed in parts per million (ppm) of fluoride on a dried weight basis.
- (c) Particulate emissions: Results of all emission sampling conducted during the month for particulates, expressed in grains per standard dry cubic foot, in pounds per day, and in pounds per ton of aluminum produced. The method of calculating pounds per ton shall be as specified in the approved monitoring programs. Particulate data shall be reported as total particulates and percentage of fluoride ion contained therein.
- (d) Gaseous emissions: Results of all sampling conducted during the month for gaseous fluorides. All results shall be expressed as hydrogen fluoride in micrograms per cubic meter [on a volume basis] and pounds per day of hydrogen fluoride[.], and in pounds per ton of aluminum produced.
- (e) Other emission and ambient air data as specified in the approved monitoring program.
- (f) Changes in collection efficiency of any portion of the collection or control system that resulted from equipment or process changes.

(2) Each primary aluminum plant shall furnish, upon request of the [Commission] Department, such other data as the [Commission] Department may require to evaluate the plant's emission control program. Each primary aluminum plant shall report the value of each emission test performed during that reporting period, and shall also immediately report abnormal plant operations which result in increased emission of air contaminants.

(3) [Prior to construction, installation or establishment of a primary aluminum plant, a notice of construction shall be submitted to the Commission.] No person shall construct, install, establish or operate a primary aluminum plant without first applying for and obtaining an air contaminant discharge permit from the Department. Addition to, or enlargement or replacement of, a primary aluminum plant or any major alteration [therein] thereof shall be construed as construction, installation or establishment.

[25-285 SPECIAL STUDIES.

(1) Special studies, covering the areas in subparagraphs (a), (b) and (c) of this subsection shall be conducted at each primary aluminum plant.

(a) Emissions of particulates from all sources within the plant, including size distribution

and physical and chemical characteristics where feasible, and a separation of fluoride and non-fluoride particulate.

(b) Plume opacity from all sources within the plant, including its relationship to grain loading, particulate characteristics, particule emissions in pounds per ton of production and stack characteristics.

(c) Emissions of sulfur dioxide, hydrocarbons, carbon monoxide, chlorine and chlorides, oxides of nitrogen, ozone, water vapor, and fluorides from all sources.

(2) Each primary aluminum plant shall submit a program for conducting the aforesaid special studies to the Commission for approval within sixty (60) days after the effective date of this regulation.

(3) The results of the special studies shall be submitted to the Commission not later than eighteen (18) months after approval of the special studies program.]

[25-290 REVISION OF EMISSION STANDARDS.

(1) A public hearing may be called on or before ninety (90) days after submission of the results of the special studies to evaluate the special studies, current technology and adequacy of these regulations and to make revisions to the regulations as necessary.

(2) The Commission may, after public hearing, establish more restrictive regulations for new primary aluminum plants or for plants that expand existing facilities. Data documenting projected emissions and changes in or effects upon air quality that would result from the construction or expansion, must be submitted to the Commission, together with plans and specifications, in accordance with Section 25-280(3).]

STATEMENT

DIARMUID F. O'SCANNLAIN, Director
Oregon Department of Environmental Quality

News Conference - November 20, 1973

Announcing Proposed Standards for Aluminum Plants

THIS COMING MONDAY, NOVEMBER 26, THE ENVIRONMENTAL QUALITY COMMISSION WILL TAKE FINAL ACTION ON ENVIRONMENTAL STANDARDS FOR ALUMINUM PLANTS. HEARINGS HAVE BEEN HELD IN PORTLAND, MEDFORD AND ASTORIA AND BOTH COMMISSION MEMBERS AND DEQ STAFF HAVE PARTICIPATED IN EACH HEARING.

BEFORE OUR HEARINGS BEGAN, I RECOMMENDED A STANDARD OF ONE POUND OF FLUORIDE EMISSION PER TON OF ALUMINUM. THE ESSENCE OF MUCH INDUSTRY TESTIMONY WAS THAT SUCH A STANDARD WAS IMPOSSIBLE TO MEET; THAT IS, UNTIL THE INTALCO ALUMINUM PLANT IN FERNDAL, WASHINGTON, BEGAN TO APPROACH THAT STANDARD WITH GREAT CONSISTENCY.

BASED ON THE RECORD OF THESE HEARINGS I WILL RECOMMEND TO THE COMMISSION THAT THE SO-CALLED "ONE POUND STANDARD" BE MAINTAINED FOR NEW PLANTS WITH SLIGHT MODIFICATIONS TO TAKE INTO ACCOUNT THE PROBLEM AREAS WHICH WERE REVEALED IN THE HEARINGS. WITH RESPECT TO EXISTING PLANTS IT IS MY CONCLUSION THAT A CONSIDERABLY LONGER PERIOD OF TIME, UP TO TEN YEARS, MUST BE PERMITTED IN ORDER TO HAVE SUCH PLANTS REACH THE ONE POUND GOAL.

SPECIFICALLY I AM RECOMMENDING THAT OUR ORIGINAL PROPOSAL OF A MAXIMUM OF ONE POUND OF FLUROIDE PER TON OF ALUMINUM PRODUCED BE MODIFIED TO BECOME AN AVERAGE OF ONE POUND PER TON ON AN ANNUAL BASIS. THIS IS BEST DESCRIBED AS A "ROLLING 12 MONTH AVERAGE" AS OPPOSED TO THE ORIGINAL PROPOSAL OF THE ONE POUND MAXIMUM. UNDER THE ROLLING AVERAGE CONCEPT, THE MAXIMUM AMOUNT THAT WOULD BE PERMITTED IN ANY GIVEN MONTH WOULD BE 1.3 POUNDS PER TON.

IN MY VIEW THE "ROLLING 12 MONTH AVERAGE" IS WITHIN REACH OF THE ALUMINUM INDUSTRY, WHEREAS I AM NOT CONVINCED, BASED ON THE RECORD, THAT A ONE POUND MONTHLY MAXIMUM IS ATTAINABLE IN THE FORESEEABLE FUTURE. OUR REVISED STANDARD REQUIRES ESSENTIALLY THE SAME LEVEL OF FLOURIDE CONTROL THAT HAS BEEN ACHIEVED FOR THE LAST SIX MONTHS AT THE INTALCO PLANT AT FERNDALE, WASHINGTON. CERTAINLY IF A CONVERTED PLANT SUCH AS INTALCO CAN MEET THIS STANDARD FOR THE FIRST SIX MONTHS AFTER ITS UPGRADING, A NEWLY CONSTRUCTED PLANT, HAVING THE BENEFIT OF ADDITIONAL TECHNOLOGICAL EXPERIENCE TO DRAW FROM, CAN BE EXPECTED TO MEET THE DEQ MARK ON A REGULAR BASIS.

I AM, OF COURSE, AWARE THAT AMAX ALUMINUM COMPANY WHICH HAS FILED AN APPLICATION FOR A PERMIT TO BUILD AT WARRENTON, WILL ARGUE VOCIFEROUSLY THAT IT CANNOT MEET ANY STANDARD WHICH SETS A LIMIT LESS THAN 1.5 POUNDS MAXIMUM IN ANY MONTH. ON THIS POINT IT APPEARS THAT AMAX AND THE DEPARTMENT OF ENVIRONMENTAL QUALITY MUST RESPECTFULLY DISAGREE.

THE STANDARD WE ARE PROPOSING TODAY IS A STANDARD WHICH WE FEEL, BASED UPON THE RECORD OF THESE HEARINGS, IS WITHIN REACH OF THE ALUMINUM INDUSTRY IF IT IS WILLING TO COMPLETE THE EXTRA EFFORT NECESSARY TO ACHIEVE THAT GOAL. I CERTAINLY DO NOT BELIEVE THAT DEQ SHOULD USE THE RULE-MAKING PROCESS TO ATTACK INDIRECTLY WHAT MUST BE CONFRONTED OPENLY AND ABOVE BOARD. WHETHER OR NOT THE AMAX PLANT SHOULD BE BUILT IN WARRENTON IS A MATTER ON WHICH THE DEQ WILL TAKE A POSITION ONLY AFTER A CAREFUL ANALYSIS OF ITS APPLICATION AND FULL HEARINGS HAVE BEEN HELD IN JANUARY. TODAY'S ANNOUNCEMENT SIMPLY SAYS THAT WE ARE HOLDING OUT FOR THE TOUGHEST ENVIRONMENTAL STANDARDS IN THE COUNTRY SO FAR AS THE ALUMINUM INDUSTRY IS CONCERNED BUT THESE STANDARDS ARE NOT IMPOSSIBLE TO REACH.

ONE OTHER CHANGE FOR NEW PLANTS IS I'M ALSO RECOMMENDING A TIGHTENING OF PARTICULATE STANDARDS FROM OUR ORIGINAL PROPOSAL OF 8 POUNDS PER TON TO A 12 MONTH AVERAGE OF 5 POUNDS PER TON AND A MAXIMUM MONTHLY AVERAGE OF 7 POUNDS. THE MAXIMUM LEVELS FOR VISIBLE EMISSIONS WOULD BE 10% OPACITY.

FOR THE PLANTS NOW OPERATING IN OREGON, I'M RECOMMENDING A STEP-BY-STEP PHASING IN:

BY JANUARY 1, 1977, EXISTING PLANTS WOULD BE REQUIRED TO ACHIEVE A MAXIMUM MONTHLY AVERAGE OF 3.5 POUNDS PER TON AND A YEARLY AVERAGE OF 2.5; PARTICULATE LEVELS BY THAT 1977 DATE WOULD HAVE TO BE DOWN TO 13 POUNDS MONTHLY MAXIMUM AND 10 POUNDS ANNUAL AVERAGE; VISIBLE EMISSIONS COULD NOT GO OVER TWENTY PER CENT OPACITY.

TEN YEARS FROM NOW, BY THE BEGINNING OF 1984, THE GOAL IS FULL COMPLIANCE WITH THE ONE POUND STANDARD, BUT WE EXPECT TO TAKE ANOTHER LOOK IN FIVE YEARS AT THE FEASIBILITY OF ACHIEVING THAT GOAL. BASED ON OUR 1979 REVIEW, WE'LL THEN SET SPECIFIC COMPLIANCE SCHEDULES FOR THE NEXT STEPS.

THESE INTERIM STANDARDS CAN BE MET BY THE MARTIN-MARIETTA PLANT AT THE DALLES WITH THEIR PRESENT LEVEL OF FLUORIDE EMISSION CONTROL. THE STANDARD WOULD REQUIRE ABOUT 20 PERCENT REDUCTION OF PARTICULATE EMISSIONS FROM PRESENT LEVELS AT THAT PLANT.

REYNOLDS METALS AT TROUTDALE, WITH IMPROVEMENTS IN THEIR CONTROL SYSTEM WHICH THEY HAVE ALREADY PLANNED TO MAKE, IS EXPECTED TO BE ABLE TO COMPLY WITH THE PROPOSED PARTICULATE STANDARDS BUT WILL NEED AN ADDITIONAL 12 PERCENT REDUCTION IN TOTAL FLUORIDE EMISSIONS.

BOTH PLANTS WILL BE EXPECTED TO MEET EACH PART OF THE STANDARD AS SOON AS PRACTICABLE. THE 1977 DATE IS AN OUTSIDE LIMIT.

IN "SPECIAL PROBLEM AREAS," WHERE LOCAL CONDITIONS WARRANT, THE PROPOSED RULES WOULD PERMIT THE COMMISSION TO SET EVEN STRICTER LIMITS THAN THOSE PROPOSED HERE. THIS ALSO COULD AFFECT MARTIN-MARIETTA'S TIMETABLE.

WE WILL REQUIRE MONITORING NOT ONLY OF STACK EMISSIONS AND RELATED POLLUTANT CONCENTRATIONS IN THE AMBIENT AIR, BUT ALSO COLLECTING AND ANALYZING FORAGE SAMPLES TO MEASURE EFFECTS ON PLANT LIFE.

I EMPHASIZE THAT WE ARE REQUIRING THE HIGHEST AND BEST PRACTICABLE TREATMENT AND CONTROL CURRENTLY AVAILABLE. THAT MEANS ANY PART OF THESE STANDARDS COULD BE MADE TIGHTER STILL, IF TECHNOLOGY IN THE FUTURE MAKES A TIGHTER REQUIREMENT FEASIBLE AND PRACTICABLE. IT ALSO MEANS THAT AN EXISTING PLANT SUCH AS MARTIN-MARIETTA CAN BE REQUIRED TO MEET AN IMMEDIATE DEADLINE WHERE IT HAS THE CAPABILITY TO ACHIEVE REQUIRED LEVELS SOONER THAN 1977.

THIS GIVES YOU IN SUMMARY WHAT I AM RECOMMENDING TO THE COMMISSION. I HAVE SAID PUBLICLY, AND SO HAS GOVERNOR McCALL, THAT IF A NEW ALUMINUM PLANT IS BUILT IN OREGON IT'S GOING TO HAVE TO BE THE CLEANEST IN THE WORLD. THESE STANDARDS ARE DESIGNED TO CARRY OUT THAT INTENT.

I ACKNOWLEDGE THAT THERE ARE LIMITATIONS TO THE DATA. CERTAIN ASSUMPTIONS, ON WHICH REASONABLE AND KNOWLEDGEABLE MEN MAY DIFFER, COME INTO PLAY IN ANY SUCH ANALYSIS.

ONE MAJOR CONCLUSION FROM DATA PRESENTED TO US IS THAT THERE IS NO LEVEL OF FLUORIDE IN THE AIR THAT DEQ CAN CERTIFY AS "SAFE." ADVERSE EFFECTS OF FLUORIDE POLLUTION HAVE BEEN DOCUMENTED AT VERY LOW CONCENTRATIONS. THEREFORE, IT'S THE DUTY OF THE DEPARTMENT OF ENVIRONMENTAL QUALITY TO REQUIRE, AS WE DO IN ALL OTHER STANDARDS, THAT AIR CONTAMINANTS BE KEPT TO THE LOWEST LEVELS PRACTICABLE. THIS MEANS SETTING THE MOST STRINGENT STANDARDS POSSIBLE, AND THIS IS THE BASIS FOR THE STANDARD I AM PRESENTING TODAY.

#



DEPARTMENT OF ENVIRONMENTAL QUALITY

Technical Report

EMISSION STANDARDS FOR PRIMARY ALUMINUM PLANTS

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

The Department of Environmental Quality (DEQ) has prepared this report describing some of the technical considerations that prompted the proposed emissions standards for primary aluminum plants, presented to the Environmental Quality Commission on November 26, 1973. Its contents are intended to serve as background information for interested parties, especially regarding the statistical study of existing aluminum plant emissions. It should not be construed as a summary of all the information considered by the Department to be pertinent to the adoption of the standards, and attention is directed to the voluminous record pursuant to the adoption of these standards, which has been accumulated during the last two years.

STATISTICAL STUDY

Prompted by testimony received, and because the proposed standards for primary aluminum plant emissions are stringent, Department staff undertook the statistical evaluation described below. Its predictions of feasible emissions performance under various conditions are not presented as certainties, but rather as reasonable probabilities. Necessary assumptions have been identified and discussed.

One of the primary reasons for pursuing a statistical analysis with available data is the testimony by an aluminum company that the inherent variability in any set of emissions test data must be considered in determining an emissions

standard which "shall not be exceeded." The analysis undertaken below and the resulting recommendations makes possible specific consideration of the inherent variability of test data in the standard proposed for adoption by the Environmental Quality Commission.

Data Base

Emissions data for aluminum plants is not plentiful, especially as a continuous series covering an extended period of years. Oregon's two existing plants have reported their emissions continuously to the Department since March 1971. The Martin-Marietta (MM) plant at The Dalles, Oregon has reported total plant emissions for over 30 consecutive months, usually as the average of 2 - 3 emissions tests each month. The Reynolds Metals Company (RMC) plant at Troutdale, Oregon has similarly reported a monthly average (usually of 3 - 4 tests), but was shut down completely for 13 months in 1971-72. Data for these two plants are summarized in Tables I and II.

A third set of emissions data available to the Department described recent total fluoride and total particulate emissions at the Intalco aluminum plant at Ferndale, Washington. This series consists of six consecutive monthly averages (April 1973 to September 1973), following major improvements in emissions control equipment at Intalco last spring. Each monthly average was calculated from 3 - 9 tests conducted on the primary emission control system and the same number conducted on the secondary control system. Intalco emissions data as reported to the Washington Department of Ecology are summarized in Table III.

TABLE I

TOTAL FLUORIDE EMISSIONS (LBS FLUORIDE/TON OF ALUMINUM PRODUCED)
FROM EXISTING PLANTS IN OREGON ¹

Month- Year	MARTIN MARIETTA ²			REYNOLDS METALS CO. ³			Remarks
	Primary System	Secondary System	Total Fluoride	Primary System	Secondary System	Total Fluoride	
9-1973	0.03	1.37	1.40				
8-1973	0.036	2.83	2.87	2.97	3.36	6.35	
7-1973	0.048	2.43	2.49	2.93	3.32	6.25	
6-1973	0.018	1.49	1.51	3.03	2.3	5.33	
5-1973	0.033	1.68	1.71	3.07	5.8	8.97	
4-1973	0.031	1.00	1.031	3.17	6.1	9.87	
3-1973	0.014	1.35	1.364	4.83	5.10	9.93	
2-1973	0.040	0.79	0.830	5.48	6.2	8.09	
1-1973	0.034	2.25	2.284	5.63	11.2	16.8	
12-1972		Freeze -----		3.23	4.9	8.13	
11-1972	0.049	3.5	3.55	5.05	9.43	14.48	
10-1972	0.010	3.4	3.41				
9-1972	0.011	4.64	4.651				
8-1972	0.017	3.10	3.117				
7-1972	0.036	4.23	4.266				
6-1972	0.032	1.335	1.367				
-1972	0.018	1.96	1.978				
4-1972	0.017	1.47	1.487				Martin-Marietta reduces
3-1972	0.067	1.37	1.44				primary control system
2-1972	0.929	Freeze	-				emissions to near zero.
1-1972	1.38	1.579	2.959				
12-1971	1.272	1.58	2.852				
11-1971	1.32	1.129	2.449				
10-1971	0.748	1.87	2.618	6.94	11.61	18.55	
9-1971	0.816	2.01	2.826	7.65	9.08	16.73	
8-1971	1.362	2.09	3.452	7.20	11.50	18.70	
7-1971	0.824	2.07	2.894	6.27	7.39	13.66	
6-1971	1.696	1.69	3.386	8.04	10.30	18.34	
5-1971	0.164	1.26	1.424	7.95	6.37	14.32	
4-1971	0.879	0.92	1.799	7.04	-	-	
3-1971	1.115	1.23	2.345	8.86			

REYNOLDS
SHUT DOWN

1. Monthly average emissions obtained from monitoring data required by Oregon Department of Environmental Quality.
2. Located at The Dalles, Oregon.
3. Located at Troutdale, Oregon.

TABLE II

TOTAL PARTICULATE EMISSIONS (LBS PARTICULATE/TON OF ALUMINUM PRODUCED) FROM EXISTING PLANTS IN OREGON¹

Month- Year	² MARTIN MARIETTA			³ REYNOLDS METALS CO.			Remarks
	Primary System	Secondary System	Total Particulate	Primary System	Secondary System	Total Particulate	
9-1973	0.25	8.4	8.65				
8-1973	0.26	14.2	14.42	8.8	7.8	16.6	
7-1973	0.33	9.6	9.93	7.8	9.9	17.7	
6-1973	0.14	6.56	6.70	8.9	6.7	15.6	
5-1973	0.26	8.7	8.96	9.1	8.9	18.0	
4-1973	0.23	7.45	7.68	7.3	18.2	25.5	
3-1973	0.11	8.3	8.41	15.5	14.2	29.7	
2-1973	0.28	6.4	6.68	13.1	10.5	23.7	
1-1973	0.26	8.2	8.46	16.9	13.8	30.7	
12-1972		Freeze		9.27	7.49	15.97	
11-1972	0.28	11.6	11.88	12.57	7.49	20.06	
10-1972	0.053	8.3	8.35				
9-1972	0.054	11.4	11.45				
8-1972	0.04	11.6	11.64				
7-1972	0.19	17.6	17.79				
6-1972	0.024	10.5	10.524				
5-1972	0.25	10.6	10.85				
4-1972	0.15	11.0	11.15				
3-1972	0.165	9.7	9.87				
2-1972	8.3	Freeze					Martin-Marietta reduces primary control system emissions to near zero.
1-1972	11.0	11.35	22.35				
12-1971	10.7	16.9	27.6				
11-1971	9.6	11.4	21.0				
10-1971	6.22	12.2	18.4	22.49	14.41	36.90	
9-1971	4.7	13.1	17.8	20.42	11.36	31.78	
8-1971	10.4	12.3	22.7	25.13	12.94	38.07	
7-1971	10.5	16.0	26.5	21.14	13.99	35.13	
6-1971	9.85	12.63	22.48	22.25	13.16	35.41	
5-1971	6.25	9.79	16.04	20.14	11.73	31.87	
4-1971	7.37	7.0	14.37	20.85	-	-	
3-1971	10.59	8.40	18.99	24.38	-	-	

REYNOLDS
SHUT DOWN

1. Monthly average emissions obtained from monitoring data required by DEQ.
2. Located at The Dalles, Oregon
3. Located at Troutdale, Oregon

TABLE III

Total Fluoride and Total Particulate Emissions (lbs/ton of aluminum produced)
at INTALCO¹

Month - Year	Gaseous Fluoride (lb/ton AL)	Total Fluoride (lb/ton AL)	Total Particulate (lb/ton AL)
4 - 1973	0.95	1.27	1.93
5 - 1973	0.45	0.757	3.83
6 - 1973	0.84	1.448	4.43
7 - 1973	0.25	0.71	3.47
8 - 1973	0.26	1.017	5.32
9 - 1973	0.26	1.00	5.33

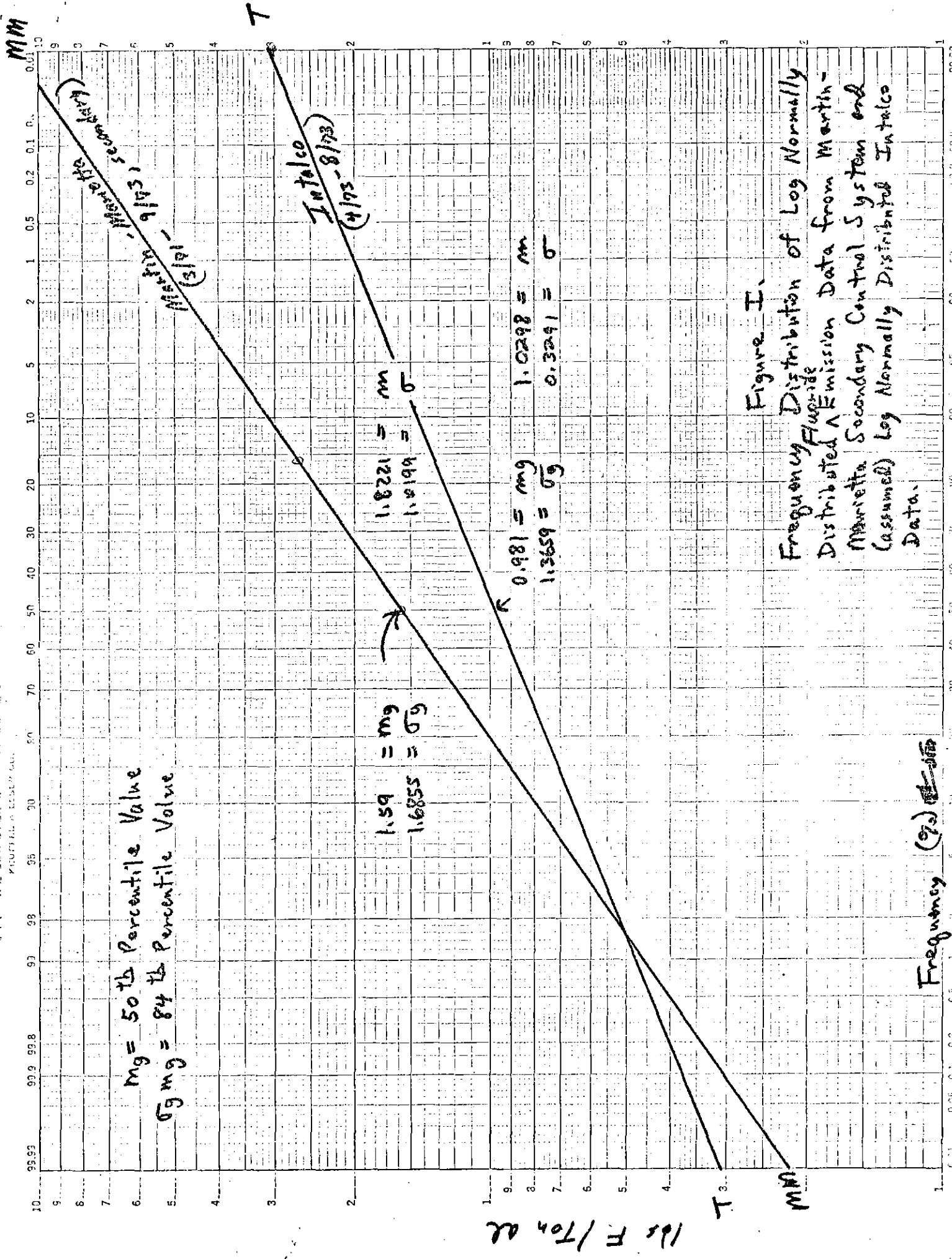
¹ Monthly average emissions obtained from monitoring data reported to Washington Department of Ecology. Intalco plant is located in Ferndale, Washington.

Because of its prior monitoring programs, the Oregon Department of Environmental Quality has obtained one of the longest continuously reported series of emission data from one of its two existing aluminum plants (Martin-Marietta plant at The Dalles, Oregon). In Appendix A, the 64 individual data points which make up this series are evaluated and found to exhibit log normal distribution (these data are graphically represented in Figure I, Line MM). The other analyses in this report are performed on monthly averages of emissions, as reported to regulatory agencies in Oregon or Washington state and listed in Tables I - III. For Martin-Marietta, the 29 monthly averages of the secondary system only were used in subsequent analyses, in order to preserve series length but make it more representative of recent performance.¹ For Reynolds, the 10 monthly averages reported since the plant was re-started up in November 1972, are used in analyses below. For Intalco, 6 monthly averages have been reported since control system improvements were completed last spring. The resulting data indicates that this plant has consistently achieved emissions lower than have been publicly reported by any other aluminum plant, to the best of our knowledge.

Assumptions

1. There is enough data available to undertake a statistical analysis. Statisticians prefer to work with data populations

1 Since the improvement of the Martin-Marietta primary system in the spring of 1972, 96-99% of the total emissions of fluoride and particulates have come from the secondary system, so that neglect of primary system emissions would only underestimate total emissions by 1 - 3%.



Mg = 50 lb Percentile Value
 59 mg = 84 lb Percentile Value

Figure I.
 Frequency Distribution of Log Normally Distributed Fluoride Emission Data from Martina-Marietta Secondary Control System and (assumed) Log Normally Distributed Intalco Data.

which include large numbers of individual data points, while the analysis described below is forced to consider populations of less than one hundred individual measurements. While this does not preclude such an analysis, it suggests caution in interpreting the results. One indicator of the reasonableness of these results is their close agreement with a projection by one aluminum company of what they believe is a reasonable guarantee of the company's future emissions performance. In any event, the data are the latest and best available, and the statistical analysis is presented in the same spirit--as the best effort of the Department, based on available data, to describe in statistical terms what aluminum plants can achieve in the way of emissions control.

2. The emissions test data distribution from aluminum plants is log normal. Appendix A of this report describes a statistical analysis of Martin-Marietta emissions data--the longest continuous series (64 individual measurements) of such data available to our knowledge--which concludes that the data is log normally distributed. Alcoa, Inc. has supplied data to the Department about the emissions from their plant at Wenatchee, Washington, in the form of frequency distribution plots on log probability graph paper which indicate that they, too, consider emissions test data to be log normally distributed. The hearing record contains a letter from Dr. J. C. Schwegmann of Kaiser Aluminum in which he describes certain emissions data as exhibiting "approximately normal distribution" (as distinct from log normal distribution). However, his interpretation

appears to be based on visual inspection without a detailed analysis of the type carried out in Appendix A. It also refers to considerably fewer samples, and samples which come from more than one plant. Moreover, a log normal distribution is not uncommon for a series of emissions tests performed at a single source or facility over time. Thus, for purposes of this analysis we have assumed that any series of carefully collected emissions data from a single aluminum plant will exhibit log normal distribution. We have further assumed that the series of monthly averages of several emissions tests will also exhibit log normal distribution, although the relatively small amount of monthly data available may preclude a conclusive test of this assumption at this time.

Analytical Concepts

For each of the three existing aluminum plants evaluated, their particular series of emissions data was first analyzed to determine the arithmetic mean (m) and the arithmetic standard (σ) for that series, using the following equations:

$$m = \frac{\sum_{i=1}^n x_i}{n} \quad (1)$$

$$\sigma = \sqrt{\frac{\sum_{i=1}^n x_i^2 - n(m)^2}{n-1}} \quad (2)$$

where x_i = individual data point in the series

n = the number of data points in the series.

The arithmetic mean indicates the average emissions exhibited by that plant, while the arithmetic standard deviation (σ) is the basic statistical indicator of how much any series of data "spreads out" around its mean (m)--i.e., an indicator of the variability of the data.

Because Martin-Marietta's total fluoride emissions were found to be log normally distributed, they can be represented as a straight line on log probability graph paper as shown in Figure I (and on page 11 of Appendix A). From the line, two other important statistical parameters can be obtained directly, from the 50th and 84th percentile values on that line: the geometric mean (m_g); and the geometric standard deviation (σ_g).

$$m_g = 50\text{th percentile} \quad (3)$$

$$\sigma_g = \frac{84\text{th percentile}}{50\text{th percentile}} \quad (4)$$

The geometric mean (m_g) represents the approximate value not exceeded by 50% of the individual data points in the data series, while the geometric standard deviation (σ_g) is again a measure of the spread of the data about the geometric mean. Equations (5) and (6) below can be used to calculate the geometric mean and the geometric standard deviation, if the arithmetic mean and arithmetic standard deviation are known.¹

$$\sigma_g = \exp \left[\ln^2 \left(\frac{\sigma^2}{m^2} + 1 \right) \right] \quad (5)$$

$$m_g = \frac{m}{\exp(0.5 \ln^2 \sigma_g)} \quad (6)$$

1 A Mathematical Model for Relating Air Quality Measurements to Air Quality Standards; Larsen, Ralph I., EPA publication AP-89, p. 10

next line

Conversely, equations (5) and (6) above can be solved so that the geometric mean and geometric standard deviation can be used to calculate the arithmetic mean and the arithmetic standard deviation, as shown in equations (7) and (8) below.

$$m = m_g \left[\exp(0.5 \ln^2 \sigma_g) \right] \quad (7)$$

$$\sigma = \left\{ \exp \left[2(\ln^2 \sigma_g + \ln m_g) \right] - m_g^2 \left[\exp(0.5 \ln^2 \sigma_g) \right]^2 \right\}^{\frac{1}{2}} \quad (8)$$

This means that for a log normal distribution of data, the calculated arithmetic mean (m) and arithmetic standard deviation (σ), can be used to determine the geometric mean (m_g) and geometric standard deviation (σ_g). These, in turn, afford two points on the frequency distribution line--the 50th and 84th percentile points--from which the entire line may be reproduced. Conversely, starting from the straight line frequency distribution, first the geometric and then the arithmetic means and standard deviations can be obtained. It should be emphasized that the resulting parameters will represent real situations only if the data is log normally distributed.

The fact that the "line of best fit," defined as the curve which most nearly approximates all of the data points in the frequency distribution, is linear (when plotted on log probability paper) is very useful in describing present or predicted aluminum plant emissions. As described above, from these straight line graphs we can derive the following four parameters of use in characterizing aluminum plant emissions: geometric mean (m_g); geometric standard deviation (σ_g); arithmetic mean (m); and arithmetic standard deviation (σ). The arithmetic mean (m)

represents the average emissions that must be achieved to insure that individual emission tests will not exceed any chosen value on the frequency distribution line more than a corresponding percentage of the time. The geometric mean (m_g) represents the approximate value not to be exceeded by 50% of the individual emission tests. The slope of the frequency distribution line reflects the "spread" of the data points in any series (about the mean value of that series). Assuming a constant mean (m_g), the steeper the slope the greater is this variability among individual emission test results, which we assume arises from two main sources: (1) variations in average emissions from the pots, due to fluctuating pot conditions; (2) errors inherent in the measurement processes of those emissions. The arithmetic standard deviation (σ) may, in turn, be used to describe the permissible variation in individual emission tests which would constitute compliance with the overall emissions performance represented by the straight line frequency distribution plot.

For example, the log normal frequency distribution which best fits the Intalco total fluoride emissions data in Table III is graphically represented in Figure I (line T). Together with equations (7) and (8), this line provides the information that to maintain Intalco's overall performance in terms of fluoride emissions: (1) approximately 50% of the tests should show no greater emissions than 0.981 lbs F/Ton Al (m_g); the arithmetic mean (m) or average of all tests over an extended time should approach 1.0298 lbs F/Ton Al; and (3) the standard deviation (σ)

from the average (m) should be 0.3291 lbs F/Ton Al. Note: Appendix C (Case #2), based on recalculated monthly average emissions for Intalco, indicates that the plant's present performance is even better than shown here.

In order to set an emissions standard "not to be exceeded," we need to define the average or mean (m) plant performance level which constitutes compliance with that standard. Then we must define the limits surrounding that mean (m) within which there is a high probability that any carefully measured emissions test result will fall. The latter requires that we know something about the inherent variability of emissions test data of the type we are interested in--namely, that we can estimate the standard deviation (σ) for aluminum plant emissions tests. The probability (P) that any single emissions test (x_i), or average (\bar{x}) of a number (n) of emissions tests, will exceed the mean (m) required for compliance with the standard can be expressed as follows:

$$P_n(x) = \frac{(\bar{x}) - m}{\sigma / \sqrt{n}} \quad (9)$$

where, $P_n(x_i)$ = the probability that \bar{x} will be within σ/\sqrt{n} of the mean (m) a designated percentage of the time

\bar{x} = the average of n individual tests, or $\frac{\sum_{i=1}^n x_i}{n}$

where x_i = individual emissions tests results

n = the number of individual tests averaged to determine compliance with the standard

σ = the arithmetic standard deviation associated with the total population of emissions test results; which population is assumed to be log normally distributed

$$\frac{\sigma P_n(x)}{n} = \bar{x} - m \quad (10)$$

$$\bar{x} = m + \frac{Y\sigma}{n} \quad (11)$$

In Equation (11), Y is a constant in a probability factor, $Y\sigma/\sqrt{n}$, which describes how far \bar{x} can be expected to exceed the mean (m) a designated percentage of the time. Statistical theory tells us that individual test values will not exceed the arithmetic mean (m) for the entire series of tests by more than 1.282 standard deviations (1.282σ) 80% of the time, or more than 1.645 σ 90% of the time, or more than 2.576 σ 99% of the time, etc., if the data is log normally distributed.¹ These coefficients of the standard deviation correspond to the constant (Y), so that the probability factor, $Y\sigma/\sqrt{n}$, is given by values in Table IV for various designated frequency requirements (the percentage of the time that \bar{x} will not exceed m by more than $Y\sigma/\sqrt{n}$).

TABLE IV

PROBABILITY FACTORS FOR NORMALLY DISTRIBUTED
DATA FOR DESIGNATED FREQUENCY REQUIREMENTS

Number of Tests Averaged	Probability Factor for Designated Frequency Requirements				
	80%	90%	95%	98%	99%
1	1.282	1.645	1.960	2.326	2.576
3	$\frac{1.282\sigma}{\sqrt{3}}$	$\frac{1.645\sigma}{\sqrt{3}}$	$\frac{1.960\sigma}{\sqrt{3}}$	$\frac{2.326\sigma}{\sqrt{3}}$	$\frac{2.576\sigma}{\sqrt{3}}$
36	$\frac{1.282}{\sqrt{36}}$	$\frac{1.645}{\sqrt{36}}$	$\frac{1.960}{\sqrt{36}}$	$\frac{2.326}{\sqrt{36}}$	$\frac{2.576}{\sqrt{36}}$

1 For value of coefficient (Y) of the standard deviation (σ), see Table II, page 625 of Statistics for Scientists and Engineers, by R. Lowell Wine, Prentice Hall, Inc., 1974.

We may now write an expression which corresponds to the maximum acceptable value for any emissions test, or average of a series of tests, which will constitute compliance with a "not to be exceeded" emissions standard, and which will be expressed in terms of the average emissions which the plant must maintain and a factor reflecting the inherent variability of emissions test data. These expressions are given below for the case where "not to be exceeded" is defined as "99% of the time" (or, in 99% of the emissions tests performed).

$$\text{Single Test Maximum} = m + \frac{Y\sigma}{\sqrt{1}} = m + 2.576 \quad (12)$$

$$\text{Maximum Average (of 3 tests)} = m + \frac{Y\sigma}{\sqrt{3}} = m + \frac{2.576\sigma}{\sqrt{3}} \quad (13)$$

$$\text{Maximum Average (of 36 tests)} = m + \frac{Y\sigma}{\sqrt{36}} = m + \frac{2.576\sigma}{\sqrt{36}} \quad (14)$$

In the above expressions, (m) represents both (1) the long-term average plant emissions required for compliance with the standard; and (2) the arithmetic mean of a series of tests of that plant's emissions, which are (a) log normally distributed, and (b) whose absolute values constitute compliance with the standard, and (c) whose standard deviation from the arithmetic mean (m) is σ . Real values for (m) and (σ) can be obtained from emissions test results for existing plants using equations (1) and (2). For situations where actual plant performance must be predicted (e.g., new plants; or, estimating (m) and (σ) for the Reynolds/Troutdale plant after the installation of primary system improvements), (m) and (σ) must be obtained from straight line

frequency distribution plots of the type shown in Figure I, using equations (7) and (8). Then (m) and (σ) can be substituted into expressions like equations (12), (13) and (14) to determine proper numerical values for standards which are "not to be exceeded."

In Appendix B, the analysis described above is carried out to determine (m) and (σ) values for three existing aluminum plants in order to determine what maximum value should not be exceeded (99% of the time) by emissions tests at these plants reported as: (1) any single test of emissions; (2) an average of three tests conducted at separate times during a calendar month; and (3) the average of 12 such monthly averages (or 36 tests) during a calendar year. These results are discussed in the next section of this report and emissions standards for both new and existing plants are discussed.

Conclusions

The foregoing analysis and its application to several existing aluminum plants (Appendix B) appears to be both a novel and useful way to model the overall emissions control performance of primary aluminum plants. It offers a framework both to describe existing emissions and to predict future emissions, after plant alterations. It readily treats the problem of allowing for the inherent variability of emissions test data in setting a "not to be exceeded" standard, and can aid in choosing specific numerical standards for a variety of testing and reporting schedules (monthly average, annual average, etc.). Critical assumptions-- such as the log normal distribution of emissions test data--

RELATIONSHIP OF CURRENT EMISSION FROM SEVERAL
EXISTING ALUMINUM PLANTS TO PROPOSED EMISSION STANDARDS¹

Emissions Standard Category ⁹	Proposed Standard ² (lbs/Ton Al)	Intalco Plant ³		Martin-Marietta Plant ³	Reynolds Plant ³	
		DEQ ⁴	DOE ⁵	Current ⁶	Current ⁷	Proposed ⁸
		(lbs/Ton Al)	(lbs/Ton Al)	(lbs/Ton Al)	(lbs/Ton Al)	(lbs/Ton Al)
<u>Total Fluoride Emissions</u>						
<u>New Plants</u>						
Single test	-	1.35	1.77			
Monthly Avg. (3)	1.3	1.18	1.46			
Annual Avg. (36)	1.0	1.01	1.16			
<u>Existing Plants</u>						
Single test	-			4.26	18.8	4.80
Monthly Avg. (3)	3.5			3.32	14.9	3.80
Annual Avg. (36)	2.5			2.40	11.0	2.80
<u>Total Particulate Emissions</u>						
<u>New Plants</u>						
Single test	-	8.68	7.36			
Monthly Avg. (3)	7.0	6.85	5.97			
Annual Avg. (36)	5.0	4.60	4.60			
<u>Existing Plants</u>						
Single test	-			18.3	36.0	12.7
Monthly Avg. (3)	13.0			15.1	29.8	10.4
Annual Avg. (36)	10.0			12.0	23.8	8.2

1. For calculation of individual plant values listed in this Table, see Appendix B of this report.
2. Part of proposed revisions of OAR, Chapter 340, Division 2, Sections 25-255 through 25-290.
3. Plant locations: Intalco at Ferndale, Wn.; Martin-Marietta at The Dalles, Oregon; Reynolds at Troutdale, Oregon.
4. Based on monthly averages recalculated by DEQ staff from raw emissions test data furnished by Intalco, Inc., and included in Appendix C; see Appendix B (Cases #2 and #4).
5. Based on monthly average emissions as reported by Intalco to Washington Department of Ecology (DOE) and listed in Table III (see Appendix B - cases #1 and #3).
6. See Appendix B. (Cases #5 and #6).
7. See Appendix B. (Cases #7 and #9).
8. See Appendix B. (Cases #8 and #10).
9. Monthly averages are of three separate emission tests; annual averages are of the twelve most recently reported monthly averages.

involved must be tested, but preliminary indications (Appendix A) are encouraging.

The results of specific evaluations of the three existing plants carried out in Appendix B are summarized in Table V for comparison with the proposed standards for total fluoride and total particulate emissions. Two projections for Intalco are listed because a recalculation of monthly average emissions for this facility by Department staff (using raw emissions data submitted by the company) yielded results significantly different from those calculated using the data in Table III. While this recalculation caused some monthly figures to rise and others to fall, the overall result was a lower average fluoride emissions level coupled with less variance in the individual monthly averages; the same recalculation process resulted in higher average particulate emissions. Evaluation of the recalculated emissions by DEQ staff indicate that Intalco should not exceed a monthly average emission rate of 1.2 lbs fluoride (F) ion/Ton of aluminum (Al) produced (99% of the time), if their emissions control remains at the levels they have reported for the past six months to the Washington Department of Ecology (DOE); and they should not exceed an annual average of 1.0 lbs F/Ton Al (99% of the time). Thus, Intalco is apparently controlling total fluoride emissions at a level slightly better than that that required by the standard proposed (Appendix D) for new plants in Oregon.* Likewise, the proposed standards for total

* 1.3 lbs F/Ton Al as a monthly average;
1.0 lbs F/Ton Al as an annual average

particulate emissions (7.0 lbs total particulate/Ton Al as a monthly average; 5.0 lbs/Ton Al as an annual average) also appear to be slightly less stringent than Intalco has achieved during the past six months.

The stringent emissions standard imposed on new plants is a proper future goal for existing plants, but the latter will require considerably more time to comply. Accordingly, compliance by existing plants with the new plants standard is proposed, but cannot realistically be required for up to ten years. Therefore, provision should be made for a review by the Environmental Quality Commission (EQC), of the feasibility of achieving this level of emission control well before such a deadline. In the meantime, existing plants should be subject to separate standards, which require that (a) total fluoride emissions not exceed 3.5 lbs F/Ton Al as a monthly average and 2.5 lbs F/Ton Al as an annual average; (b) total particulate emissions not exceed 13.0 lbs/Ton Al as a monthly average and 10.0 lbs/Ton Al as an annual average.

The new standards proposed were chosen after reviewing the present and proposed performance of existing aluminum plants as summarized in Table V, and considering what opportunities exist at each plant for improving emissions control. They are considered to be achievable without severe economic hardship for the companies involved. The standards will require continued vigilance on the part of the companies involved to maintain compliance, yet compliance is well within reach as demonstrated by the achievement of this level of control at other existing aluminum plants. These

standards are recommended with the intent of providing Oregon's environment maximum protection in an effort to prevent damage to any persons, animals or plant life.

The projections of Reynolds' overall emissions control performance indicate that after installation of an improved primary control system, Reynolds will approach the fluoride control levels presently reported by Martin-Marietta, and will surpass Martin-Marietta's particulate control performance. Thus, a single standard for existing plants, which is equitable statewide and affords maximum environmental protection, will be likely to require slightly better fluoride control at Troutdale and better particulate control at The Dalles than is currently reported. The proposed standards for existing plants do just this, requiring roughly a 20% reduction in total particulate emissions at The Dalles and about 12% reduction in total fluoride emissions at Troutdale (in addition to fluoride emissions reductions proposed as a result of improvements to Reynolds' primary control system). One problem with this approach is that a single fluoride standard which Reynolds can reasonably achieve, even after its proposed substantial reductions in fluoride emissions, does not require reductions in present fluoride emissions at Martin-Marietta, where fluoride has been more notoriously associated with environmental damage (primarily to fruit crops). However, attention is called to Section 25-270 of the proposed regulations which permit the Commission to adopt stricter standards in "Special Problem Areas." Options under Section 25-270 would include not only lower standards to be applied year round,

but also partial curtailment of production during especially sensitive periods (e.g., "fruit set").

The potential to achieve the proposed emissions reductions exists at both plants. At Reynolds it may require increasing hooding efficiencies or exhaust gas volumes in the new primary emissions control system, or upgrading the poor scrubbing efficiency of the present secondary control system. At Martin-Marietta better particulate control may be achievable both in the handling and feeding of alumina feedstock as well as by upgrading the particulate removal efficiency of the emissions control system. Though Martin-Marietta's wet electrostatic precipitators are efficient fluoride scrubbers, the significantly steeper slope of line MM in Figure I suggests that emissions measurement techniques at Martin-Marietta should be examined to determine why their test data have greater variability than Intalco's. Also, Figure II indicates a seasonal "hump" in fluoride emissions (late summer, early fall) at Martin-Marietta, which also indicates a target area for improvements.

Several changes in the original proposed standards deserve mention. Because of the potential variability among aluminum plants of the proportion of gaseous fluoride emissions within the total fluoride emissions, and the present difficulty in separately and accurately measuring the gaseous fluoride, no specific standard for gaseous fluoride emissions is recommended at this time. However, because the gaseous fluoride is believed to be more toxic to plants than particulate fluoride, the Department intends to require, as part of any approved monitoring

program, procedures to measure gaseous fluoride and to monitor fluoride levels in plant life near aluminum plants.

Because it is intended to maintain the lowest practicable levels of fluoride emission and because the previously discussed emissions standards are expressed only in weight per unit of production (lbs per ton of aluminum produced), it was considered desirable to include in the proposed standards a ceiling on the total fluoride emissions at any single aluminum plant. This does not imply that such ceilings represent a "harmless" level of fluoride emissions.

Although based upon the statistical evaluation, numerical standards could have been proposed for any single emissions test ("not to be exceeded" 99% of the time), a single test standard is not recommended. Because all test results are needed for continuing statistical evaluation of plant performance, the Department is concerned not to discourage the reporting of high results. A standard which allows averaging offers a better chance of compliance in spite of occasionally high test results.

The proposed regulation is included as Appendix D of this report.

Documented information about the adverse effects of moderate to large concentrations of fluoride on man, animals and plant life is fairly plentiful, but reliable knowledge about the effects of low levels of fluoride over extended periods of time is sparse. In general, the standards proposed in this report should result in ambient levels of fluoride in the air that cannot presently be shown to adversely effect man, and most other large animals, so that plant life is the major living organism at risk. Of course, certain conditions of terrain and meteorology could combine to give considerably heavier doses of emitted pollutants to specific areas that would not be experienced throughout the vicinity of the aluminum plant. But, by and large, the chief identified danger to date of airborne fluorides lies in their collection on, and concentration by, plants, and the effects on animals which feed on those plants. And since fluoride accumulates in the tissues of plants and animals, long term exposure to very low levels risks adverse chronic effects not yet studied in enough detail.

Oregon's experience of damage to fruit crops near the Martin-Marietta plant at The Dalles, where measured ambient fluoride levels average less than 1.0 part per billion (ppb), illustrates the problem. Dr. Timothy Facteau's research has suggested that fluoride hinders "fruit set" in sweet cherries at concentrations as low as 0.5-0.75 $\mu\text{g}/\text{m}^3$ (or 0.65-0.95 ppb)². "Soft suture" of peaches has been associated with low levels of ambient fluoride³.

1. This section is not intended to be a comprehensive statement of the risks of fluoride pollution, but does highlight some of the testimony received and literature.
2. Testimony of Dr. T. Facteau at Commission hearing on June 29, 1973.
3. N. R. Benson, Proc. Amer. Soc. Mart. Sci, 74:184-198 (1959).

The National Environmental Protection Agency (EPA) has coordinated study of fluoride damage to plants and animals in the vicinity of the Anaconda Company's aluminum plant at Columbia Falls, Montana². The findings may be summarized as follows:

Ambient fluoride rarely exceeded the 1 ppb (Montana) standard on the valley floor, but higher elevations apparently exceeded the $0.30 \mu\text{g F/cm}^2/\text{day}$ (Montana) standard by a factor of two or more. Meteorological work and vegetation surveys confirmed that most severe damage occurred on high ridges near the plant (Teakettle Mountain, less than 1.0 miles away) and up to 10 miles away (Apgar Mountain). Vegetation damage consisted of visible injury to sensitive conifers (white pine, lodgepole pine and ponderosa pine), including mortality of young trees, and other vegetation. Sensitive indicator plants (apricot trees, gladiolus exposed in the area showed moderate tip burn within 16 weeks.

Conclusions of EPA: (1) elevated fluoridation rates in plants were measured 10 or more miles from the Anaconda plant; (2) vegetation damage was definitely caused by chemical agents (fluoride), not insects; (3) pre-1971 emission levels at Anaconda were clearly too high, but more time is needed to conclude how much damage is occurring as a result of present (lower) emissions; (4) location, topography and meteorology are keys to exposure risk.

1. "Fluoride in Glacier National Park - A Field Investigation", Report No. EPA-908/1-73-001. Prepared for the U.S. Environmental Protection Agency, Region VIII, Denver, Colorado, 80302, and published in November, 1973.

In a concurrent study of the effects of fluoride pollution on wild animals near Columbia Falls, Dr. Clancy Gordon concluded:

"In conclusion, it is reiterated that there are excessive fluoride concentrations in the flora and fauna collected in the southwest zones of Glacier National Park. A comparison of fluoride concentrations found in vegetation and animal species confirms that an increase of several orders of magnitude is occurring in the food chain. How much more accumulates in the carnivores which are higher up the food chain is not known. However, the propensity of fluoride to concentrate in the food chain, as evidenced by the results of these studies, suggests that excessive fluoride accumulation in the carnivores in Glacier National Park is a strong possibility. Further studies will be needed to ascertain the ecological consequences of the fluoride pollution which has occurred in the past and continues to occur today in Glacier National Park. The major ecological consequences will probably develop slowly over many years because, as mentioned previously, the fluoride accumulation in flora and fauna occurs at extremely low concentrations of fluoride in the ambient air. But slowly and insidiously these low but excessive levels of fluoride accumulate in the foliage of vegetation until they reach concentrations several thousands of times higher than those found in the ambient air at any given time. In turn, the animals which feed upon this forage accumulate fluoride in their bone tissues in concentrations several hundred times that found in the vegetation."¹

1. Contractors Report entitled "1970 Glacier National Park Study", prepared by Dr. C. C. Gordon and personnel of the Environmental Studies Laboratory, at the University of Montana, Missoula, Montana, 59801. pp 44-45.

In its review of the effect of fluorides on the environment the National Academy of Science described the range of plant response to various fluoride levels and the cumulative nature of exposure of plants to fluoride.

"Accumulation of atmospheric fluorides by plants can result in changes in metabolism, production of foliar lesions, and alteration in growth, development, and yeild. Plants may be grouped in three general classes, according to their response to fluoride exposure: susceptible, intermediate, and resistant. In addition to differences among species and varieties, the duration of exposure, stage of development and rate of growth, rate of accumulation of fluoride, environmental conditions, and agricultural practices are important factors in determining the susceptibility of plants to fluorides.

The following threshold concentrations for atmospheric fluorides are based primarily on research, rather than on field studies.

For exposure periods of 1 day, the threshold for foliar markings is between 3 and 4 $\mu\text{g}/\text{m}^3$ for the most susceptible species and 10 $\mu\text{g}/\text{m}^3$ or higher for species of intermediate susceptibility; for exposure periods longer than a month, the threshold is about 0.5 $\mu\text{g}/\text{m}^3$ for susceptible and between 1 and 3 $\mu\text{g}/\text{m}^3$ for some intermediate species. The relation of the accumulated foliar fluoride to the occurrence of foliar lesions is complex. Susceptible plant species show foliar lesions when tissue fluoride concentrations are 20-150 ppm. Some highly resistant species can tolerate tissue concentrations in excess of 4,000 ppm without injury. Reduction in growth may occur at tissue fluoride concentrations of 30-300 ppm, depending on the species and conditions.

The average concentration of fluoride in forage that appears to be important for animals is 40 ppm. Estimates suggest that a fluoride accumulation of 40 ppm in forage would be achieved in 30 days at a mean hydrogen fluoride concentration in the air of 0.33-1.3 $\mu\text{g}/\text{m}^3$. However, these estimates do not take into account variability in exposure to fluoride, rate of plant growth, or the effects of weathering in a field condition.

The available data suggest that a threshold for significant foliar necrosis on susceptible species or an accumulation of fluoride in forage of more than 40 ppm would be a 30-day average air concentration of gaseous fluoride of about 0.5 ug/m^3 .¹

The potential for accumulation of 40 ppm fluorides in plants in the short span of one month at low levels ($0.33\text{-}1.3 \text{ ug/m}^3$, or about $0.42\text{-}1.67$ ppb of **MF**) is significant. Ambient fluoride concentrations near both Oregon aluminum plants average less than 1.0 ppb, but forage samples average fluoride levels of 50 ppm downwind near the Reynolds plant. The proposed standards should provide maximum long range (many months) protection for Oregon plant life and foraging animals, both wild and domestic.

In view of reports such as the above, the Department is unable to certify that any particular level of fluoride in the air is a "safe" level. Accordingly, the Department must rely once again on its continuing policy of reducing air contaminants to their lowest possible levels. This, in turn, calls for the most stringent standards possible, based on presently available technology.

Significant Deterioration of Air Quality

The Department is also concerned about the considerable overall impact of large stationary sources on the general level of air quality in their vicinity, especially in particularly clean air areas. Thus, additional impetus for requiring the minimum possible pollution levels also comes from the National Environmental Protection Agency (EPA), which

1. Fluorides, completed in 1971 by the Committee on Biologic Effects of Atmospheric Pollutants, Division of Medical Sciences, National Research Council, for the National Academy of Sciences.

has proposed a regulation to prevent significant deterioration of air quality. Along with many other states, Oregon supported this concept of minimizing degradation of air quality, especially in these areas which now have particularly clean air. Such clean air areas cannot be allowed to become pollution havens. Also, because federal requirements increasingly direct states to assess the air quality impact of more and more specific types of growth and development, it is clear that any new facility with a large volume of emissions must limit these emissions to the maximum extent possible - or risk usurping too great a portion of that community's future growth potential.

APPENDIX A



State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

To: HMP

Date: August 7, 1973

From: RH

Subject: Request for Analysis of Martin Marietta Flouride Data

Presented here is a brief description of my statistical treatment of the "total flouride" emission data from the secondary system at Martin Marietta. The attempt was made to keep the narrative simple enough to be understood yet technical enough to have some technical substance.

As requested, the analysis was confined to the total flouride values from the secondary system as reported to the Department by Martin Marietta. The time period covered by the data is from March 2, 1971 through June 19, 1973.

RH:e
RH
Enclosure

CONCLUSIONS

The data was shown to be log-normally distributed and when the cumulated relative frequencies were plotted on log-probability paper, the graph approximated a straight line. The line of best fit was approximated using the geometric mean and the geometric standard deviation. Using this line to estimate the 95% occurrence shows the approximate value of 3.6 lb. FI/Ton Al. In other words, 95% of the samples collected have values less than 3.6 lb. FI/Ton Al. This means that based upon the statistical analysis; when 20 samples are collected, 19 of them (95%) will have values of less than 3.6 lb. FI/Ton Al.

The time series plots (ref. pg. 14, 15, 16) show that the highest values and the most extreme deviations in the data occurred in the later part of 1972. The 1971 data does not show this type of pattern. The 1973 data for that time period has not been collected yet, hence there is some question that these values are typical. The impact of these values is very significant since they are the source of the non-normality in the data and are the case of interest. In any event, it seems clear that there are obviously other variables at work here and that more data needs to be collected before the complexity of the situation is resolved.

PERTINENT STATISTICS

Number of samples = 64
Median = 1.49
Arithmetic Mean = 1.819
Geometric Mean = 1.59
Geometric Standard Deviation = 1.69
95% of samples < 3.6 - predicted by cumulated frequency distribution

DISCUSSION AND DESCRIPTION OF ANALYSIS PROCEDURES

I. Raw Data

The data analyzed was the 64 source test samples collected by Martin Marietta on their secondary system. Only the total fluoride samples were analyzed. The time period of the data is from March 2, 1971 through June 19, 1973. The raw data is presented on pages 1, 2 and 3 of the appendix.

II. Frequency Distributions

As a first step in the treatment of this data, I arranged the raw data in ascending order and compiled a frequency count. That is, the number of occurrences (frequency) of each data point was tallied and recorded next to the observed value. The results of this compilation are recorded under the F. column of Frequency Table No. 1 on pages 4, 5 and 6 of the appendix.

The second step was compiling a cumulative frequency distribution. This was done by successively adding the frequency count obtained above for each observed data value. These values are tallied under the \leq F column on Frequency Table No. 1.

The third step was the calculation of cumulative relative frequency for each observed value. These numbers represent the cumulative frequency for each value expressed as a percentage of the total number of data values. It was calculated in this case by dividing the entry in the F column of Frequency Table No. 1 by 64 and multiplying by 100.

III. Determination of Normality

The easiest method of testing for normal distributions of data is to graph the frequency against the observed value. If the resulting curve approximates a bell-shaped curve then the data is assumed to be normally distributed-meaning among other things that it is free of bias.

An important fact apparent from the F column of Frequency Table No. 1 is that the data is multi-modal. That is, there are several observed values with the highest frequency count. The fact that the data is multi-modal in addition to the fact that the number of data values is relatively small (for statistical purposes) led to the conclusion that for the purpose of determining the normality of the frequency distribution, the data should be treated on a class interval basis. That is, the frequency distribution should be lumped together for a range of values rather than tallied for each distinct value.

To facilitate the class interval frequency distribution, the range of the raw data was calculated by subtracting the minimum value from the maximum value and the decision was arbitrarily made to use ten class intervals. This then meant that the data should be tallied for ten class intervals with a class interval of $(5.80 - .40) \div 10 = .54$. The class interval frequency distribution was compiled with the results displayed on page 7 of the appendix titled Class Interval Distribution Table.

A graph of the class interval frequency distribution was drawn on linear graph paper and is included in the appendix as page 8. From this graph it is apparent that the data deviates from a normal distribution for class intervals of 3.6 and beyond. In other words, the data is skewed to the right. This departure from normality is important since it appears in the range of data values of most concern. The shape of the curve approximated by this graph (page 8) led to the suspicion that the data might be log-normally distributed. Simply said, a log-normal distribution shows a bell-shaped curve for the frequency distribution when graphed on semi-log graph paper instead of linear graph paper. This graph was drawn, is included in the appendix as page 9 and the results clearly show that the data is log-normally distributed. The importance of this fact only comes into play in this case when estimating the curve of best fit described below.

IV. Graphs of the Cumulated Relative Frequency

The purpose of this type of graph is to relate a specific data value to the distribution of all of the data. A graph of this kind when carefully done can be used to predict the number of occurrences of a specific value. In plain language, it can be used to determine what percentage of the data will fall below or exceed a specific value.

The mechanics of making this graph are to plot the cumulated relative frequency expressed as a percentage against the data value. When this procedure is followed, a graph is obtained which shows the general shape of the curve used for the predictions described above. The problem then is to determine the curve of best fit. That is, the points plotted show the shape of the curve but which curve best approximates all of the plotted points. It is this line which is useful for the purposes described above.

Because the data exhibited a log-normal distribution, the cumulative relative frequency distribution curve will in theory be most nearly approximated by a straight line when plotted on log-probability paper. This graph was drawn using the values from Frequency Table No. 1 under the N and $\% \leq F$ columns with the resulting graph included in the appendix as page 10. As expected, the graph on page 10 approximates a straight line. The line of best fit for this graph was calculated using the geometric mean and the geometric standard deviation of the raw data. The graph on page 10, with the line of best fit drawn on it, was made and is included as page 11 in the appendix. From the line drawn on page 11, the 95% occurrence appears to be 3.6.

For the sake of completeness, the cumulated relative frequency distribution for the same data was plotted on linear graph paper - included as page 12 in the appendix. The standard statistical technique (least squares fit linear regression) to determine the line of best fit was run on the Wang programmable calculator. The equation of the line of best fit produced from the linear regression has been plotted on the graph shown on page 12. That graph is included as page 13 in the appendix, however; it must be noted that the results of this graph (page 13) are not as accurate as the line shown on page 11 since the frequency distribution was shown to be log-normal rather than normal.

V. Time Series Graphs

To get an insight into the pattern of the raw data as a function of time, three time series graphs of the raw data were drawn. The graphs were obtained by plotting the observed value against the date of collection. These graphs are included in the appendix as pages 14, 15 and 16.

VI. Excluded Data

The graph on page 15 shows that the highest values obtained and the most extreme deviations in the data occurred in the later part of

of 1972. The question of the impact of these extremes in the data on the cumulative relative frequency distribution graph (page 10) and the attendant line of best fit (page 11) was raised. In essence the question is what happens to these graphs if this data is excluded from the statistical analysis realizing that no claim is made to the statistical validity of such a process.

To answer this question, I decided to exclude the data from late 1972 which introduced the extremes occurring in a short time interval. Four data points were removed under this criteria. They are as follows:

2 August 1972	value of	5.77
4 August 1972	value of	2.69
26 October 1972	value of	0.90
2 November 1972	value of	5.80

These four data values represent the two extreme deviations in the data as shown on the time series graph of page 15 in early August 1972 and late October-early November 1972.

A second frequency table was compiled in the same manner as before. This table is included as pages 17, 18 and 19 labeled as Frequency Table ilo. 2. Likewise a cumulated relative frequency distribution for this set of data was drawn (page 20) and the line of best fit plotted on it (page 21).

A comparison of the graphs on page 11 (line of best fit with all data included) and page 21 (line of best fit with some data excluded) shows that a slight decrease in the slope of the best fit line was the result of the data exclusion. The 95% occurrence from the graph on page 21 is approximately 3.2 lb F1/Ton A1. This is not a large variation from the value predicted from the graph on page 11 but as I said, in the area of critical concern and worthy of more analysis when further data is available.

APPENDIX

1. 1971 Raw Data - Martin Marietta	Page 1
2. 1972 Raw Data - Martin Marietta	Page 2
3. 1973 Raw Data - Martin Marietta	Page 3
4. Frequency Table #1	Page 4
5. Class Interval Distribution Table	Page 7
6. Frequency Distribution (Linear Paper)	Page 8
7. Frequency Distribution (Semi-Log Paper)	Page 9
8. Cumulative Relative Frequency Distribution (log-Probability)	Page 10
9. Line of Best Fit (log-Probability)	Page 11
10. Cumulative Relative Frequency Distribution (linear Paper)	Page 12
11. Line due to Linear Regression	Page 13
12. Time Series Graphs	Page 14
13. Frequency Table #2	Page 17
14. Cumulative Relative Freq Distribution - Data Excluded	Page 20
15. Line of Best Fit - Data Excluded	Page 21

POTASSIUM EMISSIONS FROM MARTIN MARIETTA

Reporting Period	Primary System						Secondary System						MONTHLY AVERAGE POTASSIUM EMISSIONS			
	TEST DATE	TEST LOCATION	GASEOUS FLUORIDE (CF/1000 A)	PARTICULATE FLUORIDE (CF/1000 A)	TOTAL FLUORIDE (CF/1000 A)	TEST DATE	TEST LOCATION	GASEOUS FLUORIDE (CF/1000 A)	PARTICULATE FLUORIDE (CF/1000 A)	TOTAL FLUORIDE (CF/1000 A)	GASEOUS FLUORIDE (CF/1000 A)	PARTICULATE FLUORIDE (CF/1000 A)	TOTAL FLUORIDE (CF/1000 A)	TOTAL FLUORIDE (CF/1000 A)		
															TEST DATE	TEST LOCATION
MARCH	26 Mar	Room 3A	1.25	1.55	1.3	26 Mar	Room 3A	2.25	0.96	1.21	8.82					
		Room 3B	0.98	0.78	9.57	26 Mar	Room 3B	0.37	0.71	1.08	8.48					
						18 Mar	Room 3A	0.37	0.89	1.26	11.5					
						29 Mar	Room 3A	0.35	0.88	1.23	6.9					
						31 Mar	Room 3A	0.68	0.71	1.39	6.2					
(Monthly Ave)			1.115	1.115	10.59			0.40	1.83	1.23	9.40	0.40	1.945	2.345	18.5	
APRIL	5 Apr	Room 3A	1.60	1.67	1.75	2 APR	Room 3A	0.16	0.90	1.92	9.0					
	7 Apr	Room 3A	0.024	0.97	0.94	5 APR	Room 3A	0.22	0.61	0.83	7.0					
	8 Apr	Room 3B	0.033	0.88	0.913	5 APR	Room 3B	0.15	0.53	0.68	4.0					
						24 APR	Room 3A	0.36	0.69	1.05	8.0					
						29 APR	Room 3A	0.20	0.79	0.99	6.9					
(Monthly Ave)			0.029	0.94	0.979	7.37		0.22	0.70	0.92	7.0	0.259	1.54	1.799	14.0	
MAY	17 May	Room 3A	0.672	6.07	6.33	4 May	Room 3A	0.12	0.28	0.40	3.18					
	19 May	Room 3A	0.659	0.59	5.27	10 May	Room 3A	0.46	1.5	1.96	13.3					
	21 May	Room 3A	0.037	0.97	0.507	20 May	Room 3A	0.22	1.19	1.41	12.9					
	25 May	Room 3A	0.017	0.97	0.97											
(Monthly Ave)			0.046	0.97	0.164	6.25		0.27	0.99	1.26	7.79	0.316	1.46	1.424	16.0	
JUNE	8 June	Room 3A	2.286	1.27	1.386	8 June	Room 3A	0.23	1.09	1.72	12.2					
	14 June	Room 3A	0.066	1.97	2.036	7 June	Room 3A	0.25	1.70	2.05	12.15					
(Monthly Ave)			0.076	1.62	1.696	9.75		0.29	1.40	1.69	12.63	0.366	3.02	3.586	22.0	
JULY	7 July	Room 3A	0.54	0.76	0.524	7 July	Room 3A	2.53	1.25	1.78	10.8					
						12 July	Room 3A	0.37	1.25	1.62	15.8					
						15 July	Room 3A	0.77	2.03	2.80	21.5					
(Monthly Ave)			0.054	0.76	0.924	16.5		0.56	1.51	2.07	16.0	0.64	2.27	2.894	26.0	
AUG.	11 Aug	Room 3A	0.045	1.66	1.125	4 Aug	Room 3A	0.42	1.39	1.81	11.3					
	12 Aug	Room 3A	0.049	1.55	1.599	12 Aug	Room 3A	0.49	1.88	2.37	13.2					
(Monthly Ave)			0.057	1.31	1.362	10.4		0.46	1.64	2.09	12.3	0.517	2.95	3.452	22.0	
SEPT.	7 Sept	Room 3A	0.026	0.79	0.716	1 Sept	Room 3A	1.11	1.54	2.65	14.7					
						7 Sept	Room 3A	0.79	1.68	2.47	14.8					
						21 Sept	Room 3A	0.90	1.68	0.90	9.7					
(Monthly Ave)			0.056	0.78	0.816	4.7		0.93	1.61	2.01	13.1	0.966	2.29	2.826	17.0	
OCT.	26 Oct	Room 3A	0.022	0.58	0.752	1 Oct	Room 3A	0.67	0.83	1.50	9.85					
	27 Oct	Room 3A	0.093	0.64	0.733	2 Oct	Room 3A	0.62	1.54	2.16	13.5					
						21 Oct	Room 3A	0.55	1.10	1.65	13.2					
(Monthly Ave)			0.057	0.48	0.748	6.22		0.62	1.26	1.87	12.2	0.627	1.94	2.612	18.0	
NOV.	15 Nov	Room 3A	0.017	1.17	1.187	4 Nov	Room 3A	0.28	0.87	1.15	11.8					
	16 Nov	Room 3A	0.01	1.25	1.46	11 Nov	Room 3A	0.18	0.75	1.08	10.9					
(Monthly Ave)			0.11	1.21	1.32	9.6		0.284	0.85	1.129	11.4	0.394	2.06	2.442	21.0	
DEC.	1 Dec	Room 3A	0.02	0.72	0.716	14 Dec	Room 3A	0.24	0.96	1.20	11.1					
	18 Dec	Room 3A	0.02	1.71	1.71	18 Dec	Room 3A	0.22	1.43	1.95	16.7					
(Monthly Ave)			0.01	1.24	1.212	1.7		0.34	1.17	1.58	16.9	0.417	2.03	2.852	21.0	

Report on
Purification

TEST DATE	TEST	WATER	FLUORIDE	CHLORINE	PHOSPHORUS	IRON	TEST DATE	TEST	WATER	FLUORIDE	CHLORINE	PHOSPHORUS	IRON	TEST DATE	TEST	WATER	FLUORIDE	CHLORINE	PHOSPHORUS	IRON
JAN.																				
10	JAN 7	0.007	1.34	1.37	1.28	3	JAN 10	0.25	1.29	1.57	11.5									
11	JAN 7	0.004	1.25	1.34	1.14	6	JAN 11	0.297	1.29	1.537	11.2									
12	JAN 7	0.118	1.23	1.448	8.9															
(Monthly Ave)																				
		0.074	1.27	1.380	11.0			0.289	1.29	1.579	11.35	0.363	2.56	2.959	22.35					
FEB.																				
7	FEB 7	0.074	1.03	1.04	9.5		FEB 7	DUE TO FREEZE												
8	FEB 8	0.053	0.70	0.253	7.1															
(Monthly Ave)																				
		0.064	0.87	0.929	8.3															
MARCH																				
9	MAR 4	0.007	0.013	0.02	0.015	10	MAR 9	0.40	1.09	1.49	12.4									
14	MAR 4	0.007	0.016	0.022	0.014	14	MAR 14	0.34	0.97	1.31	10.0									
15	MAR 8	0.005	0.015	0.0215	0.166	16	MAR 15	0.20	1.11	1.31	6.8									
16	MAR 8	0.013	0.017	0.03	0.220															
17	MAR 8	0.015	0.24	0.255	0.236															
(Monthly Ave)																				
		0.0103	0.608	0.067	0.165			0.31	1.06	1.37	9.7	0.32	1.668	1.44	9.82					
APRIL																				
6	APR 5	0.006	0.020	0.026	0.18	12	APR 6	0.29	0.97	1.26	10.7									
10	APR 5	0.005	0.015	0.020	0.17	14	APR 10	0.64	1.04	1.68	11.4									
11	APR 6	0.005	0.009	0.011	0.17															
14	APR 6	0.005	0.008	0.013	0.09															
(Monthly Ave)																				
		0.005	0.013	0.017	0.15			0.47	1.00	1.47	11.0	0.475	1.013	1.487	11.15					
MAY																				
15	MAY 12	0.0052	0.006	0.012	0.10	15	MAY 15	0.65	1.44	2.09	13.4									
23	MAY 12	0.0050	0.0045	0.0105	0.39	23	MAY 23	0.73	1.10	1.83	7.9									
(Monthly Ave)																				
		0.0056	0.0053	0.018	0.25			0.69	1.27	1.96	10.6	0.696	1.275	1.978	10.55					
JUNE																				
27	JUN 2	0.009	0.025	0.034	0.25	27	JUN 27	0.58	0.79	1.37	11.2									
29	JUN 2	0.007	0.023	0.03	0.23	29	JUN 29	0.65	0.65	1.30	9.8									
(Monthly Ave)																				
		0.008	0.024	0.032	0.24			0.615	0.72	1.335	10.5	0.623	0.744	1.367	10.52					
JULY																				
18	JUL 5	0.009	0.024	0.033	0.24	28	JUL 18	1.66	4.11	5.77	21.4									
4	JUL 5	0.009	0.019	0.028	0.14	4	JUL 4	1.03	1.66	2.62	13.7									
(Monthly Ave)																				
		0.009	0.026	0.036	0.19			1.35	2.89	4.23	17.6	1.359	2.916	4.266	17.79					
AUG.																				
1	AUG 6	0.009	0.008	0.017	0.040	5	AUG 1	1.26	1.26	2.52	10.85									
7	AUG 6	0.009	0.008	0.017	0.040	7	AUG 7	2.03	1.26	3.69	12.2									
(Monthly Ave)																				
		0.009	0.008	0.017	0.040			1.85	1.26	3.10	11.6	1.859	1.268	3.117	11.64					
SEPT.																				
27	SEPT 12	0.005	0.006	0.011	0.054	19	SEPT 27	ANALYSIS SPOILED			15.3									
						26	SEPT 26	2.36	2.28	4.64	7.44									
(Monthly Ave)																				
		0.005	0.006	0.011	0.054			2.36	2.28	4.64	11.4	2.365	2.286	4.651	11.45					
OCT.																				
17	OCT 7	0.004	0.006	0.010	0.053	17	OCT 17	2.3	1.9	4.2	10.9									
						26	OCT 26	1.7	0.9	0.9	5.7									
(Monthly Ave)																				
		0.004	0.006	0.010	0.053			2.0	1.4	2.6	8.3	2.004	1.401	2.61	8.35					
NOV.																				
27	NOV 15	0.007	0.04	0.007	0.29	2	NOV 27	3.4	2.4	5.8	14.6									
28	NOV 8	0.011	0.04	0.051	0.26	13	NOV 28	1.1	1.9	3.0	10.1									
						20	NOV 20	1.0	1.6	2.6	10.0									
(Monthly Ave)																				
		0.009	0.04	0.049	0.28			1.8	2.0	3.5	11.6	1.81	2.04	3.55	11.85					
DEC.																				

1973

POT ROOM EMISSIONS FOR MARTIN MARIETTA

REPORTING PERIOD	PRIMARY System						SECONDARY System						MONTHLY AVERAGE POTROOM EMISSIONS			
	TEST DATE	TEST LOCATION	GASEOUS FLUORIDE (#F/Ton Al)	PARTICULATE FLUORIDE (#F/Ton Al)	TOTAL FLUORIDE (#F/Ton Al)	TOTAL PARTICULATE (#F/Ton Al)	TEST DATE	TEST LOCATION	GASEOUS FLUORIDE (#F/Ton Al)	PARTICULATE FLUORIDE (#F/Ton Al)	TOTAL FLUORIDE (#F/Ton Al)	TOTAL PARTICULATE (#F/Ton Al)	GASEOUS FLUORIDE (#F/Ton Al)	PARTICULATE FLUORIDE (#F/Ton Al)	TOTAL FLUORIDE (#F/Ton Al)	TOTAL PARTICULATE (#F/Ton Al)
JAN.	1/21	WEP #3	0.003	0.003	0.004	0.22	1/25	Room 3 Fan #53	1.04	1.27	2.31	8.9				
	1/26	WEP #3	0.004	0.003	0.003	0.19	1/26	Room 3 Fan #53	1.10	1.10	2.20	7.6				
(Monthly Ave)			0.004	0.003	0.004	0.26			1.07	1.19	2.25	8.2	1.074	1.22	2.294	8.46
FEB.	12/26	WEP #4	0.005	0.04	0.045	0.29	1/26	Room 8 Fan #57	0.14	0.48	0.62	6.1				
	2/26	WEP #4	0.004	0.03	0.034	0.26	2/26	Room 2 Fan #53	0.20	0.76	0.96	6.7				
(Monthly Ave)			0.005	0.04	0.040	0.28			0.17	0.62	0.79	6.4	0.175	0.66	0.830	6.68
MARCH	2/11	WEP #4	0.003	0.013	0.016	0.13	2/11	Room C Fan #57	0.41	0.74	1.15	7.5				
	2/11	WEP #6	0.002	0.008	0.010	0.09	2/11	Room C Fan #57	0.41	1.0	1.41	9.3				
	2/11	WEP #6	0.005	0.011	0.016	0.11	2/11	Room C Fan #57	0.58	0.92	1.50	8.2				
(Monthly Ave)			0.003	0.011	0.014	0.11			0.45	0.89	1.35	8.3	0.453	0.901	1.364	8.41
APRIL	2/11	WEP #3	0.006	0.02	0.026	0.20	3/28	Room 4 Fan #57	0.14	0.69	0.83	7.5				
	3/11	WEP #1	0.006	0.03	0.036	0.26	2/26	Room 4 Fan #57	0.41	0.76	1.17	7.4				
(Monthly Ave)			0.006	0.025	0.031	0.23			0.28	0.73	1.00	7.45	0.286	0.755	1.031	7.68
MAY	5/1	WEP #1	0.007	0.03	0.027	0.20	5/17	Room 2 Fan #57	0.71	0.71	1.42	7.7				
	5/29	WEP #1	0.007	0.022	0.029	0.22	5/22	Room 2 Fan #57	0.94	1.0	1.94	9.7				
(Monthly Ave)			0.007	0.026	0.023	0.26			0.825	0.855	1.68	8.7	0.832	0.881	1.71	8.96
JUNE	6/25	WEP #6	0.002	0.002	0.004	0.04	6/14	Room 2 Fan #57	0.68	0.91	1.59	5.9				
	6/27	WEP #6	0.002	0.03	0.032	0.23	6/19	Room 2 Fan #57	0.76	0.62	1.38	7.2				
(Monthly Ave)			0.002	0.016	0.018	0.14			0.72	0.77	1.49	6.56	0.722	0.786	1.51	6.70

(all data included)

Total Fluoride Emissions, Martin Marietta

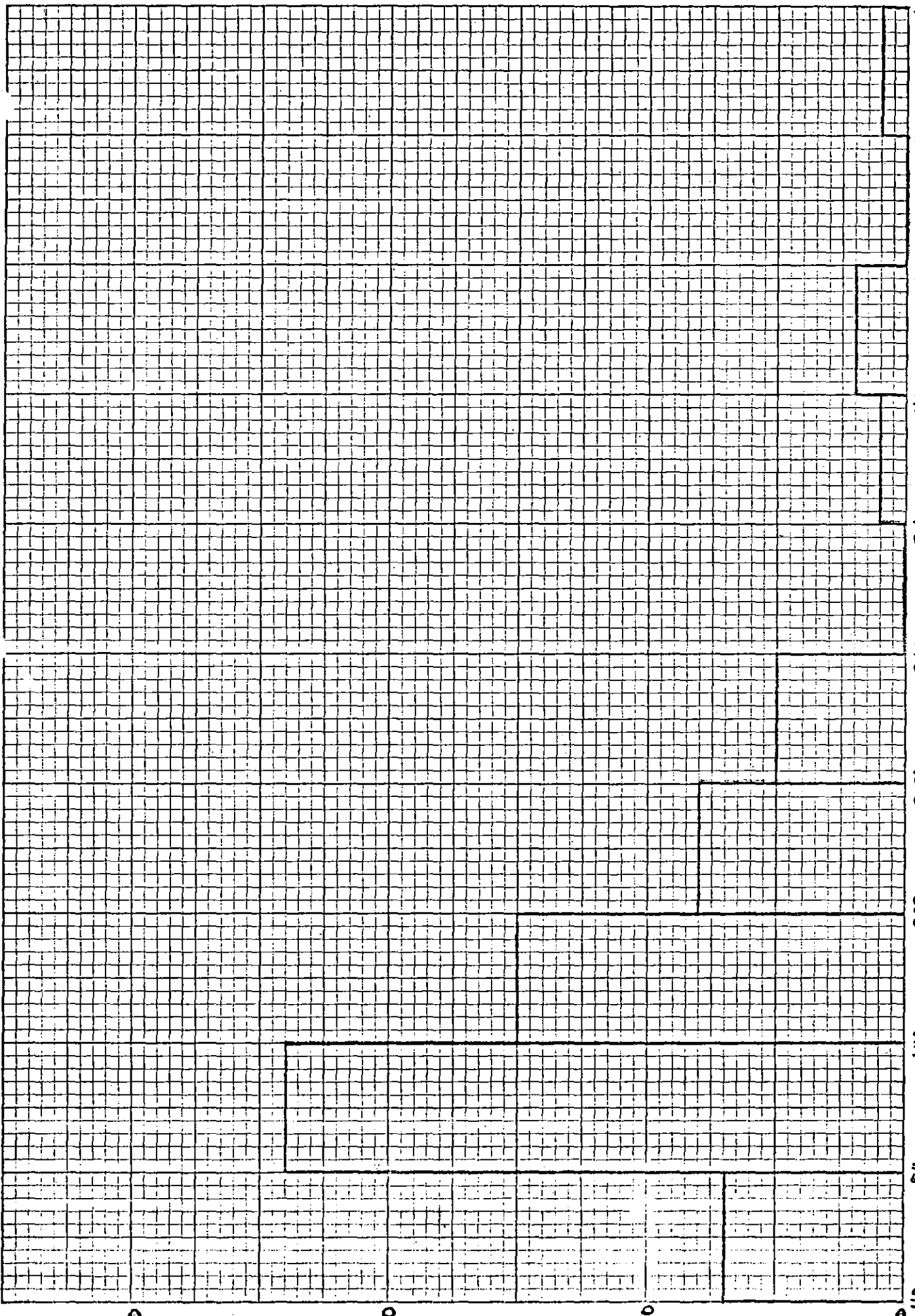
March 2, 1971 Thru June 19, 1973

N	f	Σf	$\% \Sigma f$
.40	1	1	1.6
.62	1	2	3.1
.68	1	3	4.7
.83	2	5	7.8
.90	2	7	10.9
.96	1	8	12.5
.99	1	9	14.1
1.01	1	10	15.6
1.05	1	11	17.2
1.06	1	12	18.8
1.08	1	13	20.3
1.15	1	14	21.9
1.17	1	15	23.4
1.20	1	16	25.0
1.21	1	17	26.6
1.23	1	18	28.1
1.25	1	19	29.7
1.26	2	21	32.8
1.30	1	22	34.4
1.31	2	24	37.5
1.32	1	25	39.1
1.37	1	26	40.6
1.38	1	27	42.2
1.39	1	28	43.8
1.41	2	30	46.9

N	f	Σf	% Σf
1.42	1	31	48.4
1.49	1	32	50.0
1.50	2	34	53.1
1.57	1	35	54.7
1.59	2	37	57.8
1.62	1	38	59.4
1.65	1	39	60.9
1.68	1	40	62.5
1.78	1	41	64.1
1.81	1	42	65.6
1.83	1	43	67.2
1.94	1	44	68.8
1.95	1	45	70.3
1.96	1	46	71.9
2.05	1	47	73.4
2.09	1	48	75.0
2.20	1	49	76.5
2.31	1	50	78.1
2.37	1	51	79.7
2.47	2	53	82.8
2.52	1	54	84.4
2.60	1	55	85.9
2.65	1	56	87.5
2.69	1	57	89.1
2.80	1	58	90.6
3.00	1	59	92.2
3.69	1	60	93.8

N	f	Σ f	% Σ f
4.20	1	61	95.3
4.64	1	62	96.9
5.77	1	63	98.4
5.80	1	64	100

<u>Class Interval</u>	<u>Midpoint</u>	<u>f</u>
.400 - .945	67	7
.946 - 1.485	121	24
1.486 - 2.025	175	15
2.026 - 2.565	229	8
2.566 - 3.105	283	5
3.106 - 3.645	337	0
3.646 - 4.185	391	1
4.186 - 4.725	445	2
4.726 - 5.265	499	0
5.266 - 5.805	553	2

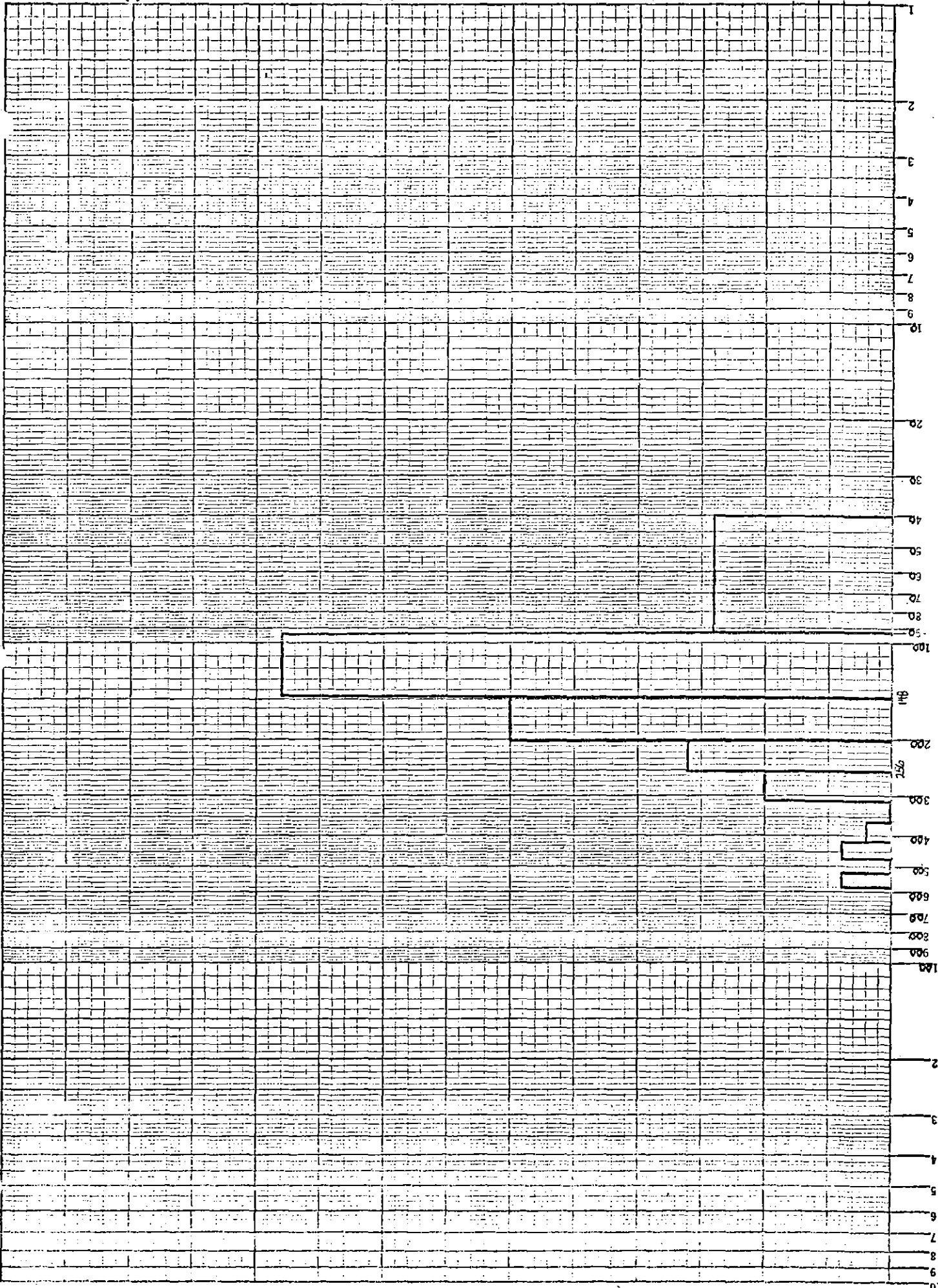


K 10 X 10 TO THE INCH (SECONDARY SYSTEM)
 KEUFFEL & ESSER CO.
 MADE IN U.S.A.

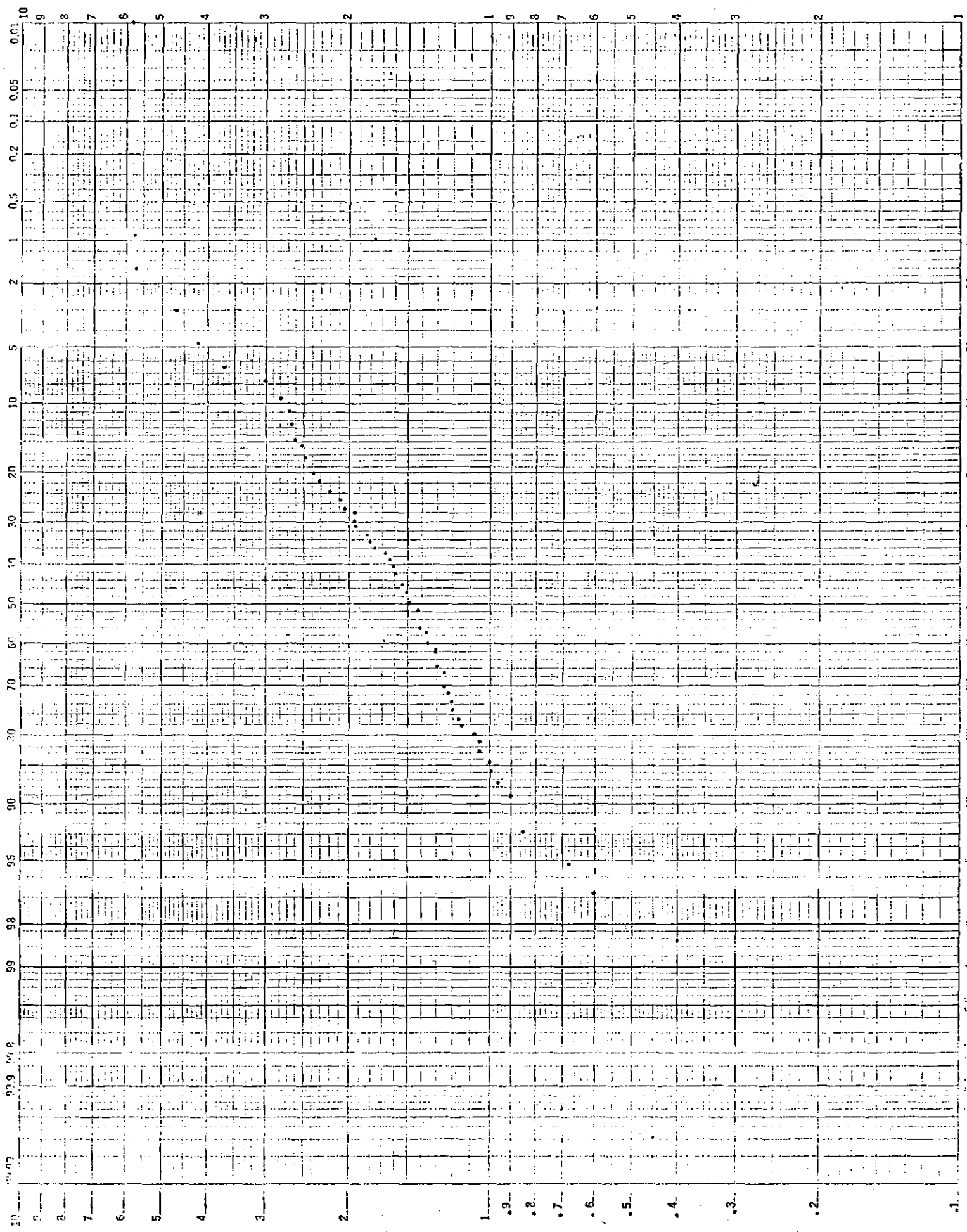
K 10 X 10 TO THE INCH 46 0782
 7 X 10 INCHES
 MADE IN U.S.A.

K&E SEMI-LOGARITHMIC
4 CYCLES X 70 DIVISIONS
MADE IN U.S.A.

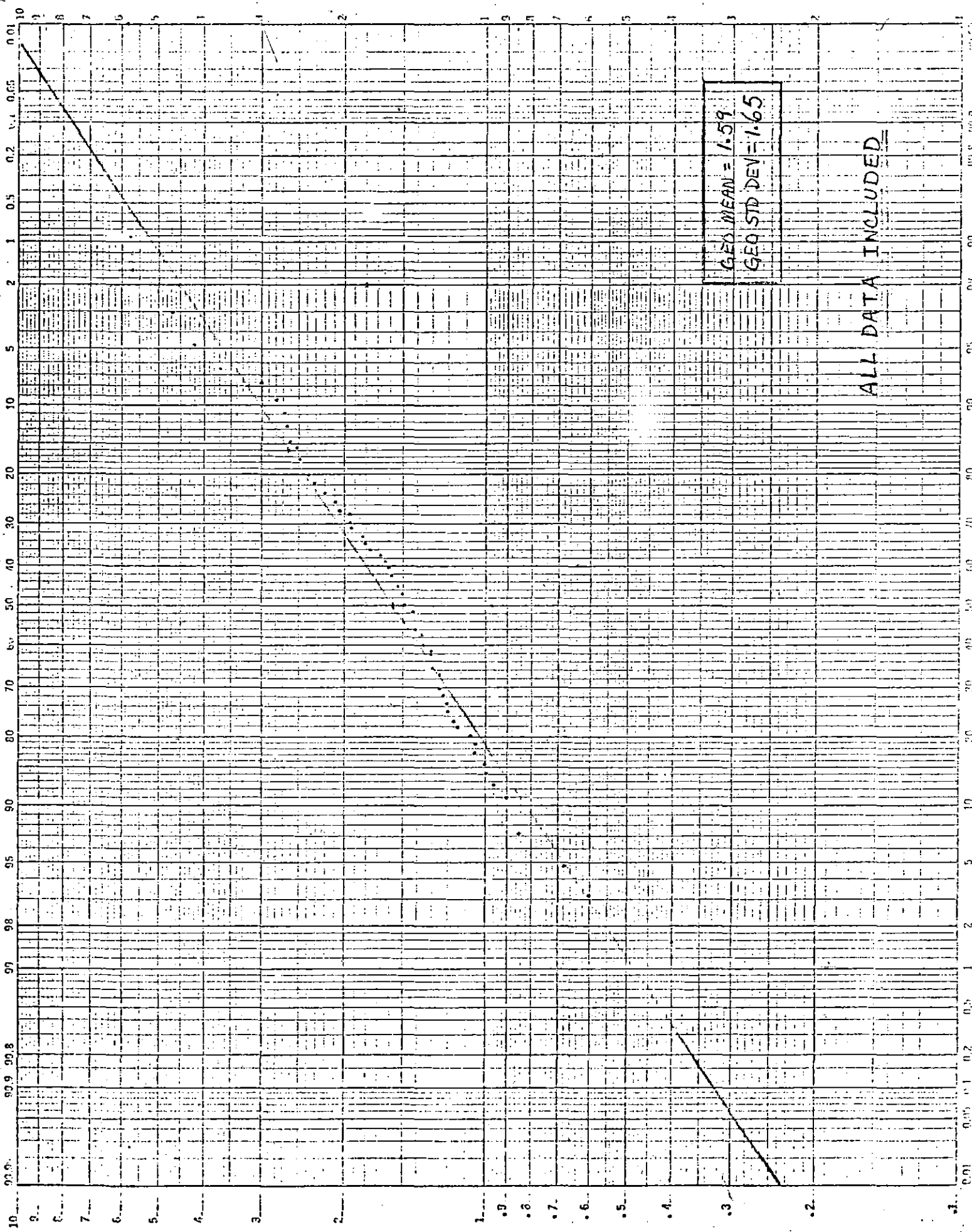
TOTAL FL / TON AL (SECONDARY SYSTEM)



RELIABILITY 46 8043
LOG CYCLES
HUFFEL & ESKIP CO.

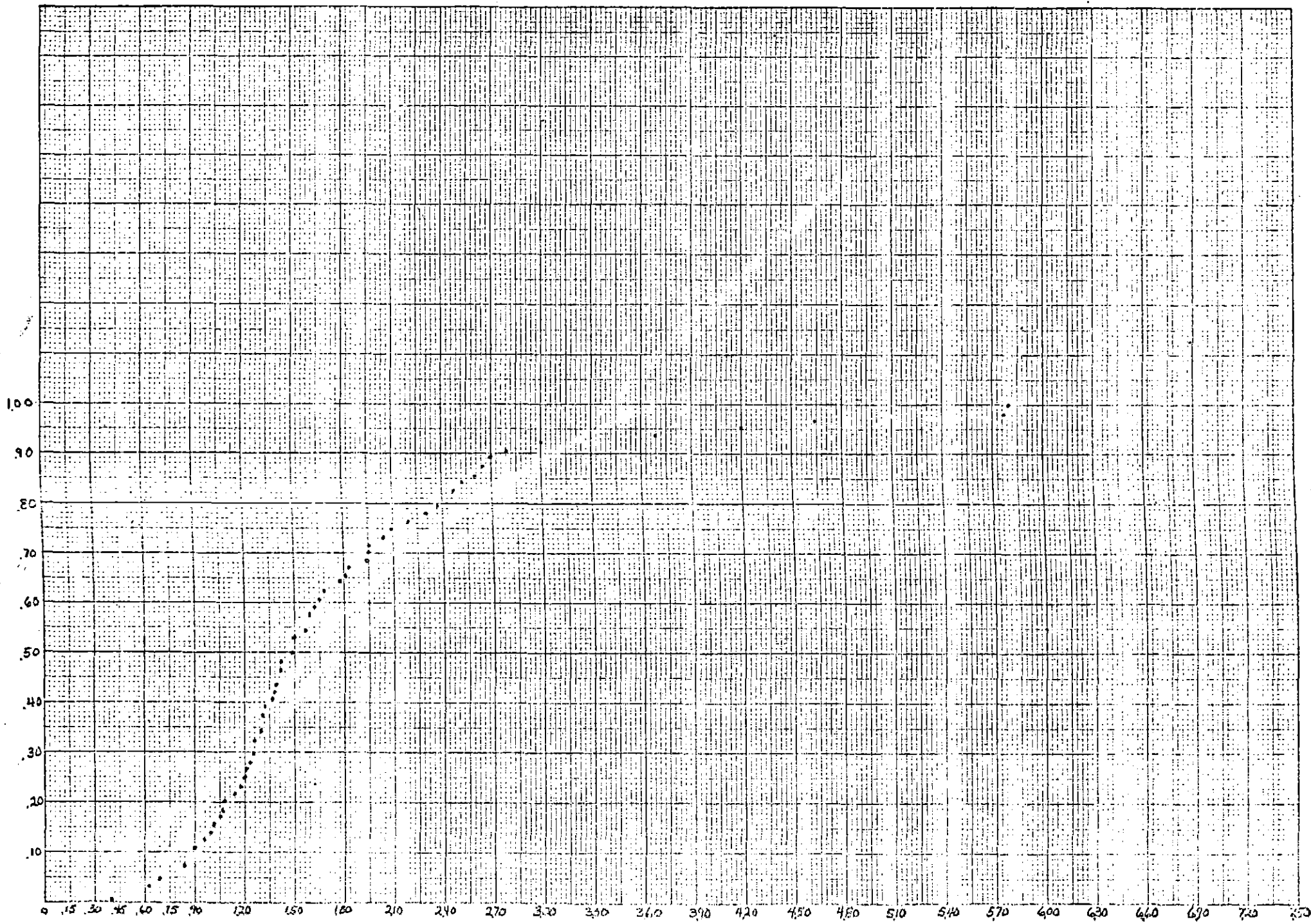


69 71 / TON AL




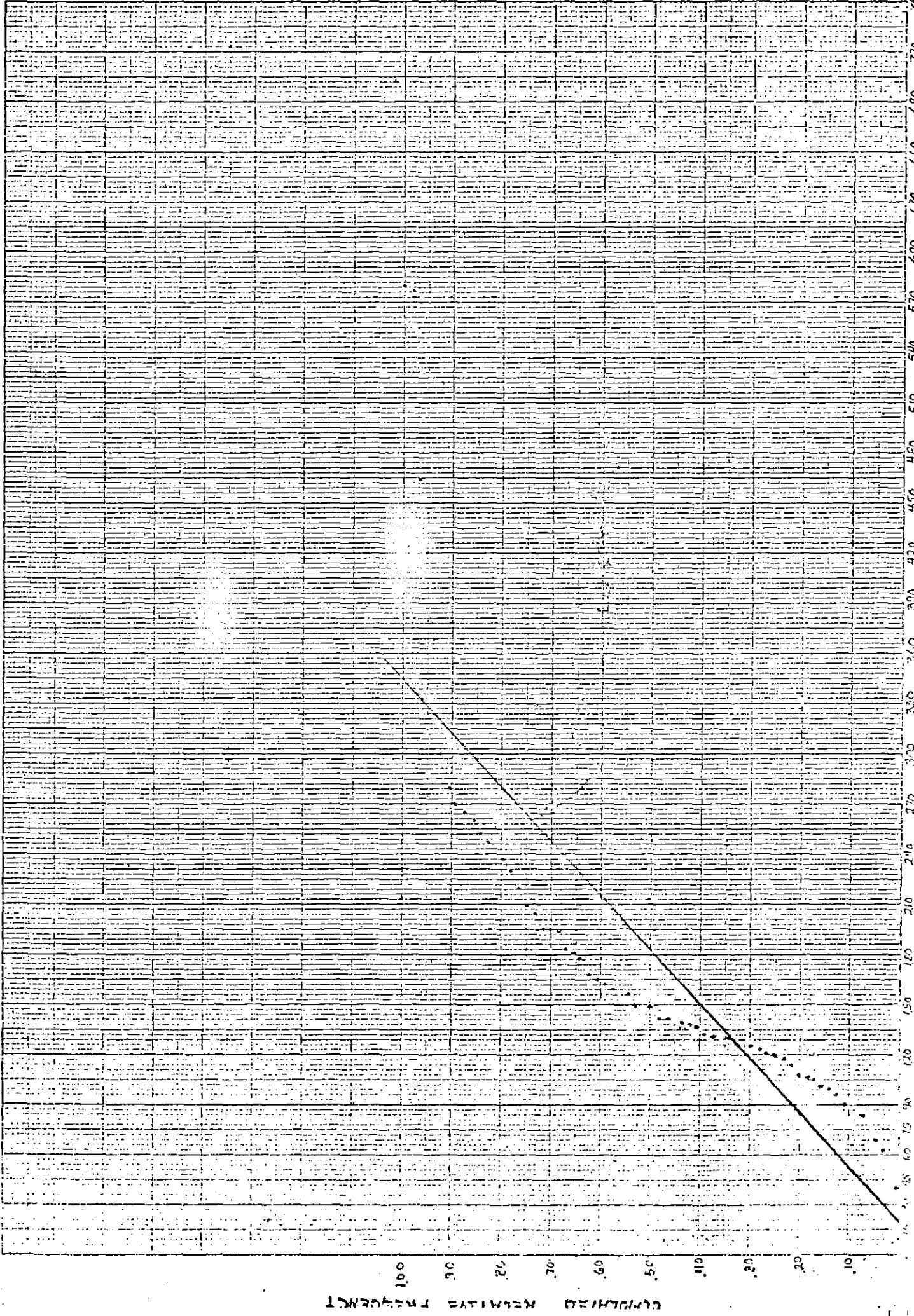
66 FI / TON AL

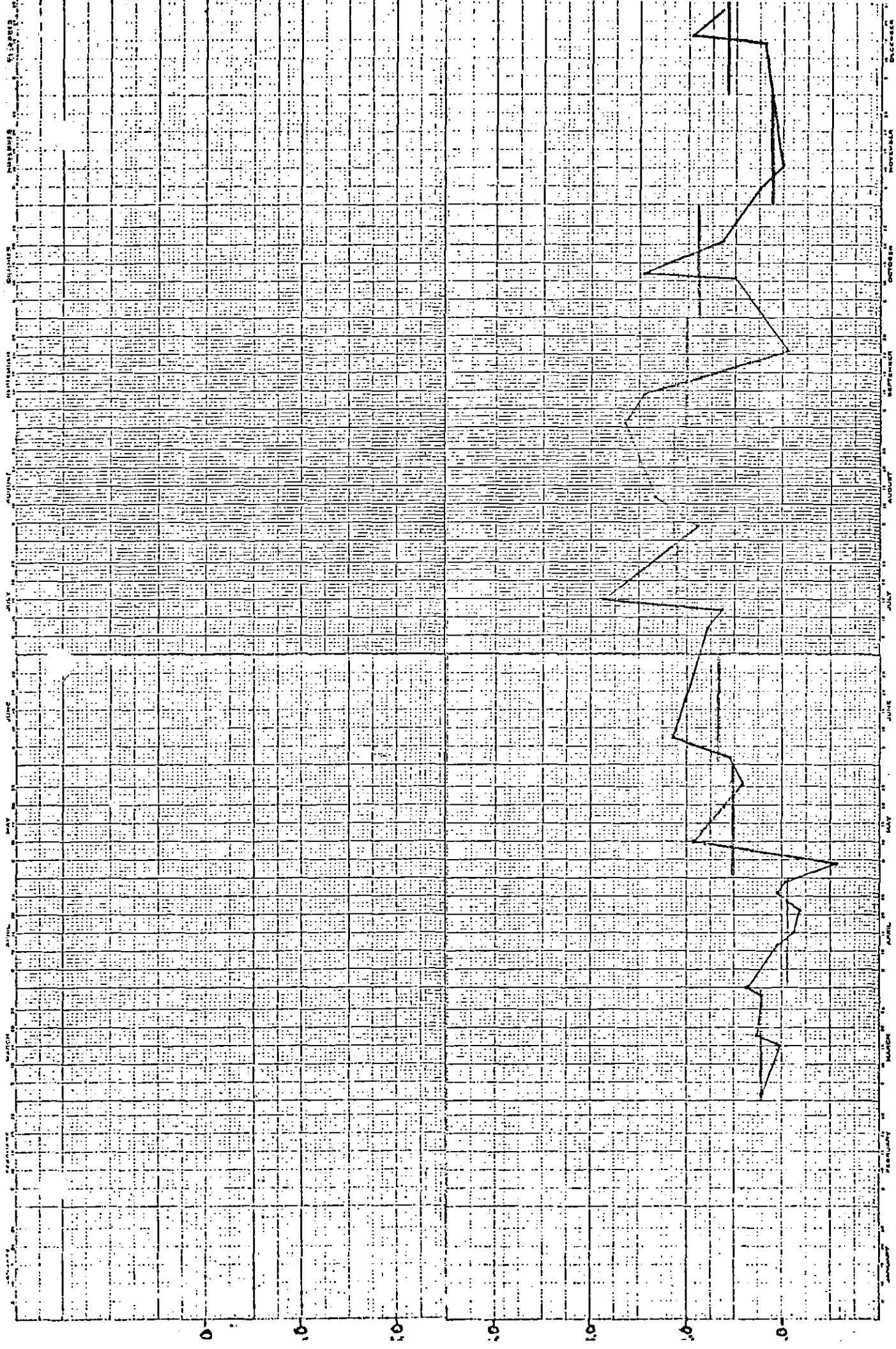
CUMULATED RELATIVE FREQUENCY



Total for 11. Total of 11.000000


10 X 10 TO THE CENTIMETER 46 1512
 MADE IN U.S.A.
 KUFFEL & ESSER CO.





— SOURCE TEST
 — MONTHLY AVE

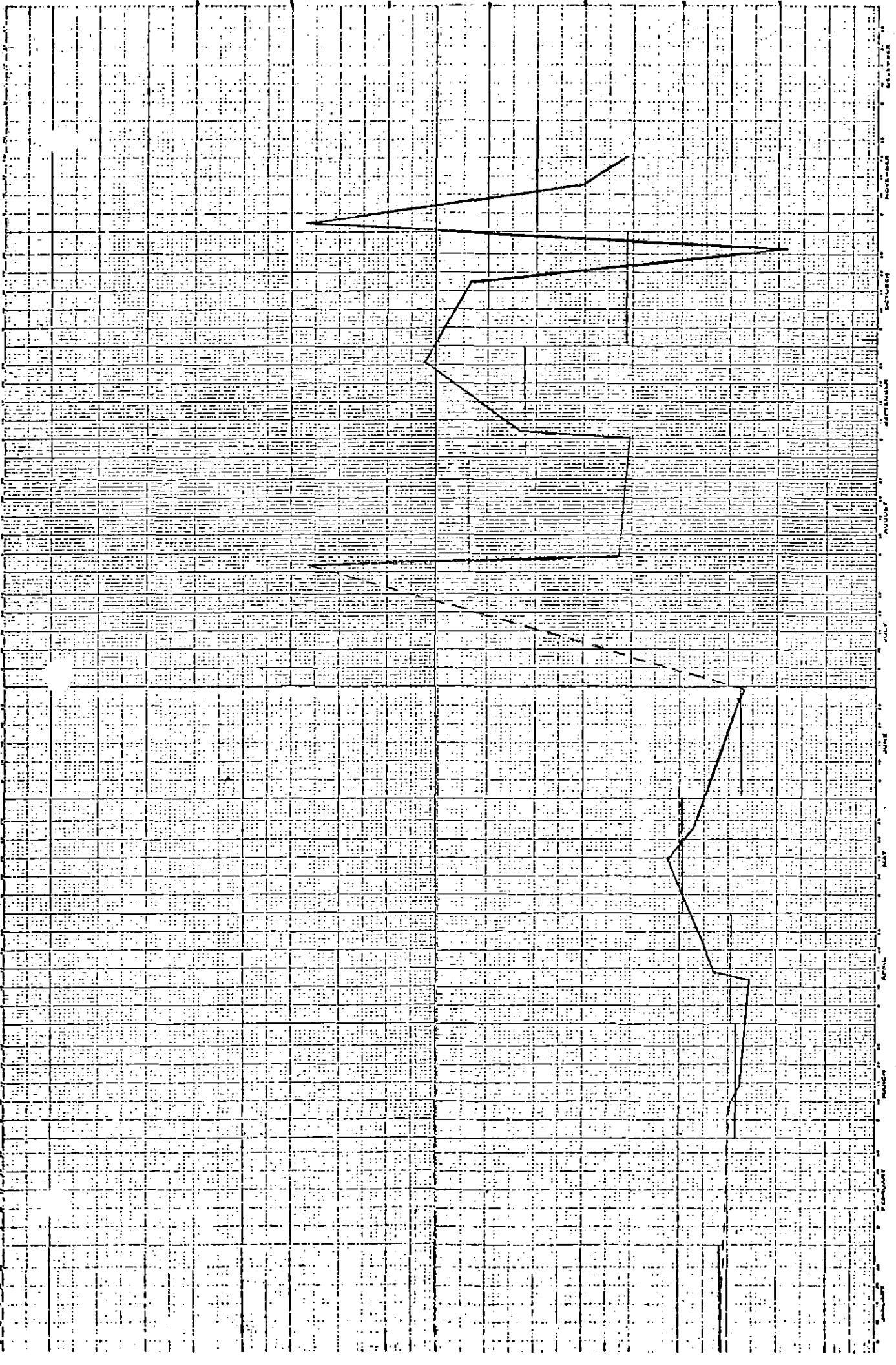
MARTIN MARIETTA
 1971 FI-
 SECONDARY SYSTEM

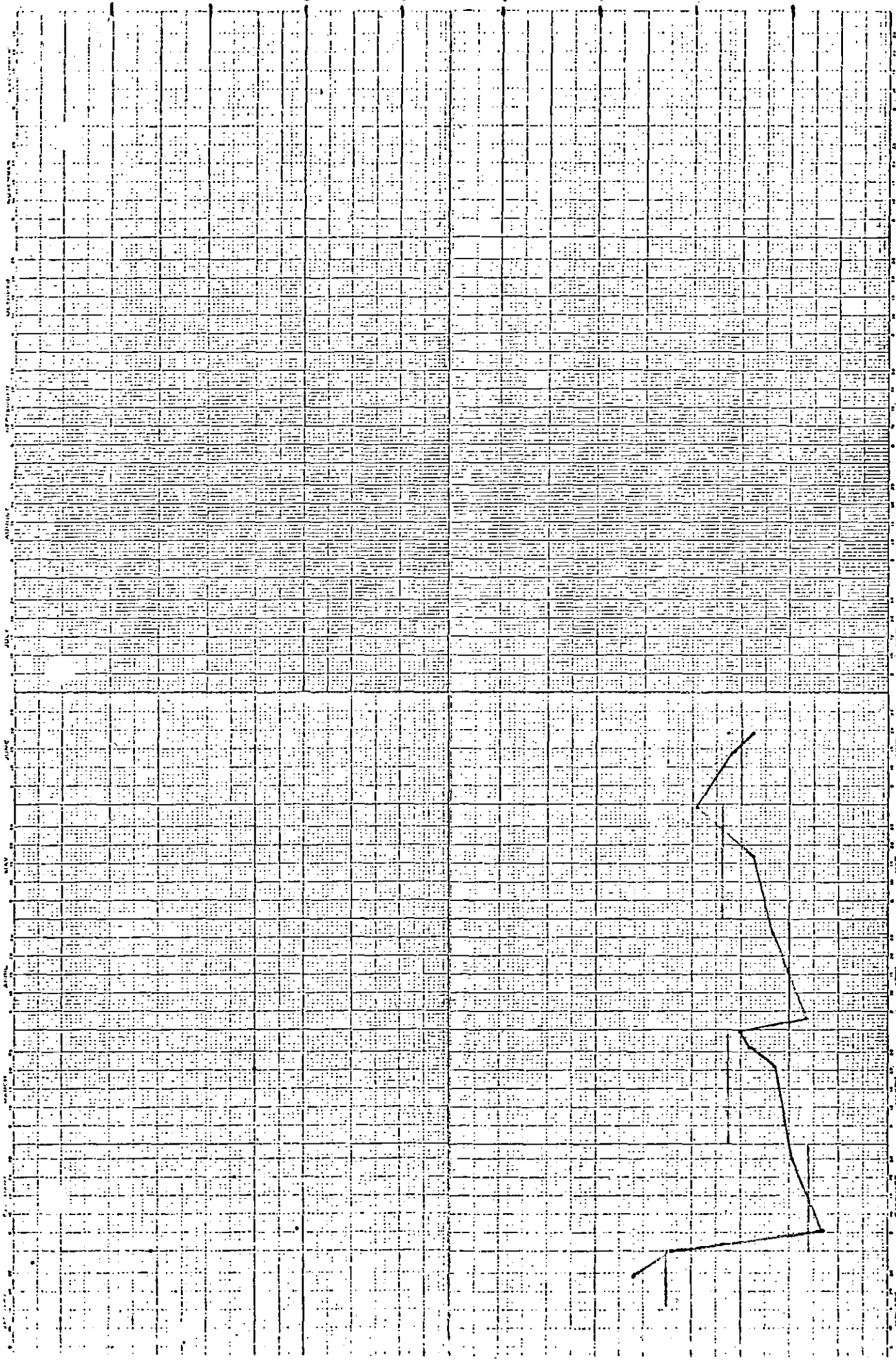
lb/Ton Al →
 ← time

lb/Ton Al
time

— SOURCE TEST
- - - NO DATA
— MONTHLY AVE

MARTIN MARIETTA
1972 FI-
SECONDARY SYSTEM





— SOURCE TCI
 - - - MONTHLY F

MARTIN MARIETTA
 1973 FL-
 SECONDARY SYSTEM

lb/Ton Al
 time

FREQUENCY TABLE #2

(Data Excluded)

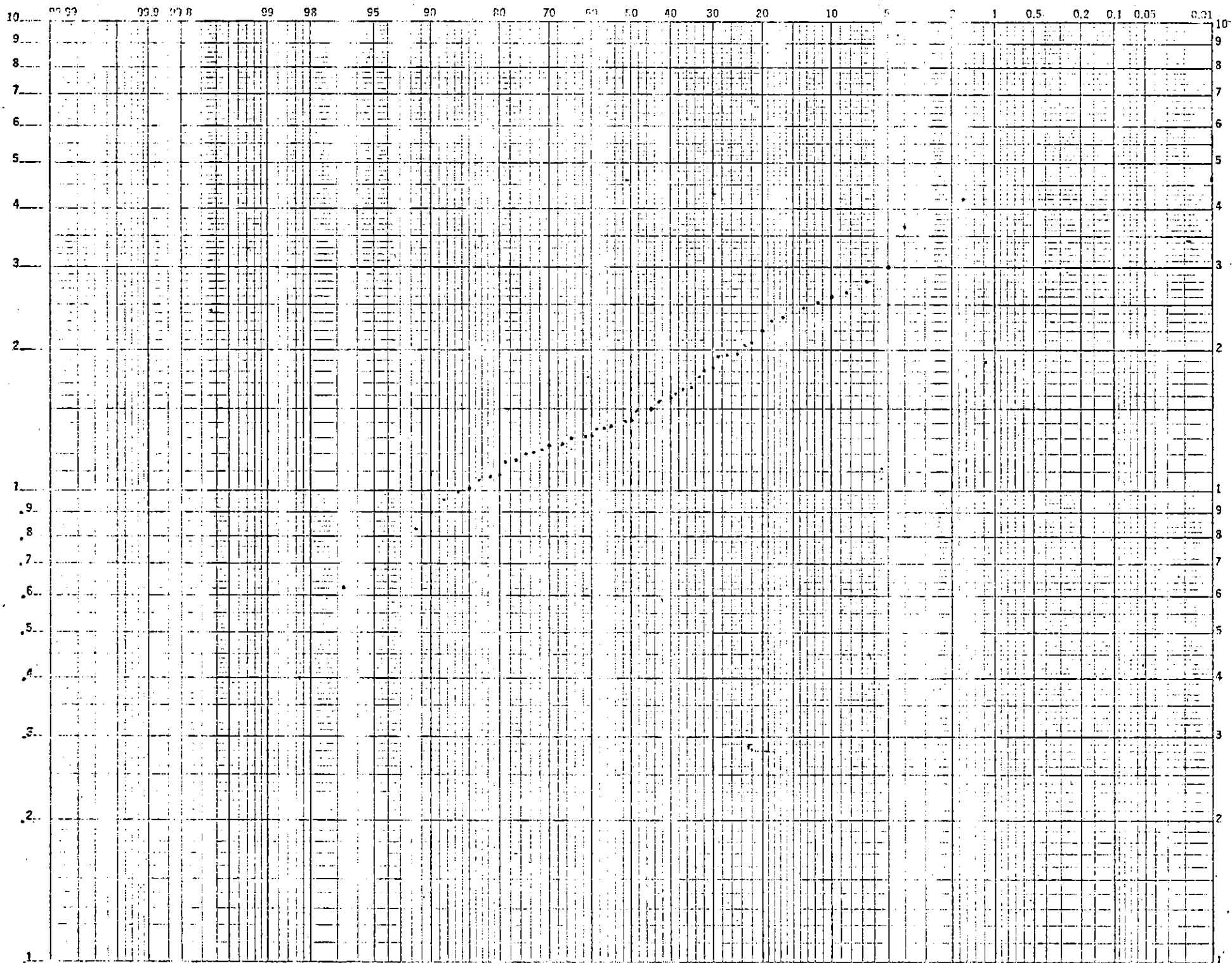
Total Fluoride Emissions, Martin Marietta

March 2, 1971 Thru June 19, 1973


N	#	$\Sigma \#$	% $\Sigma \#$
.40	1	1	1.6
.62	1	2	3.3
.68	1	3	5.0
.83	2	5	8.3
.90	1	6	10.0
.96	1	7	11.6
.99	1	8	13.3
1.01	1	9	15.0
1.05	1	10	16.6
1.06	1	11	18.3
1.08	1	12	20.0
1.15	1	13	21.6
1.17	1	14	23.3
1.20	1	15	25.0
1.21	1	16	26.6
1.23	1	17	28.3
1.25	1	18	30.0
1.26	2	20	33.3
1.30	1	21	35.0
1.31	2	23	38.3
1.32	1	24	40.0
1.37	1	25	41.6
1.38	1	26	43.3
1.39	1	27	45.0
1.41	2	29	48.3

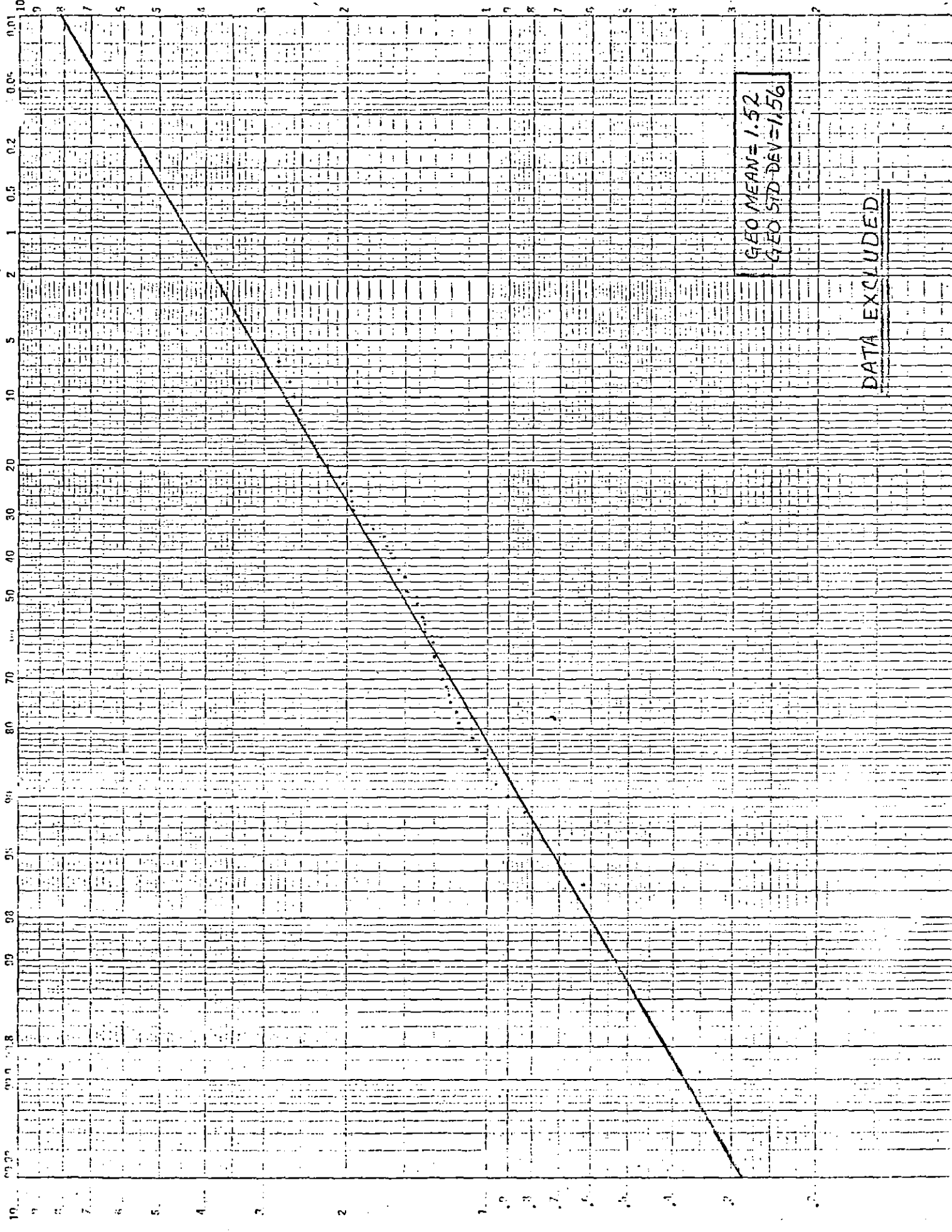
N	f	Σf	% Σf
1.42	1	30	50.0
1.49	1	31	51.6
1.50	2	33	55.0
1.57	1	34	56.6
1.59	2	36	60.0
1.62	1	37	61.6
1.65	1	38	63.3
1.68	1	39	65.0
1.78	1	40	66.6
1.81	1	41	68.3
1.83	1	42	70.0
1.94	1	43	71.6
1.95	1	44	73.3
1.96	1	45	75.0
2.05	1	46	76.6
2.09	1	47	78.3
2.20	1	48	80.0
2.31	1	49	81.6
2.37	1	50	83.3
2.47	2	52	86.6
2.52	1	53	88.3
2.60	1	54	90.0
2.65	1	55	91.6
2.80	1	56	93.3
3.00	1	57	95.0

N	f	Σf	$\% \Sigma f$
3.69	1	58	96.0
4.20	1	59	98.3
4.64	1	60	100



LB FT / IUN ML


PROBABILITY 46 8043
 X 2 LOGS CYCLIG
 MADE IN U.S.A.
 KEUFFEL & ESSER CO.



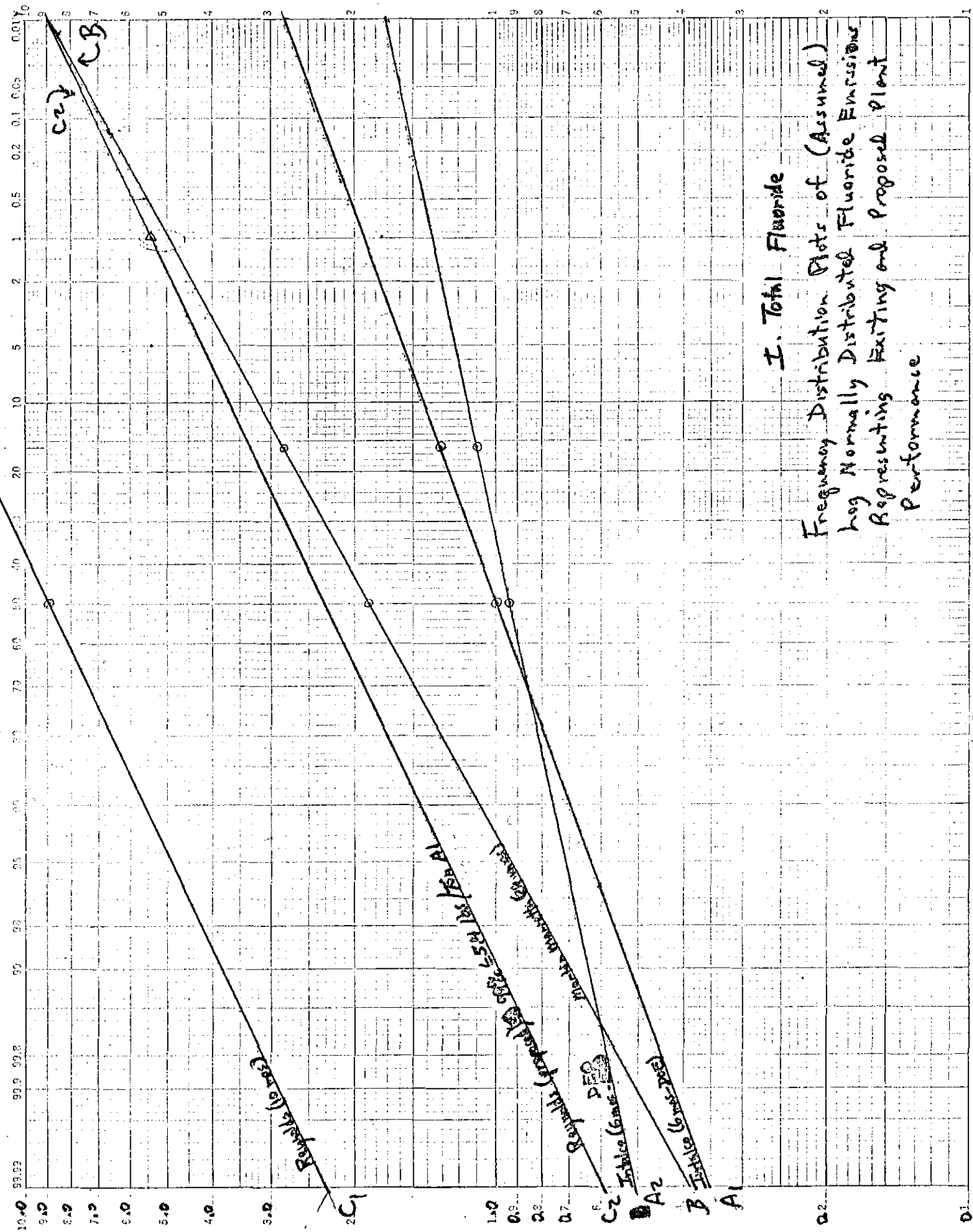
LB FL / TON AL

APPENDIX B

STATISTICAL EVALUATION OF EMISSIONS TEST RESULTS FROM SEVERAL EXISTING PRIMARY ALUMINUM PLANTS

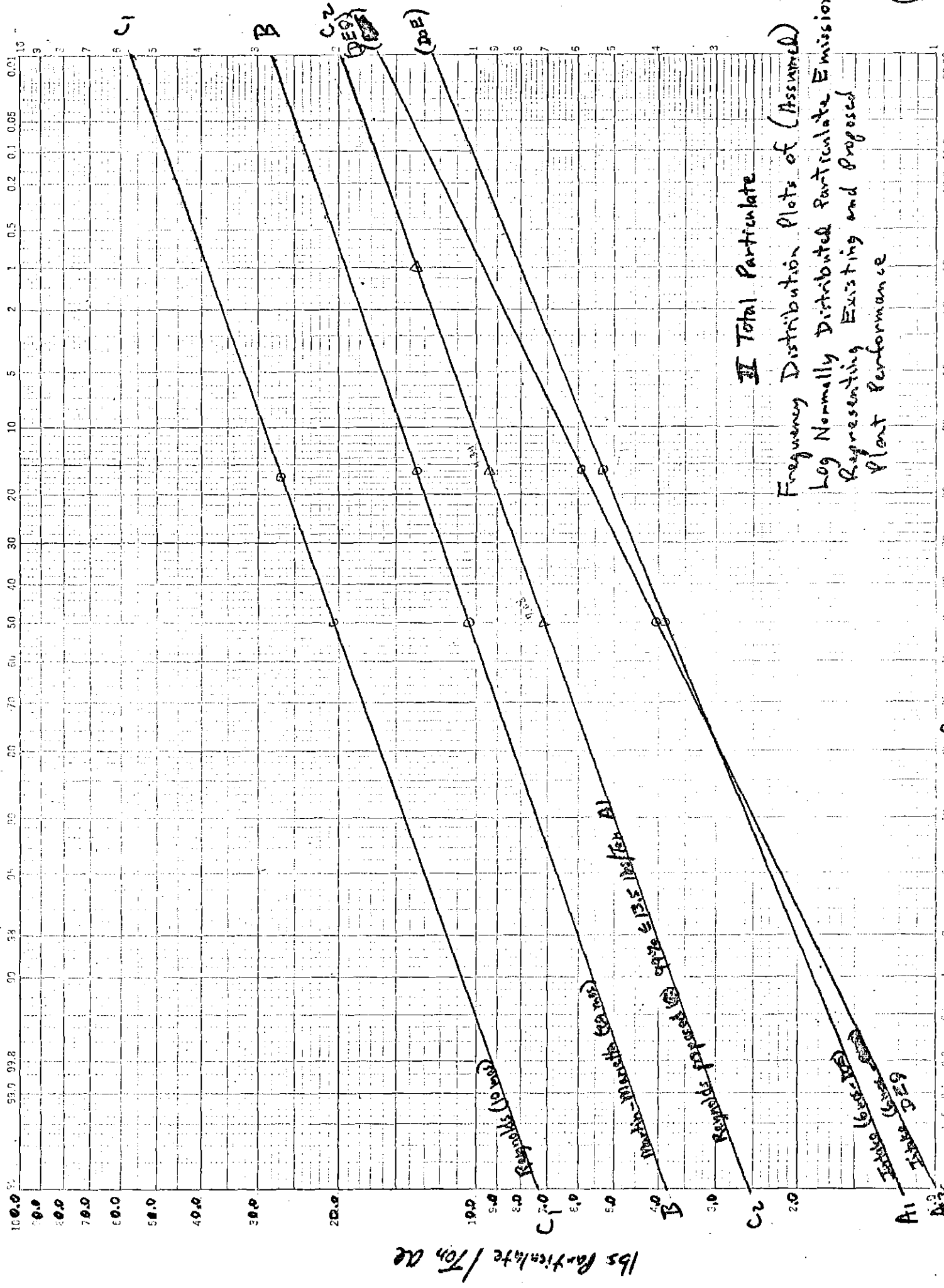
The analysis described above in this report is carried out below for total fluoride and particulate emissions from the Intalco plant at Ferndale, Washington, the Martin-Marietta plant at The Dalles, Oregon, and for the Reynolds Metals Company plant at Troutdale, Oregon. The following are definitions of shorthand nomenclature used:

- x_i = Individual item of data reported to state regulatory agency; usually a monthly average of two or more tests. For purposes of this analysis, such monthly averages are not broken down into individual test results unless otherwise indicated.
- m = The arithmetic mean or average of all individual items of data within a particular series for a given aluminum plant.
- σ = The arithmetic standard deviation of a particular series of data.
- m_g = The geometric mean of a particular series of data.
- σ_g = The geometric standard deviation of a particular series of data.
- Y = Coefficient of the arithmetic standard deviation as used in the probability factor in Equation (11) of this report, and whose numerical values are contained in Table IV of the report.
- n = The number of individual items of data in a particular series of data.
- $\xrightarrow{\text{WANG}}$ = Signifies that the indicated parameters were calculated using a Wang electronic calculator programmed to solve Equations (5), (6), (7), or (8) in the text of the report.
- Line I-A₁ = Refers to Figure I of this Appendix and specifically to the straight line frequency distribution plot labeled A₁ in that Figure. Similar designations are included with each calculation below. Line II-C₂ would refer to plot labeled C₂ in Figure II of this Appendix.



I. Total Fluoride
 Frequency Distribution Plots of (Assumed)
 log Normally Distributed Fluoride Emissions
 Representing Existing and Proposed Plant
 Performance

lb F / 7 ar



lbs Particulate / Ton ae

CASE #1: Intalco plant: Total fluoride emissions, as reported monthly to Washington Department of Ecology (DOE) and listed in Table III of this report

MONTH	x_i	x_i^2		
4-1973	1.27	1.6129	n	$= 6$
5-1973	0.757	0.5730	m	$= 6.2020/6 = 1.0336$
6-1973	1.448	2.0967	$\sum x_i^2$	$= 6.8209$
7-1973	0.71	0.5041	$\sum nm^2$	$= 6.4108$
8-1973	1.017	1.0342	$\sum x_i^2 - nm^2$	$= 0.4101$
9-1973	1.00	1.0000	σ^2	$= 0.4101/5 = 0.082020$
	<u>6.2020</u>	<u>6.8209</u>	σ	$= 0.28639$

Given: $m = 1.0336$ $m_g = 0.99606$
 $\sigma = 0.2864$ $\xrightarrow{\text{WANG}} \sigma_g = 1.3125$
 $m_g \sigma_g = 1.30739$

For Log Normal Frequency Distribution Plot, see Line I-A₁

The following maximum emissions should not be exceeded, assuming log normal distribution of the above data, in order to maintain compliance with the overall performance described by the data above.

Single Test:	$m + \frac{Y\sigma}{\sqrt{n}}$	$= 1.0336 + \frac{2.576(0.2864)}{1.0}$	$= 1.771$	1.77
Monthly Ave: (3 tests)	$m + \frac{Y\sigma}{\sqrt{3}}$	$= 1.0336 + \frac{2.576(0.2864)}{1.731}$	$= 1.4598$	1.46
Annual Ave: (36 tests)	$m + \frac{Y\sigma}{\sqrt{36}}$	$= 1.0336 + \frac{2.576(0.2864)}{6.0}$	$= 1.156$	1.16

CASE #2: Intalco plant: Total fluoride emissions, as recalculated by staff of Oregon Department of Environmental Quality (DEQ) from raw data contained in Appendix C.

MONTH	x_i	x_i^2		
4-1973	1.181	1.3947	n	$= 6$
5-1973	0.872	0.7604	m	$= 5.6870/6 = 0.9478$
6-1973	0.870	0.7569	$\sum x_i^2$	$= 5.5096$
7-1973	0.742	0.5506	$\sum nm^2$	$= 5.3903$
8-1973	1.049	1.1004	$\sum x_i^2 - nm^2$	$= 0.1193$
9-1973	0.973	0.9467	σ^2	$= 0.1193/5 = 0.02386$
	<u>5.6870</u>	<u>5.5096</u>	σ	$= 0.15446$

Given: $m = 0.9478$ $m_g = 0.93545$
 $\sigma = 0.1545$ $\xrightarrow{\text{WANG}} \sigma_g = 1.1757$
 $m_g \sigma_g = 1.09989$

For Log Normal Frequency Distribution Plot, see Line I-A₂

The following maximum emissions should not be exceeded in order to maintain compliance with the overall performance described by the data above, assuming log normal distribution of the data.

Single Test:	$m + \frac{Y\sigma}{\sqrt{1}}$	=	0.9478	+	$\frac{2.576(0.1545)}{1.0}$	=	1.3458	1.35 1.18 1.01
Monthly Ave: (3 tests)	$m + \frac{Y\sigma}{\sqrt{3}}$	=	0.9478	+	$\frac{2.576(0.1545)}{1.731}$	=	1.1777	
Annual Ave: (36 tests)	$m + \frac{Y\sigma}{\sqrt{36}}$	=	0.9478	+	$\frac{2.576(0.1545)}{6.0}$	=	1.014	

CASE #3: Intalco plant: Total particulate emissions, as reported monthly to the Washington Department of Ecology (DOE), and listed in Table III of this report.

MONTH	x_i	x_i^2
4-1973	1.93	3.7249
5-1973	3.83	14.6689
6-1973	4.43	19.6249
7-1973	3.47	12.0409
8-1973	5.32	28.3024
9-1973	5.33	28.4089
	<u>24.31</u>	<u>106.7709</u>

n	=	6	
$m = \bar{x}$	=	4.05166	, $\bar{x}^2 = 16.4160$
$\sum x_i^2$	=	106.7709	
$n\bar{x}^2$	=	98.4960	
$\sum x_i^2 - n\bar{x}^2$	=	8.2749	
σ^2	=	1.654980	
σ	=	1.2864	

Given: $m = 4.0517$	$\xrightarrow{\text{WANG}}$	$mg = 3.8617$
$\sigma = 1.2864$		$\sigma_g = 1.3632$
		$m_g \sigma_g = 5.2646$

For Log Normal Frequency Distribution Plot, see Line II-A₁

The following maximum emissions should not be exceeded in order to maintain compliance with the overall performance described by the data above, and assuming log normal distribution of the data.

Single Test:	$m + \frac{Y\sigma}{1.0}$	=	4.0517	+	$\frac{2.576(1.2864)}{1.0}$	=	7.3654	7.36 5.97 4.60
Monthly Ave: (3 tests)	$m + \frac{Y\sigma}{\sqrt{3}}$	=	4.0517	+	$\frac{2.576(1.2864)}{1.731}$	=	5.9660	
Annual Ave: (36 tests)	$m + \frac{Y\sigma}{\sqrt{36}}$	=	4.0517	+	$\frac{2.576(1.2864)}{6.0}$	=	4.6039	

CASE #4: Intalco Plant; total particulate emissions - as recalculated by staff of Oregon Department of Environmental Quality from raw data contained in Appendix C.

X_i	X_i^2			
1.93	3.7249		$m = 6$	
3.60	12.9600		$m = 4.332666$	$m^2 = 18.7720$
4.33	18.7489	$\sum X_i^2 = 126.8935$		
3.256	14.1075		$nm^2 = 112.6320$	
5.59	31.2481	$\sum X_{-mm}^2 = 14.2615$		
<u>6.79</u>	<u>46.1041</u>		$\sigma^2 = 14.2615/s = 2.8523$	
25.9960	126.8935		$\sigma = 1.6889$	
		Given $m = 4.3327$	Wang $m_g = 4.03684$	
			$\sigma_g = 1.4565$	
			$m_g \sigma_g = 5.8800$	

For log normal frequency distribution plot, see Line II-A₂

The following maximum emissions should not be exceeded in order to maintain compliance with the overall performance described by the data above, assuming log normal distribution of this data:

Single Test:	$m + \frac{Y\sigma}{1}$	$= 4.3327 + \frac{4.3506 \cdot 2.576 (1.6889)}{1.0}$	$= 8.6833$	(8.7)
Monthly Ave: (3 tests)	$m + \frac{Y\sigma}{\sqrt{3}}$	$= 4.3327 + \frac{2.5133 \cdot 2.576 (1.6889)}{1.731}$	$= 6.8460$	(6.8)
Monthly Ave: (36 tests)	$m + \frac{Y\sigma}{\sqrt{36}}$	$= 4.3327 + \frac{0.7251 \cdot 2.576 (1.6889)}{6.0}$	$= 5.0578$	(5.1)

CASE #5: Martin-Marietta Plant; total fluoride emissions - secondary system only; as reported to Oregon Department of Environmental Quality and listed in Table I (Column 3) of this report.

X_i	X_i^2			
1.37	1.8769			
2.83	8.0289	$m = 29$		
2.43	5.9049	$m = 2.0304$	$m^2 = 4.12272$	
1.49	2.2201			
1.68	2.8224	$\sum X_i^2 = 140.4295$		
1.00	1.00	$n(m)^2 = 119.5589$		
1.35	1.8225	$\sum X_i^2 - nm^2 = 20.9206$		
0.79	0.6241	$\sigma^2 = 20.9206/28 = 0.747164$		
2.25	5.0625			
3.5	12.2500	$\sigma = 0.86438$		
3.4	11.5600			
4.64	21.5296	Given $m = 2.0304$	Wang $m_g = 1.8681$	
			\rightarrow	
3.10	9.6100	$\sigma = 0.8644$	$\sigma_g = 1.5040$	
4.23	17.8929		$m_g \sigma_g = 2.8096$	
1.335	1.7822	For Log Normal Frequency Distribution Plot, see Line I-B		
1.96	3.8416			
1.47	2.1609	The following maximum values should not be exceeded in order		
1.37	1.8769	to maintain compliance with the overall performance described		
1.579	2.4932	by the data above, assuming log normal distribution of this		
1.58	2.4964	data:		
1.129	1.2746	Single Test: $m + \frac{Y\sigma}{1}$	$= 2.0304 + \frac{2.2267}{2.526 (0.8644)}$	$= 4.2571 (4.26)$
1.87	3.4969			
2.01	4.0401	Monthly Ave: $m + \frac{Y\sigma}{3}$	$= 2.0304 + \frac{2.576 (0.8644)}{1.731}$	$= 3.3167 (3.32)$
2.09	4.3681	(3 tests)		
2.07	4.2849	Annual Ave: $m + \frac{Y\sigma}{\sqrt{36}}$	$= 2.0304 + \frac{2.576 (0.8644)}{6.0}$	$= 2.4015 (2.40)$
1.69	2.8561	(36 tests)		
1.26	1.5876			
0.92	0.8464			
<u>1.23</u>	<u>1.5129</u>			
58.8830	140.4793			

CASE #5 (Continued)

1. For a proposed standard of 3.5 lbs total fluoride/Ton of Aluminum produced (monthly average) and 2.5 lbs F/Ton Al (annual average):

$$(a) \quad m + \frac{Y\sigma}{\sqrt{3}} = 3.5, \quad m = 3.5 - \frac{2.576(0.8644)}{1.731} = 2.22$$

$$(b) \quad m + \frac{Y\sigma}{\sqrt{36}} = 2.5, \quad m = 2.5 - \frac{2.576(0.8644)}{6.0} = 2.13$$

Both 2.22 and 2.13 are larger than 2.03 lbs F/Ton Al, Martin-Marietta's present average (m) emissions - so no further fluoride emissions reductions would be required by such a standard.

2. For a proposed standard of 3.0 lbs F/Ton Al (monthly average) and 2.0 lbs F/Ton Al (annual average):

$$(a) \quad m + \frac{Y\sigma}{3} = 3.0, \quad m = 3.0 - \frac{2.576(0.8644z)}{1.731} = 1.717$$

$$(b) \quad m + \frac{Y\sigma}{\sqrt{36}} = 2.0, \quad m = 2.0 - 2.576(0.8644) = 1.629$$

$$2.0304 - 1.629 = \frac{0.401}{2.0304} (100) = 19.75\%$$

To comply with this standard, Martin Marietta would have to reduce fluoride emissions by nearly 20% from its present level.

Case #6:

Martin-Marietta plant -- Total Particulate emissions - secondary system only; as reported to Oregon DEQ and listed in Table II (column 3) of this report.

X	X
8.4	70.5600
14.2	201.6400
9.6	92.16
6.56	43.0336
8.7	75.6900
7.45	55.5025
8.3	68.8900
6.4	40.9600
8.2	67.2400
11.6	134.5600
8.3	68.8900
11.4	129.9600
11.6	134.5600
17.6	309.7600
10.5	110.2500
10.6	112.3600
11.0	121.0000
9.7	94.0900
11.35	128.8225
16.9	285.6100
11.4	129.9600
12.2	148.8400
13.1	171.6100
12.3	151.2900
16.0	256.0000
12.63	159.5169
9.79	95.8441
7.00	49.0000
<u>8.40</u>	<u>70.5600</u>
311.180	3578.1596

$n = 29$
 $m = 10.7303 \quad m^2 = 115.1403$
 $\sum x_i^2 = 3578.1596$
 $nm^2 = 3339.0687$
 $\sum x_i^2 - nm^2 = 239.0909$
 $\sigma^2 = 239.0909 / 28 = 8.53896$
 $\sigma = 2.92215$
 Given: $m = 10.7303 \quad m_{og} = 10.3532$
 $\sigma = 2.92215 \quad \sigma_g = 1.3066$
 $m_g \sigma_g = 13.5275$

For log normal frequency distribution see Line II-B.

The following maximum values should not be exceeded in order to maintain compliance with the overall performance described by the data above, and assuming log normal distribution of the data:

Single test: $m + Y = 10.7303 + \frac{7.5274 \cdot 2.576(2.92215)}{1.0} = 18.2578$
 Monthly Avg: $m + \frac{Y\sigma}{\sqrt{3}} = 10.7303 + \frac{4.3486 \cdot 2.576(2.92215)}{1.731} = 15.0789$
 Annual Avg: $m + \frac{Y\sigma}{\sqrt{36}} = 10.7303 + \frac{1.2545 \cdot 2.576(2.92215)}{6.0} = 11.9848$

18.3
15.1
12.0

CASE #6 (Continued)

1. For a proposed standard of 13.0 lbs particulates/Ton of Aluminum produced (monthly average) and 10.0 lbs/Ton Al (annual average):

$$(a) \quad m + \frac{Y\sigma}{\sqrt{3}} = 13.0 \quad , \quad 13.0 - \frac{2.576(2.9215)}{1.731} = 8.65$$

$$(b) \quad m + \frac{Y\sigma}{\sqrt{36}} = 10.0 \quad , \quad 10.0 - \frac{2.576(2.9215)}{6.0} = 8.73$$

$$10.73 - 8.65 = 2.08 \quad \frac{2.08}{10.73}(100) = 19.4\%$$

To comply with this standard, Martin-Marietta would have to reduce its total particulate emissions by 20% from present levels.

2. For a proposed standard of 11.0 lbs particulate/Ton Al (monthly average) and 8.0 lbs/Ton Al (annual average):

$$(a) \quad m + \frac{Y\sigma}{\sqrt{3}} = 11.0 \quad , \quad m = 11.0 - \frac{2.576(2.9215)}{1.731} = 6.66$$

$$(b) \quad m + \frac{Y\sigma}{\sqrt{36}} = 8.0 \quad , \quad m = 8.0 - \frac{2.576(2.9215)}{6.0} = 6.75$$

$$10.75 - 6.66 = 4.07 \quad \frac{4.07}{10.73}(100) = 37.9\%$$

To comply with this standard, Martin-Marietta would have to reduce its total particulate emissions by 38% from present levels.

Case #7:

Reynolds (Troutdale) plant; Total Fluoride emissions - as reported to Oregon DEQ and listed in Table I (column 7)

Month	X	X ²	
8-1973	6.35	40.3225	$n = 10$
7-1973	6.25	39.0625	
6-1973	5.33	28.4089	$m = 9.4190$ $m^2 = 88.71756$
5-1973	8.97	80.4609	$\sum X_i^2 = 1007.5703$
4-1973	9.87	97.4169	
3-1973	9.93	98.6049	$\sum X_i^2 - n(m)^2 = 887.1756$
2-1973	8.08	65.2864	
1-1973	16.8	282.2400	$\sigma^2 = 120.3947$
12-1972	8.13	66.0969	$\sigma^2 = \frac{120.3947}{9} = 13.3771$
11-1972	14.48	209.6704	
	94.1900	1007.5703	

$\sigma = 3.65748$

Given: $m = 9.4190$ $\sigma = 3.65748$ Wang \rightarrow $m_g = 8.7802, \sigma_g = 1.4546$
 $m_g \sigma_g = 12.7720$

Log normal representation in line I-C.

The following maximum emissions should not be exceeded in order to maintain compliance with the overall performance described by the data above, assuming log-normal distribution of this data.

Single test:	$m + \frac{Y}{1.0} =$	$9.4190 + \frac{9.4216}{1.0} = 18.8406$
Monthly Average: (3 tests)	$m + \frac{Y\sigma}{\sqrt{3}} =$	$9.4190 + \frac{5.4428}{1.731} = 14.8618$
Annual Avg: (36 tests)	$m + \frac{Y\sigma}{\sqrt{36}} =$	$9.4190 + \frac{1.5702}{6.0} = 10.9892$

18.8
14.9
11.0

Case #8:

Reynolds (Troutdale) plant - Total Fluoride emissions after improvements to primary control system reported (in Reynolds' testimony) to limit maximum total fluoride emissions to 5.4 lbs fluoride/ton of aluminum produced. Line I-C₂ represents this projected situation with a frequency distribution plot parallel to Reynolds' existing fluoride emissions performance (line I-C₁) and for which the 99th percentile value = 5.4 lbs F/ton Al. From line I-C₂ can be obtained $m_g = 2.245$ and $\sigma_g = 1.454$.

$$\text{Given: } m_g = 2.245 \qquad m = 2.4067$$

$$\sigma_g = 1.454 \quad \xrightarrow{\text{Wang}} \quad \sigma = 0.9299$$

Then, the following maximum emissions should not be exceeded when Reynolds achieves its projected improved performance described by line I-C₂, assuming log normal distribution of resulting emissions test data:

$$\text{Maximum single test} = m + \frac{Y\sigma}{11} = 2.4067 + \frac{2.3954(0.9299)}{1.0} = 4.8021$$

$$\text{Monthly Average: (3 tests)} = m + \frac{Y\sigma}{\sqrt{3}} = 2.4067 + \frac{1.3838(2.3954)}{1.731} = 3.7905$$

$$\text{Annual Average: (36 tests)} = m + \frac{Y\sigma}{\sqrt{36}} = 2.4067 + 0.3992 = 2.8059$$

4.8
 3.8
 2.8

1. For a proposed standard of 3.0 lbs total fluoride/ton of aluminum (monthly average) and 2.0 lbs F/ton Al (annual average):

$$\text{a) } m + \frac{Y\sigma}{\sqrt{3}} = 3.0, \quad m = 3.0 - \frac{2.576(0.9299)}{1.731} = 1.62$$

$$\text{b) } m + \frac{Y\sigma}{\sqrt{36}} = 2.0, \quad m = 2.0 - \frac{2.576(0.9299)}{6.0} = 1.61$$

$$2.4069 - 1.62 = 0.7869 \quad \frac{0.7869}{2.4069} (100) = 32.7\%$$

Thus to comply with these standards would require nearly 33% improvement in the average emissions (m) which should result from improvements already promised for the primary emissions control system.

2. For a proposed standard of 3.5 lbs F/ton Al (monthly average) and 2.5 lbs F/ton Al (annual average):

$$a) \quad m + \frac{Y\sigma}{\sqrt{3}} = 3.5, \quad m = 3.5 - \frac{2.576(0.9299)}{1.731} = 2.12$$

$$b) \quad m + \frac{Y\sigma}{\sqrt{36}} = 2.5, \quad m = 2.5 - \frac{2.576(0.9299)}{6.0} = 2.11$$

$$2.4069 - 2.12 = 0.2869 \quad \frac{0.2869}{2.4069} (100) = 11.91\%$$

To comply with these standards would require 12% improvement in the projected average emissions (m), which should result from improvements already promised for the primary emission control system.

3. For proposed standard of 4.0 lbs F/ton Al (monthly average) and 3.0 lbs F/ton Al (annual average):

$$a) \quad m + \frac{Y}{3} = 4.0, \quad m = 4.0 - \frac{2.576(0.9299)}{1.731} = 2.61$$

$$b) \quad m + \frac{Y}{6.0} = 3.0, \quad m = 3.0 - \frac{2.576(0.9299)}{6.0} = 2.61$$

Both 2.62 and 2.61 are greater than the projected mean (2.4069), so no improvements beyond those already promised are needed.

CASE #9 Reynolds (Troutdale Plant total particulate emissions - as reported to Oregon Department of Environmental Quality and listed in Table II (Column 7):

X_i	X_i^2			
16.6	275.5600	$n = 10$		
17.7	313.2900	$m = 21.3430$	$m^2 = 455.5236$	
15.6	243.3600	$\sum X_i^2 = 4845.445$		
18.0	324.0000			
25.5	650.2500	$nm^2 = 4555.2360$		
29.7	882.0900			
23.6	556.9600	$\sum X_i^2 - nm^2 = 290.2085$		
30.7	942.4900	$\sigma^2 = 290.2085/9 = 32.245388$		
15.97	253.0409	$\sigma = 5.6785$		
<u>20.06</u>	<u>402.4036</u>			
213.4300	4845.4445	Given $m = 21.3430$	Wang $m_g = 20.62546$	
		$\sigma = 5.6785$	$\sigma_g = 1.2989$	
			$m_g \sigma_g = 26.7905$	

Log Normal Representation = Line II - C_1

Given $m = 21.3430$ Then the following maximum values should not be exceeded 99% of the time to maintain compliance with the overall performance described by the above data.
 $\sigma = 5.6785$

Single Test:	$m + \frac{Y\sigma}{1}$	=	21.3430	+	$\frac{2.576(5.6785)}{1.0}$	=	35.9708	(36.0)
Monthly Ave: (3 tests)	$m + \frac{Y\sigma}{\sqrt{3}}$	=	21.3430	+	$\frac{2.576(5.6785)}{1.731}$	=	29.7934	(29.8)
Annual Ave: (36 tests)	$m + \frac{Y\sigma}{\sqrt{36}}$	=	21.3430	+	$\frac{2.4379}{6.0}$	=	23.7809	(23.8)

CASE #10 Reynolds Troutdale Plant - total particulate emissions after improvements to primary control system, reported (in Reynolds' testimony) to limit maximum total particulate emissions to 13.5 lbs particulate/Ton of aluminum produced. Line II - C₂ represents this projected situation with a frequency distribution plot parallel to Reynolds' existing particulate emissions performance (Line II - C₁), and for which the 99th percentile value = 13.5 lbs particulate/Ton Al. From Line II - C₂ can be obtained mg = 7.08 and $\sigma_g = 1.3192$.

Given $m_g = 7.08$ $\xrightarrow{\text{Wang}}$ $m = 7.3569$
 $\sigma_g = 1.3192$ \rightarrow $\sigma = 2.0777$

Then, the following maximum emissions should not be exceeded when Reynolds achieves its projected improved performance described by Line II - C₂, assuming log normal distribution of resulting emissions test data.

Single Test: $m + \frac{Y\sigma}{1} = 7.3569 + \frac{5.3521 \cdot 2.0777}{1.0} = 12,7090$ (12.7)
Monthly Ave: $m + \frac{Y\sigma}{\sqrt{3}} = 7.3569 + \frac{3.0919 \cdot 2.0777}{1.731} = 10,4488$ (10.4)
Annual Ave: $m + \frac{Y\sigma}{\sqrt{36}} = 7.3569 + \frac{0.8920 \cdot 2.0777}{6.0} = 8.2489$ (8.2)

1. For a proposed standard of 11.0 lbs particulate/Ton of Aluminum produced (monthly average) and 8.0 lbs/Ton Al (annual average):

(a) $m + \frac{Y}{3} = 11.0$, $m = 11.0 - \frac{2.576(2.0777)}{1.731} = 7.92$
(b) $m + \frac{Y}{36} = 8.0$, $m = 8.0 - \frac{2.576(2.0777)}{6.0} = 7.11$

$7.3569 - 7.11 = 0.2469$, $\frac{0.2469}{7.3569}(100) = 3.35\%$

To comply with this standard, Reynolds must reduce total particulate matter about 3-1/2% more than is proposed to be achieved with promised improvements to their primary emissions control system.

The results analyses of CASES #1 through #10 are summarized in Table V in the text of this report.

INTALCO



ALUMINUM CORPORATION

1000 AVENUE C, BIRMINGHAM, WASHINGTON DC 20548
TELEPHONE (202) 638-1000

November 2, 1973

Mr. Frederic A. Skirwin, Associate Engineer
Air Quality Control Division
Department of Environmental Quality
State of Oregon
1234 S. W. Morrison Street
Portland, Oregon 97205

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
NOV 5 1973
AIR QUALITY CONTROL

Dear Mr. Skirwin:

In reply to your request of October 29th, we are enclosing sheets giving individual sample results on which our reports to the Washington Department of Ecology are based. The weighted averages reported to them are based upon these results plus an operating reliability figure for the various units.

By way of comment, we might state that a change of procedure was initiated in April or May as a result of a Department of Ecology request. To date, this change has resulted in lower gaseous fluoride figures. Our investigation into the reason for this difference has not yet provided a satisfactory answer.

An outline of our analytical procedure and a sketch of the sampling train are also included.

We trust this provides the information you require.

Yours very truly,

R. A. Gustafson
Property and
Environmental Manager

RAG:gp

cc: I. Macdonald
R. Ferrie
T. Briggs

The following expressions were followed to calculate emission rates in pounds per ton of aluminum produced from the individual test results obtained from Intalco:

Primary System - Serial numbers containing alphabetical designation for potlines A, B and/or C followed by three numerical digits.

Secondary System - Serial numbers containing alphabetical designation for potlines A, B and/or C followed by two numerical digits.

$$\frac{\text{Total Partic.}}{\text{Ton Al}} = \frac{(0.003168)^* (\text{Volume, SCFM}) (\text{Part. Conc., mg/SCF}) (\text{Units Op})}{(\text{Ave. tons Al produced})^{**}}$$

$$\frac{\text{Partic F}^-}{\text{Ton Al}} = \frac{(\text{Tot Partic.}) (\% \text{ F})}{(\text{Ton Al})}$$

$$\frac{\text{Gas F}^-}{\text{Ton Al}} = \frac{(0.003168)^* (\text{Volume, SCFM}) (\text{Gas F}^- \text{ Conc., mg/SCF}) (\text{Units Op})}{(\text{Ave. tons Al produced})^{**}}$$

$$\frac{\text{Tot. F}^-}{\text{Ton Al}} = \frac{\text{Partic F}^-}{\text{Ton Al}} + \frac{\text{Gas F}^-}{\text{Ton Al}}$$

- * Combined factor necessary to convert milligrams (mg) to pounds (lbs) and minutes to days.
- ** This data obtained from monthly Intalco reports to Washington Department of Ecology.

The above calculations were made for each individual sample. Primary, secondary and potroom totals were obtained by summing similar quantities obtained from simultaneous sampling for potlines A, B and C unless noted otherwise. The sampling was tripled in August and September and these monthly averages therefore result from three times as much the data.

DATE	SER. NO.	VOLUME SCF	PART CONC		GASEOUS F- CONC mg/SCF	GASEOUS #F/DAY	UNITS OP.	%F IN PART
			mg/SCF	#/D #/D				
4-24-73	A-13	104800	029	327.4 58.92	012	135.46	34	18.00
4-24-73	A-103	58704	038	84.8 6.74	147	328.05	12	7.95
4-24-73	B-5	104000	008	89.6 19.20	004	44.81	34	21.43
4-24-73	B-315	13564	134	253.4 12.85	014	30.25	44	5.07
4-24-73	C-23	104000	026	291.3 62.79	007	78.41	34	21.56
4-24-73	C-515	13286	145	305.6 27.17	013	24.08	44	8.89
(700 TONAL/day)			Pr	643.8 46.76		382.38		429.14
			Sec.	708.3 140.91		258.68		399.59
			Program Tot.	1352.1 187.67		641.06		828.73
		Gas F -	Partic F -	Tot. F -	Tot. Partic.			
		(Ct/Scum)	(Ct/Scum)	(Ct/Scum)	(Ct/Scum/4)			
Primary		0.546	0.067	0.613	0.92			
Secondary		0.370	0.201	0.571	1.01			
Program Totals		0.916	0.268	1.184	1.93			

DATE	Per. No.	VOLUME SCF	PART CONC mg/SCF	PART #/D	PART %/D	GASEOUS F-CONC mg/SCF	GASEOUS #F/D.	UNITS OP	%F
5-8	A-15	106100	020	228.6	40.34	0124	141.71	34	1765
5-8	A-105	58052	093	188.1	11.06	018	36.41	11	588
5-8	B-27	104200	011	123.4	26.10	0057	63.97	34	2114
5-8	B-311	11106	888	1249.7	46.61	035	49.26	40	373
5-8	C-5	104800	018	203.2	35.52	008	90.31	34	1748
5-8	C-511	11022	22	338.0	19.94	002	3.07	44	590
								Tot F #/D	
(647 tons/day)		Pri		1775.8	77.64		88.74		166.35
		Sec.		555.2	101.96		295.99		397.25
		Petroleum tot.		2331.0	179.57		384.73		564.30
		Gas F (#/M ³)	Partic. F (#/M ³)	Tot F (#/M ³)	Total Partic. (#/M ³)				
Primary		0.137	0.120	0.257	3.74				
Secondary		0.457	0.158	0.615	4.853				
Petroleum Totals		0.595	0.278	0.872	3.60				

DATE	SCR. No	VOLUME SCF	PRRT CONC mg/SCF	PRRT #/D	#/D	GASEOUS F- CONC mg/SCF	GASEOUS #F/D	UNITS DP	%F
6-5	A-13	105800	076	866.1	169.8	003	34.19	34	19.60
6-5	A-204	37612	111	145.4	7.1	039	51.12	11	489
6-5	B-8	105400	060	681.2	131.5	002	22.71	34	19.31
6-5	B-414	12552	126	200.4	8.9	003	4.77	40	442
6-5	C-23	105300	035	370.0	84.7	001	11.34	34	2134
6-5	C-614	12397	315	544.3	31.5	004	6.91	44	579
								Tot F/D	
				PRC	890.1	47.5		62.80	110.30
				SEC	1917.3	306.0		68.24	454.24
(649 Ton Al/Day)				Petroom Tot	2807.4	433.5		131.04	564.54
		GAS F (ppm)	Partic. F (ppm/Scrub)	Tot. F (ppm/Scrub)	Tot. Partic (ppm/Scrub)				
Primary		0.097	0.073	0.170	1.37				
Secondary		0.105	0.595	0.700	2.95				
Petroom Totals		0.202	0.668	0.870	4.33				

DATE	Sec No	VOLUMES	PART CONC. MG/SCF	PART #/O.	GRAPEOUS F- CONC MG/SCF	GRAPEOUS #F/D.	Units OF.	% OF
7-17	A-13	105,000	.047	531.6 90.52	.0017	19.22	34	19.03
7-17	A-203	52,924	.185	340.5 12.53	.0032	5.89	11	3.68
7-17	B-5	105,000	.032	361.9 68.91	.0014	15.83	34	19.04
7-17	B-405	11,708	.125	185.5 14.35	.067	99.40	40	7.74
7-17	C-23	105,000	.046	520.2 94.11	.002	22.62	34	18.09
7-17	C-605	12,691	.256	452.9 20.20	.0051	9.02	44	4.46
(637 ton Al (dry))			Pri	978.9 47.08		114.31		Tot. F (#/D)
			Sec	1413.7 253.57		57.67		161.39
			Petrosum Tot.	2392.6 300.62		171.98		311.21
								472.60
		Gas F -	Partic F -	Tot. F -	Tot. Petrosum			
		(#/Scud)	(#/ton Al)	(#/Scud)	(#/ton Al)			
	Primary	0.179	0.074	0.253	1.537			
	Secondary	0.091	0.398	0.489	2.219			
	Petrosum Totals	0.270	0.472	0.742	3.756			

DATE	SER. No.	VOLUME SCF	PART CONC MG/SCF	PART #/D	PART #/D	GASEOUS F- CONC MG/SCF	GASEOUS F #/D	Units OP	%F
8-7	A-15	105600	048	546.0	100.35	0042	47.77	34	18.38
8-7	A-204	51753	669	1206.5	66.24	118	212.81	11	5.49
8-16	A-15	105800	034	387.5	71.53	001	11.40	34	18.46
8-20	A-202	61827	457	984.6	22.15	001	2.15	11	2.25
8-21	A-3	165500	031	3523	19.09	001	11.36	34	5.40
8-21	A-206	54991	355	680.3	26.00	010	19.16	11	3.94
8-7	B-8	105200	051	577.9	113.04	0015	17.00	34	14.56
8-7	B-309	12068	134	2049	14.18	006	9.18	40	6.92
8-16	B-308	12362	037	58.0	3.45	001	1.57	40	5.96
8-16	B-6	104100	042	470.9	123.15	001	11.21	34	21.15
8-21	B-301	11681	167	247.2	6.55	002	2.96	40	2.65
8-21	B-21	105500	051	579.5	104.43	001	11.36	34	18.02
8-7	C-27	104900	0801	9051	262.28	0028	31.64	34	28.98
8-7	C-509	12338	1417	2437	18.28	003	5.16	44	7.50
8-16	C-505	12761	185	329.1	19.35	002	3.56	44	5.88
8-16	C-16	104900	068	768.3	211.91	002	22.60	34	27.58
8-21	C-502	11489	170	272.3	12.55	002	3.20	44	4.61
8-21	C-12	104900	081	915.2	176.55	002	22.60	34	19.24
(578 ton AI/day)									
Sample	Source	Gas F- (#/Ton AI)	Partic F- (#/Ton AI)	Tot. F- (#/Ton AI)	Tot. Partic. (#/Ton AI)				
8/7	Primary	0.393	0.171	0.564	2.86				
8/7	Secondary	0.167	0.323	0.990	3.51				
	Petrochem	0.560	0.994	1.554	6.27				
	Primary	0.013	0.078	0.091	2.37				
8/16	Secondary	0.078	0.703	0.781	2.81				
	Petrochem Tot.	0.091	0.781	0.872	5.18				
	Primary	0.044	0.079	0.123	2.08				
8/21	Secondary	0.078	0.519	0.597	3.12				
	Petrochem Tot.	0.122	0.598	0.720	5.20				
Monthly	Primary	0.150	0.109	0.259	2.44				
Ave.	Secondary	0.109	0.682	0.890	3.15				
	Petrochem Tot.	0.258	0.791	1.049	5.59				

DATE	SCR. No	VOLUME SCF	Part. Conc MG/SCF	Part #/0	GASEOUS F-Conc MG/SCF	GASEOUS F #/0	UNITS OF	% F
9-5	A-13	115000	.050	619.3 112.91	.001	12.39	34	18.23
9-5	A-202	57622	.480	963.8 32.19	.003	6.02	11	3.34
9-12	A-5	105000	.027	305.4 66.69	.0007	7.92	34	21.84
9-12	A-203	59896	1.205	2515.1 106.64	.002	4.17	11	4.24
9-19 *	A-13	105000	.046	520.2 127.41	.001	11.31	34	24.49
9-25	A-25	106000	.044	502.4 91.38	.002	22.83	34	18.19
9-25	A-206	53851	.232	435.4 19.77	.003	5.63	11	4.54
9-5	B-424	13083	.114	109.0 9.68	.099	164.13	40	5.12
9-5	B-5	115000	.046	569.8 89.52	.001	12.39	34	15.91
9-11 *	B-6	105500	.033	375.0 62.74	.003	34.09	34	11.73
9-12 *	B-306	12997	.199	327.7 22.45	.130	214.11	40	6.85
9-18	B-321	13606	.084	147.8 11.95	.001	1.72	40	8.25
9-18	B-27	105100	.029	328.3 64.15	.0005	5.66	34	19.54
9-25	B-402	13757	.196	341.7 18.79	.006	10.46	40	5.50
9-25	B-8	105900	.056	638.8 136.09	.001	11.41	34	21.43
9-5	C-624	12585	.449	787.7 45.45	.000	3.51	44	5.77
9-5	C-23	115000	.126	1560.7 253.30	.002	24.77	34	16.33
9-12 *	C-609	11697	.269	438.6 20.83	.012	19.57	44	4.75
9-18	C-16	105200	.091	1031.1 219.02	.002	22.66	34	21.24
9-18	C-609	12166	.263	446.0 24.17	.002	3.39	44	5.42
9-25	C-624	14066	.094	184.3 8.94	.002	3.92	44	4.85
9-25	C-27	105700	.031	352.9 60.35	.001	11.39	34	17.10
(584 cor. A1/day)		Sample	Source	Gas F (#/Sec/Al)	Partic. F (#/Sec/Al)	Tot. F (#/Sec/Al)	Tot. Partic (#/Sec/Al)	
			Primary	0.297	0.150	0.447	3.32	
		9/5	Secondary	0.085	0.780	0.865	4.71	
			Petroleum Tot.	0.382	0.930	1.312	8.03	
		9/18 *	Primary	0.016	0.244	0.260	5.31	
			Secondary	0.062	0.599	0.661	2.85	
			Petroleum Tot.	0.078	0.843	0.921	8.16	
			Primary	0.034	0.081	0.115	1.65	
		9/25	Secondary	0.078	0.494	0.572	2.54	
			Petroleum Tot.	0.112	0.575	0.687	4.19	
		Monthly	Primary	0.116	0.158	0.274	3.43	
		Ave.	Secondary	0.075	0.624	0.699	3.37	
			Petroleum Tot.	0.191	0.783	0.973	6.79	

* Not considered

* 9/12 data used for Line A

The sample point in the stack to be tested will depend on whether single point or multiple point is used. The sample rate we use is \approx 0.6 CFM.

We sample the stacks for 24 hours to get a complete cycle in the potrooms.

The filters are 0.45 μ 47 mm Gelman which we dissolve in Methyl Ethel Ketone with H₂O & KOH. Evaporate the M.E.K., dilute to 100 ml and run on the Technicon auto analyzer.

The impingers have 200-250 ml distilled water in them. They are emptied into a 1000 ml graduate and rinsed with distilled water into the graduate. The volume is noted and a portion of the liquid is saved for analysis on the Orion specific-ion meter.

SAMPLE TRAIN FOR

TESTING WET AND DRY

SCRUBBERS

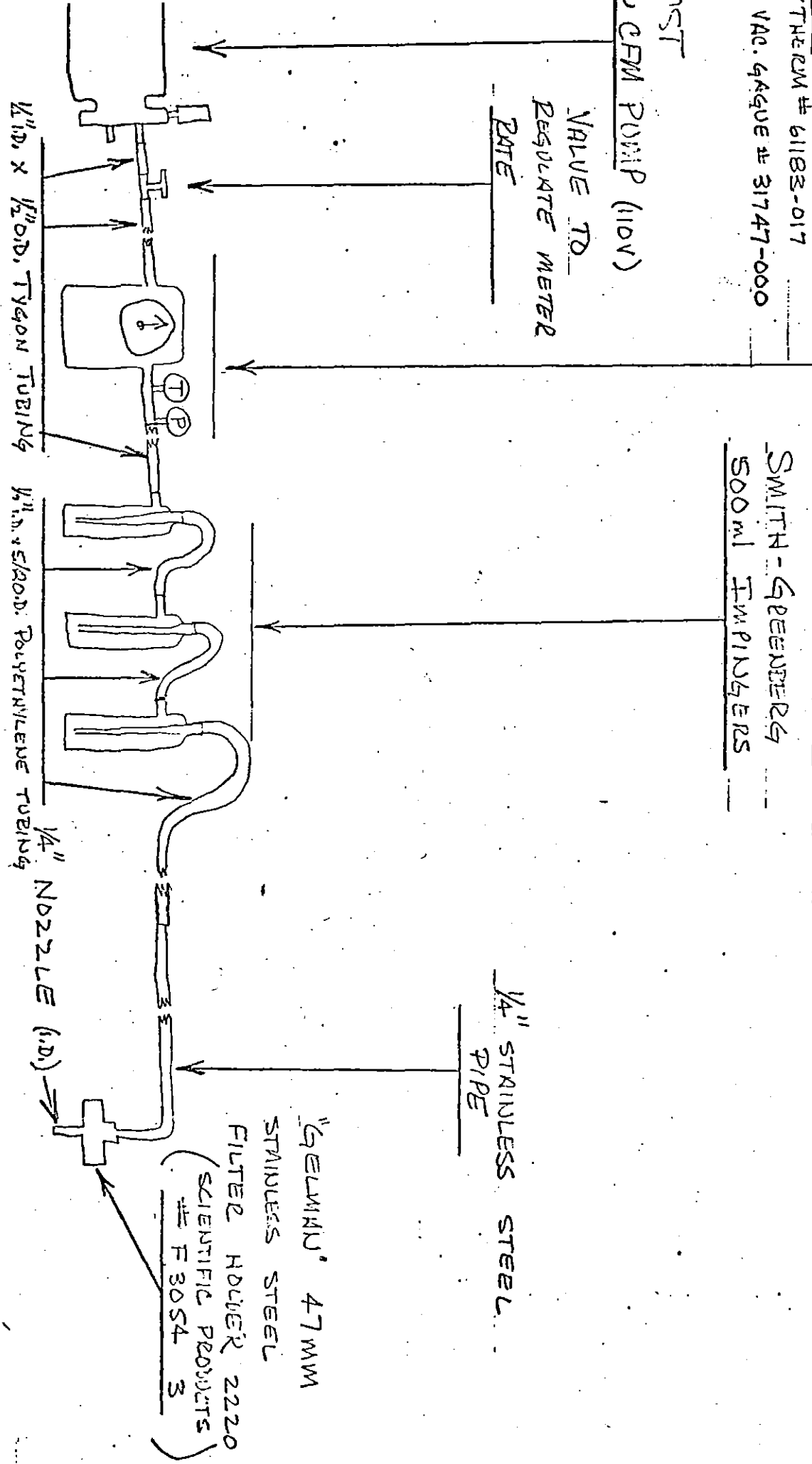
ROCKWELL GAS METER
WITH TEMPERATURE &
VACUUM GAUGES ADDED

SMITH-GREENBERG
500 ml IMPINDERS

SCIENTIFIC
THE RM # 61183-017
VAC. GAUGE # 31747-000

OST
VACUUM PUMP (110V)

VALVE TO
REGULATE METEER
RATE



1/4" STAINLESS STEEL
PIPE

"GELMAN" 47MM
STAINLESS STEEL
FILTER HOLDER 2220
(SCIENTIFIC PRODUCTS
F 3054 3)

1/2" O.D. X 1/2" O.D. TYGON TUBING

1/2" O.D. POLYETHYLENE TUBING

1/4" NOZZLE (i.d.)

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY CONTROL DIVISION

November 1973

Proposed
Amendments to OAR, Chapter 340, Division 2

OAR, Chapter 340, Division 2, Sections 25-255 through 25-290 is proposed to be amended as follows:

25-255 STATEMENT OF PURPOSE.

In furtherance of the public policy of the state as set forth in ORS 449.765, it is hereby declared to be the purpose of the Commission in adopting the following regulations to:

- (1) Require, in accordance with a specific program and timetable for each operating primary aluminum plant the highest and best practicable collection, treatment and control of atmospheric pollutants emitted from primary aluminum plants through the utilization of technically feasible equipment, devices and procedures necessary to attain and maintain desired air quality.
- (2) Require effective monitoring and reporting of emissions, ambient air levels of fluorides, flouride content of forage and other pertinent data. The Department will use these data, in conjunction with observation of conditions in

the surrounding areas, to develop emission and ambient air standards and to determine compliance therewith.

- (3) Encourage and assist the aluminum industry to conduct a research and technological development program designed to reduce emissions, in accordance with a definite program, including specified objectives and time schedules.
- (4) Establish standards which based upon presently available technology, are reasonably attainable with the intent of revising the standards as needed when new information and better technology are developed.

25-260 DEFINITIONS.

- (1) All Sources - Means sources including, but not limited to, the reduction process, alumina plant, anode plant, anode baking plant, cast house, and collection, treatment and recovery systems.
- (2) Ambient Air - The air that surrounds the earth, excluding the general volume of gases contained within any building or structure.
- (3) Annual Average - Means the arithmetic average of the twelve most recent monthly averages reported to the Department.

- [(3)] (4) Anode Baking Plant - Means the heating and sintering of pressed anode blocks in oven-like devices, including the loading and unloading of the oven-like devices.
- [(4)] (5) Anode Plant - Means all operations directly associated with the preparation of anode carbon except the anode baking operation.
- [(5)] (6) Commission - Means Environmental Quality Commission.
- [(6)] (7) Cured Forage - Means hay, straw, ensilage that is consumed or is intended to be consumed by livestock.
- [(7)] (8) Department - Means Department of Environmental Quality.
- [(8)] (9) Emission - Means a release into the outdoor atmosphere of air contaminants.
- [(9)] (10) Emission Standard - Means the limitation on the release of a contaminant or multiple contaminants to the ambient air.
- [(10)] (11) Fluorides - Means matter containing fluoride ion.
- [(11)] (12) Forage - Means grasses, pasture and other vegetation that is consumed or is intended to be consumed by livestock.
- (13) Monthly Average - Means the arithmetic average of the three best valid test results obtained during any calendar month, utilizing test methods and procedures approved by the Department.
- (14) Opacity - Means the degree to which an emission reduces transmission of light or obscures the view of an object in the background.

- [(12)] (15) Particulate Matter - Means a small, discrete mass of solid or liquid matter, but not including uncombined water.
- [(13)] (16) Primary Aluminum Plant - Means those plants which will or do operate for the purpose of or related to producing aluminum metal from aluminum oxide (alumina).
- [(14)] (17) Pot Line Primary Emission Control System[s] - Means the system which collects and removes contaminants prior to the emission point. If there is more than one such system, the primary system is that system which is most directly related to the aluminum reduction cell.
- [(15)] (18) Regularly Scheduled Monitoring - Means sampling and analyses in compliance with a program and schedule approved pursuant to Section [25-275] 25-280.
- (19) Ringelmann Smoke Chart - Means the Ringelmann Smoke Chart with instructions for use as published in May 1967 by the U.S. Department of Interior, Bureau of Mine
- [(16)] (20) Standard Dry Cubic Foot of Gas - Means that amount of the gas which would occupy a cube having dimensions of one foot on each side, if the gas were free of water vapor at a pressure of 14.7 P.S.I.A. and a temperature of 60°F.

25-265 EMISSION STANDARDS.

- [(1)] Visible emissions from all sources shall not exceed twenty (20) percent opacity (Ringelmann 1).

(2) Each primary aluminum plant shall proceed promptly with a program to comply with this regulation. A proposed schedule of compliance shall be submitted by each plant to the Commission not later than one hundred and eighty (180) days after the effective date of this regulation. After receipt of the proposed schedule, the State shall establish a schedule of compliance for each plant. Such schedule shall include the date by which full compliance must be achieved but, in no case, shall full compliance be later than January 1, 1975.]

(1) The exhaust gases from each primary aluminum plant constructed on or after January 1, 1973, shall be collected and treated as necessary so as not to exceed the following minimum requirements:

(a) Total fluoride emissions from all sources shall not exceed: (1) a monthly average of 1.3 pounds of fluoride ion per ton of aluminum produced; and (2) an annual average of 1.0 pound of fluoride ion per ton of aluminum produced; and (3) 12.5 tons of fluoride ion per month from any single aluminum plant without prior written approval by the Department.

(b) The total of organic and inorganic particulate matter emissions from all sources shall not exceed: (1) a monthly average of 7.0 pounds of particulate per ton of aluminum produced;

and (2) an annual average of 5.0 pounds of particulate per ton of aluminum produced.

(c) Visible emissions from any source shall not exceed ten (10) percent opacity or 0.5 on the Ringelmann Smoke Chart at any time.

(2) Each primary aluminum plant constructed and operated after January 1, 1973, shall be in full compliance with these regulations no later than 180 days after completing potroom start-up and shall maintain full compliance thereafter.

(3) The exhaust gases from each primary aluminum plant constructed on or before January 1, 1973, shall be collected and treated as necessary so as not to exceed the following minimum requirements:

(a) 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, and

(2) An annual average of 2.5 pounds of fluoride ion per ton of aluminum produced, and

(3) 22.0 tons of fluoride ion per month from any single aluminum plant without prior written approval by the Department.

(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, and

- (2) An annual average of 10.0 pounds of particulate per ton of aluminum produced.
- (c) Visible emissions from any source shall not exceed 20 percent opacity or 1.0 on the Ringelmann Smoke Chart at any time.
- (4) Each existing primary aluminum plant shall proceed promptly with a program to comply as soon as practicable with these regulations. A proposed program and implementation plan shall be submitted by each plant to the Department not later than 180 days after the effective date of these amended regulations. The Department shall establish a schedule of compliance for each existing primary aluminum plant. Such schedule shall include the dates by which compliance shall be achieved but, in no case, shall full compliance be later than the following dates:
- (a) Existing plants shall comply with emission standards in 25-265(3) by January 1, 1977;
- (b) Existing plants shall comply with emission standards in 25-265(1) by January 1, 1984, pending a review by the Commission as described in 25-265(5).
- (5) The Commission shall review during calendar year 1979 the feasibility of applying section 25-265(4)(b) based on their conclusions regarding:

- (a) the then current state of the art of controlling emissions from primary aluminum plants;
- (b) the progress in controlling and reducing emissions exhibited at that time by then existing aluminum plants;
- (c) the need for further emissions control at those facilities based on discernible environmental impact of emissions up to that time.

25-270

SPECIAL PROBLEM AREAS.

The Department may require more restrictive emission limits than the numerical emission standards contained in Section 25-265 for an individual plant upon a finding by the Commission that the individual plant is located or is proposed to be located in a special problem area. Such more restrictive emission limits for special problem areas may be established on the basis of allowable emissions per ton of aluminum produced or total maximum daily emissions to the atmosphere, or a combination thereof, and may be applied on a seasonal or year-round basis.

[25-270]

25-275

HIGHEST AND BEST PRACTICABLE TREATMENT AND CONTROL REQUIREMENT.

[Notwithstanding the specific emission limits set forth in Section 25-265 of these regulations, in] In order to

maintain the lowest possible emissions of air contaminants, the highest and best practicable treatment and control currently available shall in every case be provided [.] but this section shall not be construed to allow emissions to exceed the specific emission limits set forth in Section 25-265.

[25-275]

25-280 MONITORING.

(1) Each primary aluminum plant constructed and operated on or before January 1, 1973, shall submit, within sixty (60) days after [an] the effective date of [this] these amended regulations, a detailed, effective monitoring program. [The proposed program shall be subject to revision and approval by the Commission.] The program shall include regularly scheduled monitoring and testing by the plant of [for] emissions of gaseous and particulate fluorides and total particulates. The plant shall take and test a minimum of three (3) representative emission samples each calendar month. The samples shall be taken at specified intervals.

A schedule for measurement of fluoride levels in forage and ambient air shall be submitted. The Department shall establish a monitoring program for the plant which shall be placed in effective operation within ninety (90) days after written notice to the plant by the Department of the established

monitoring program.

- (2) [Necessary sampling and analysis equipment shall be ordered or otherwise provided for within thirty (30) days after the monitoring program has been approved in writing by the Commission. The equipment shall be placed in effective operation in accordance with the approved program within ninety (90) days after delivery.] Each primary aluminum plant proposed to be constructed and operated after January 1, 1973, shall submit a detailed preconstruction and post-construction monitoring program as a part of the air contaminant discharge permit application.

[25-280]

25-285

REPORTING.

(1) Unless otherwise authorized in writing by the [Commission] Department, data shall be reported by each primary aluminum plant within thirty (30) days of the end of each calendar month for each source and station included in the approved monitoring program as follows:

- (a) Ambient air: Twelve-hour concentrations of gaseous fluoride in ambient air expressed in micrograms per cubic meter of air[.], and in parts per billion (ppb). Also 28 day test results using calcium formate ("limed") paper expressed in micrograms of fluoride per centimeter squared per cubic meter ($\mu\text{g}/\text{cm}^2/\text{m}^3$).

- (b) Forage: Concentrations of fluoride in forage expressed in parts per million (ppm) of fluoride on a dried weight basis.
- (c) Particulate emissions: Results of all emission sampling conducted during the month for particulates, expressed in grains per standard dry cubic foot, in pounds per day, and in pounds per ton of aluminum produced. The method of calculating pounds per ton shall be as specified in the approved monitoring programs. Particulate data shall be reported as total particulates and percentage of fluoride ion contained therein.
- (d) Gaseous emissions: Results of all sampling conducted during the month for gaseous fluorides. All results shall be expressed as hydrogen fluoride in micrograms per cubic meter [on a volume basis] and pounds per day of hydrogen fluoride[.], and in pounds per ton of aluminum produced.
- (e) Other emission and ambient air data as specified in the approved monitoring program.
- (f) Changes in collection efficiency of any portion of the collection or control system that resulted from equipment or process changes.

- (2) Each primary aluminum plant shall furnish, upon request of the [Commission] Department, such other data as the [Commission] Department may require to evaluate the plant's emission control program. Each primary aluminum plant shall report the value of each emission test performed during that reporting period, and shall also immediately report abnormal plant operations which result in increased emission of air contaminants.
- (3) [Prior to construction, installation or establishment of a primary aluminum plant, a notice of construction shall be submitted to the Commission.] No person shall construct, install, establish or operate a primary aluminum plant without first applying for and obtaining an air contaminant discharge permit from the Department. Addition to, or enlargement or replacement of, a primary aluminum plant or any major alteration [therein] thereof shall be construed as construction, installation or establishment.

[25-285 SPECIAL STUDIES.

- (1) Special studies, covering the areas in subparagraphs (a), (b) and (c) of this subsection shall be conducted at each primary aluminum plant.
- (a) Emissions of particulates from all sources within the plant, including size distribution

and physical and chemical characteristics where feasible, and a separation of fluoride and non-fluoride particulate.

(b) Plume opacity from all sources within the plant, including its relationship to grain loading, particulate characteristics, particule emissions in pounds per ton of production and stack characteristics.

(c) Emissions of sulfur dioxide, hydrocarbons, carbon monoxide, chlorine and chlorides, oxides of nitrogen, ozone, water vapor, and fluorides from all sources.

(2) Each primary aluminum plant shall submit a program for conducting the aforesaid special studies to the Commission for approval within sixty (60) days after the effective date of this regulation.

(3) The results of the special studies shall be submitted to the Commission not later than eighteen (18) months after approval of the special studies program.]

[25-290 REVISION OF EMISSION STANDARDS.

(1) A public hearing may be called on or before ninety (90) days after submission of the results of the special studies to evaluate the special studies, current technology and adequacy of these regulations and to make revisions to the regulations as necessary.

(2) The Commission may, after public hearing, establish more restrictive regulations for new primary aluminum plants or for plants that expand existing facilities. Data documenting projected emissions and changes in or effects upon air quality that would result from the construction or expansion, must be submitted to the Commission, together with plans and specifications, in accordance with Section 25-280(3).]

November 1, 1973

Mr. Diarmuid F. O'Scannlain
Director
Oregon Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Dear Mr. O'Scannlain:

At the supplementary hearing on proposed emission standards for primary aluminum plants held in Astoria on October 24, results from the emission monitoring program at the INTALCO Aluminum Corporation were read into the record.

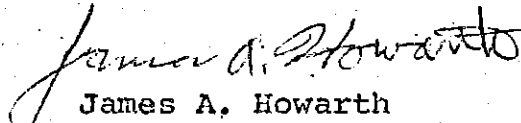
Since April 1973, the INTALCO monitoring program has yielded results indicating emission of F ion varying from 0.7 lbs/ton Aluminum to 1.4 lbs/ton Aluminum. It must be emphasized that the calculation is based on a limited number of samples from only some of the emission points of the primary and secondary potroom scrubbers.*

The results of INTALCO's potroom emission monitoring program should be a good indication that INTALCO emission control is being maintained but cannot be considered as the equivalent of a compliance test in establishing an accurate emission level.

We understand the DEQ staff have requested additional information from INTALCO; this information to include raw data on individual samples, and both sampling and analytical procedures. This information will be forwarded as requested.

The INTALCO potroom emission monitoring results read into the record do not constitute a basis for establishment of emissions standards for primary aluminum plants.

Very truly yours,


James A. Howarth
Project Manager

JAH:as

Page - 2 - Diarmuid F. O'Scannlain

*Normal sampling frequency is to sample 3 of 102 wet scrubber emission points and 3 of 100 dry scrubber emission points over a 24 hour period once per month. There is no measurement of carbon baking emission or other fugitive losses.

DIRECTOR'S PRELIMINARY STATEMENT FOR AGENDA ITEM F,
EMISSION STANDARDS FOR PRIMARY ALUMINUM PLANTS

MR. CHAIRMAN, BEFORE THE COMMISSION BEGINS ITS DELIBERATIONS ON EMISSION STANDARDS FOR ALUMINUM PLANTS, I'D LIKE TO CLARIFY ONE POINT THAT MAY BE A SOURCE OF CONFUSION TO SOME OF THE PEOPLE IN OUR AUDIENCE.

I WANT TO BE SURE IT'S CLEARLY UNDERSTOOD THAT WHAT'S AT ISSUE TODAY IS THE STANDARD THAT WILL APPLY TO ALL ALUMINUM PLANTS IN OREGON WHETHER ALREADY IN EXISTENCE OR CONTEMPLATED. WE ARE NOT DECIDING TODAY WHETHER ANY SPECIFIC PLANT SHOULD OR SHOULDN'T BE BUILT AT A SPECIFIC LOCATION.

WE HAVE RECEIVED AN APPLICATION FROM AMAX CORPORATION FOR ITS PROPOSED PLANT AT WARRENTON. WE EXPECT TO HOLD A FACT-FINDING HEARING IN JANUARY ON AMAX PERMIT APPLICATIONS FOR AIR, SOLID WASTE, PLUS BOTH STATE AND FEDERAL REQUIREMENTS RELATED TO WATER.

WE EXPECT THE JANUARY AMAX HEARING TO COVER THE ENVIRONMENTAL IMPACT OF THAT PROPOSED PLANT. WE EXPECT AN ENVIRONMENTAL IMPACT STUDY FROM THE COMPANY. WE WILL EVALUATE THE PROPOSED ESTUARY STUDY BY OREGON STATE UNIVERSITY AS PART OF THE IMPACT ASSESSMENT. WE WILL EXPLORE THE EXTENT TO WHICH THE FEDERAL NON-DEGRADATION REQUIREMENTS RELATE TO THE AMAX PROPOSAL FOR THIS PARTICULAR AREA EVEN THOUGH OUR RULES ON NON-DEGRADATION WON'T BE READY FOR SOME TIME. WE WILL ALSO LOOK AT POWER NEEDS. WHILE WE DON'T REGULATE ENERGY USE, WE DO HAVE TO LOOK AT THE ENVIRONMENTAL IMPACT OF THE OF THE PLANTS THAT GENERATE THAT ENERGY. FOR EXAMPLE: TURBINE PLANTS, SUCH AS THE ONE AT HARBORTON, AND THE BEAVER PLANT WHICH THE COMMISSION WILL CONSIDER LATER TODAY, DO AFFECT AIR QUALITY AND PRODUCE SOME NOISE. IF WE'RE SHORT OF POWER, WE'RE LIKELY TO NEED MORE FACILITIES OF THIS KIND. AN ALUMINUM PLANT USES A LOT OF POWER. THEREFORE, INDIRECTLY, THE BUILDING OF A NEW ALUMINUM PLANT CAN MEAN MORE TURBINES OR STEAM PLANTS BECAUSE THERE'S ONLY SO MUCH HYDRO POWER AVAILABLE.

THESE ISSUES MAY WELL ENTER INTO THE COMMISSION'S DELIBERATIONS ON THE AMAX PERMIT APPLICATIONS.

OTHER HEARINGS AT OTHER TIMES MAY BE HELD ON PERMITS FOR OREGON'S TWO EXISTING PLANTS. THOSE HEARINGS WOULD INCLUDE CONSIDERATION OF INDIVIDUAL COMPLIANCE SCHEDULES FOR MEETING WHATEVER STANDARDS THE COMMISSION SETS TODAY. EACH PLANT WILL HAVE TO MEET INTERIM STANDARDS AS SOON AS PRACTICABLE BEFORE THE 1977 DEADLINE, CONSIDERING HOW FAR ALONG THE PLANT IS NOW AND HOW FAR IT HAS TO GO TO ACHIEVE THOSE STANDARDS. OTHER CONSIDERATIONS WILL INCLUDE WHETHER THE PLANT IS LOCATED IN A "SPECIAL PROBLEM AREA" THAT REQUIRES ADDITIONAL RESTRICTIONS IN CERTAIN SEASONS.

THESE ARE THE ISSUES TO BE DEALT WITH IN CONSIDERING SPECIFIC PERMITS. TODAY THE COMMISSION HOPES TO SET GENERAL RULES AND DEFINE THE SPECIAL CASES UNDER WHICH THOSE RULES MAY VARY. NO PERMIT FOR ANY ALUMINUM PLANT IS BEING CONSIDERED TODAY.

MR. CHAIRMAN, I THINK YOUR DISCUSSION OF STANDARDS
MAY BE MORE MEANINGFUL TO OUR AUDIENCE IF THEY KEEP THIS
DISTINCTION CLEARLY IN MIND. WITH THAT, THE STAFF IS READY
TO PRESENT ITS REPORT.

AIR CONTAMINANT DISCHARGE PERMITS

[ED. NOTE: Unless otherwise specified, sections 20-033.02 through 20-033.20 of this chapter of the Oregon Administrative Rules Compilation were adopted by the Department of Environmental Quality July 28, 1972, and filed with the Secretary of State August 31, 1972 as DEQ 47.]

20-033.02 PURPOSE. The purpose of these regulations is to prescribe the requirements and procedures for obtaining Air Contaminant Discharge Permits pursuant to [Chapter 406, Oregon Laws 1971] ORS 449.727 to 449.739 and related statutes for stationary sources.

20-033.04 DEFINITIONS. As used in these regulations unless otherwise required by context:

(1) "Department" means Department of Environmental Quality.

(2) "Commission" means Environmental Quality Commission.

(3) "Person" means the United States Government and agencies thereof, a ny state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatever.

(4) "Permit" or "Air Contaminant Discharge Permit" means a written permit issued by the Department or Regional Authority in accordance with duly adopted procedures, which by its conditions authorizes the permittee to construct, install, modify or operate specified facilities, conduct specified activities, or emit, discharge or dispose of air contaminants in accordance with specified practices, limitations or prohibitions.

(5) "Regional Authority" means the [Columbia-Willamette Air Pollution Authority,] Mid-Willamette Valley Air Pollution Authority [,] or the Lane Regional Air Pollution Authority.

[20-033.06 NOTICE POLICY. It shall be the policy of the Department of Environmental Quality and the Regional Authorities to issue public notice as to the receipt of an application within 15 days after the application is accepted for filing.

The public notice shall allow 30 days for written comment from the public and from interested State and Federal agencies.

20-033.06 NOTICE POLICY. It shall be the policy of the Department of Environmental Quality and Regional Authority to issue public notice as to the intent to issue an Air Contaminant Discharge Permit allowing at least 30 days for written comment from the public, and from interested State and Federal agencies, prior to issuance of the permit.

[20-033.08 PERMIT REQUIRED. (1) Air contaminant discharge permits shall be obtained for the air contaminant sources, including those processes and activities directly related or associated thereto which are listed in Table A, appended hereto and incorporated therein by reference, in accordance with the schedules set forth in subsections (2), (3), (4), and (5) of this section.

(2) No person shall construct, install, establish develop or operate any new air contaminant source listed in Table A appended hereto without first obtaining a permit from the Department or Regional Authority.

(3) After January 1, 1973, no person shall operate any air contaminant source (a) through (l) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.

(4) After July 1, 1973, no person shall operate any air contaminant source (m) through (hh) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.

(5) After January 1, 1974, no person shall operate any air contaminant source (ii) through (uu) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.]

20-033.08 PERMIT REQUIRED. (1) No person shall construct, install, establish, develop or operate any air contaminant source, including those processes and activities directly related or associated thereto which are listed in Table A, appended hereto and incorporated herein by reference, without first obtaining a permit from the Department or Regional Authority.

(2) No person shall, without first obtaining a permit from the Department or Regional Authority, construct, install, establish, develop or operate any air contaminant source not listed in Table A which would emit:

- (a) 10 tons or more per year, if the source were to operate uncontrolled, of any air contaminants including, but not limited to, particulates, SO_x, NO_x, or hydrocarbons; or
- (b) at the discretion of the Department or Regional Authority, any malodorous odors.

(3) Any source listed in Table A may apply to the Department or Regional Authority for a special letter permit if operating a facility with no, or insignificant, air contaminant discharges. The determination of applicability of this special permit shall be made solely by the Department or Regional Authority having jurisdiction. If issued a special permit, the Application Investigation and Permit Issuing or Denying Fee and/or Annual Permit Compliance Determination Fee, provided by Section 20-033.12, may be waived by the Department or Regional Authority.

20-033.10 MULTIPLE-SOURCE PERMIT. When a single site includes more than one of the air contaminant sources listed in Table A, a single permit may be issued including all sources located at the site. [Such] For uniformity such [permits] applications shall separately identify by subsection each air contaminant source included from Table A. [Applications for multiple-source permits will not be received by the Department or Regional Authority for processing without

prior written agreement between the permit issuing agency and the applicant concerning the overall merit of issuing a multiple-source permit for the site under consideration.]

(1) When a single air contaminant source which is included in a multiple-source permit, is subject to permit modification, revocation, suspension or denial, such action by the Department or Regional Authority shall only affect that individual source without thereby affecting any other source subject to that permit.

(2) When a multiple-source permit includes air contaminant sources subject to the jurisdiction of the Department and a Regional Authority, the Department may require that it shall be the permit issuing agency. In such cases, the Department and the Regional Authority shall otherwise maintain and exercise all other aspects of their respective jurisdictions over the permittee.

20-033.12 FEES. (1) All persons required to obtain a permit shall be subject to a three-part fee consisting of a uniform non-refundable Filing Fee of \$25.00, a variable Application Investigation and Permit Issuing or Denying Fee and a variable Annual Permit Compliance Determination Fee. The amount equal to the Filing Fee and the Application Investigation and Permit Issuing or Denying Fee shall be submitted as a required part of the application. The Annual Permit Compliance Determination Fee shall be paid prior to issuance of the actual permit.

(2) The fee schedule contained in the listing of air contaminant sources listed in Table A appended hereto shall be applied to determine the variable permit fees.

(3) The Filing Fee and Application Investigation and Permit Issuing or Denying Fee shall be submitted with each application for a new permit, modified permit, or renewed permit.

(4) Modifications of existing, unexpired permits which are instituted by the Department or Regional Authority due to changing conditions or standards, receipts of additional information or any other reason pursuant to applicable statutes and 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.

(5) Applications for multiple-source permits received pursuant to Section 20-003.10 shall be subject to a single \$25.00 Filing Fee. The application Investigation and Permit Issuing or Denying Fee and Annual Permit Compliance Determination Fee for multiple-source permits shall be equal to the total amounts required by the individual sources involved, as listed in Table A.

(6) At least one Annual Permit Compliance Determination Fee shall be paid prior to final issuance of a permit. Thereafter, the Annual Permit Compliance Determination Fee shall be paid at least 30 days prior to the start of each subsequent permit year. Failure to timely remit the Annual Permit Compliance Determination Fee in accordance with the above shall be considered grounds for not issuing a permit or revoking an existing permit.

(7) If a permit is issued for a period less than one (1) year, the applicable Annual Permit Compliance Determination Fee shall be equal to the full annual fee. If a permit is issued for a period greater than 12 months, the applicable Annual Permit Compliance Determination Fee shall be prorated by multiplying the Annual Permit Compliance Determination Fee by the number of months covered by the permit and dividing by twelve (12).

(8) In no case shall a permit be issued for more than five (5) years.

(9) Upon accepting an application for filing, the Filing Fee shall be considered as non-refundable.

(10) The Application Investigation and Permit Issuing or Denying Fee need not be submitted upon notice in writing by the permit issuing agency or shall be refunded when submitted with applications for modified or renewed permits if the following conditions exist:

(a) The modified or renewed permit is essentially the same as the previous permit.

(b) The source or sources included are in compliance with all conditions of the modified or renewed permit.

(11) When an air contaminant source which is in compliance with the rules of a permit issuing agency relocates or pro-

poses to relocate its operation to a site in the jurisdiction of another permit issuing agency having comparable control requirements, application may be made and approval may be given for an exemption of the Application Investigation and Permit Issuing or Denying Fee. The permit application and the request for such fee reduction shall be accompanied by (1) a copy of the permit issued for the previous location, and (2) certification that the permittee proposes to operate with the same equipment, at the same production rate, and under similar conditions at the new or proposed location. Certification by the agency previously having jurisdiction that the source was operated in compliance with all rules and regulations will be acceptable should the previous permit not indicate such compliance.

(12) If a temporary or conditional permit is issued in accordance with adopted procedures, fees submitted with the application for an air contaminant discharge permit shall be retained and be applicable to the regular permit when it is granted or denied.

(13) Sources required to obtain a permit under Section 20-033.08 (2) not included in Table A shall be subject to, in addition to the Filing Fee of \$25.00, the following fee schedule to be applied in each case by the Department based upon the anticipated cost of issuing or denying the permit, and of compliance inspections:

Schedule	Application Investigation and Permit Issuing or Denying Fee	Annual Permit Compliance Determination Fee
if low cost	\$ 25	\$ 25
if medium cost	150	100
if high cost	450	325

(14) [(13)] All fees shall be made payable to the permit issuing agency. [and shall be deposited in the State Treasury by the Department of Environmental Quality to the credit of the Department of Environmental Quality Air Emission Permit Account which is continuously appropriated for the purpose of funding the air contaminant discharge permit program covered by these regulations.]

...of applications... denial, modification... revocation of permits shall be made... with duly adopted procedures of... permit issuing agency.

20-033.16 OTHER REQUIREMENTS. (1) No person shall construct, install, establish, modify or enlarge any air contaminant source listed in Table A or facilities for controlling, treating, or otherwise limiting air contaminant emissions from air contaminant sources listed in Table A without notifying the permit issuing agency as required by ORS 449.712, and rules promulgated thereunder.

(2) Prior to construction, installation, establishment, modification or enlargement of any air contaminant source listed in Table A or facilities for controlling, treating, or otherwise limiting air contaminant emissions from air contaminant sources listed in Table A, detailed plans and specifications shall be submitted to and approved in writing by the Department or Regional Authority upon request as required by ORS 449.712 and rules promulgated thereunder.

20-033.18 REGISTRATION EXEMPTION. Air contaminant sources constructed and operated under a permit issued pursuant to these regulations may be exempted from registration as required by rules adopted pursuant to ORS 449.707.

20-033.20 PERMIT PROGRAMS FOR REGIONAL AIR POLLUTION ABATEMENT FACILITIES. Subject to the provisions of this section 20-033.20, the Department of Environmental Quality Commission authorized each Regional Authority to issue air contaminant discharge permits for air contamination sources within its jurisdiction.

(1) A Regional Authority's permit program, including proposed permits and proposed revised permits, shall be submitted to the Environmental Quality Commission for review and approval prior to final adoption by the Regional Authority. Each permit issued by the Regional Authority shall by its conditions authorize the permittee to construct, install, establish, modify or enlarge, or operate specified air contaminant sources, conduct specified activities, or permit discharge or dispose of air contaminants in accordance with specified practices, standards, or prohibitions.

(2) Each permit proposed to be issued or revised by a Regional Authority shall be submitted to the Department of Environmental Quality at least fourteen (14) days prior to the proposed issuance date. Within the fourteen (14) day period, the Department shall give written notice to the Regional Authority of any objection the Department has to the proposed permit or revised permit or its issuance. No permit shall be issued by a Regional Authority unless all objections thereto by

the Department shall be resolved prior to issuance. If the Department does not make any such objection, the proposed permit or revised permit may be issued by the Regional Authority.

(3) If there is an objection by the Department regarding a proposed or revised permit, the Department shall present its objection before the Board of the Regional Authority in question prior to the issuance of a final permit.

(4) If as a result of objection by the Department regarding a proposed or revised permit, the Regional Authority is unable to meet the time provisions of either this regulation or those contained in an existing permit, the Regional Authority shall

issue a temporary permit for a period not to exceed 90 days.

(5) The Regional Authority shall give written notice to the Department of its intention to deny an application for a permit, not to renew a permit, or to revoke or suspend any existing permit.

(6) A copy of each permit issued or revised by a Regional Authority pursuant to this section shall be promptly submitted to the Department.

(7) The Regional Authority shall prepare and submit to the Department a summary listing of air contaminant sources currently in violation of issued permits. These reports shall be made on a quarterly basis commencing April 1, 1973.

PROPOSED CHANGES TO
 TABLE A - AIR CONTAMINANT SOURCES AND
 ASSOCIATED FEE SCHEDULE

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>1.</u>	[a] Asphalt production by distillation	2951	\$ 75	\$ 50
<u>2.</u>	[b] Asphalt blowing plants	2951	100	75
<u>3.</u>	[c] Asphaltic concrete paving plants	2951	100	100
<u>4.</u>	[d] Asphalt felts and coating	2952	150	100
<u>5.</u>	[e] Calcium carbide manufacturing	2819	225	150
<u>6.</u>	[f] Alkalies and chlorine manufacturing	2812	225	175
<u>7.</u>	[g] Nitric acid manufacturing	2819	100	75
<u>8.</u>	[h] Ammonia manufacturing	2819	200	125
<u>9.</u>	[i] Secondary lead smelting	3341	225	175
<u>10.</u>	[j] Rendering plants	2094	150	100
<u>11.</u>	[k] Coffee roasting	2095	100	75
<u>12.</u>	[l] Sulfite pulp and paper production	2611 2621 2631	300	175
	[m] [Grain mill products located in Special Control Areas]	[2041] [2042]		
	[10,000 or more T/yr.]		[250]	[150]
	[less than 10,000 T/yr.]		[50]	[50]
<u>13.</u>	<u>Flour and other grain mill products in Special Control Areas</u>	<u>2041</u>		
	<u>a. 10,000 or more T/yr.</u>		<u>250</u>	<u>150</u>
	<u>b. Less than 10,000 T/yr.</u>		<u>50</u>	<u>50</u>

Table A Continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>14.</u>	<u>Prepared feeds for animals and fowls in Special Control Areas.</u>	<u>2042</u>		
	a. <u>10,000 or more T/yr.</u>		\$ <u>250</u>	\$ <u>150</u>
	b. <u>Less than 10,000 T/yr.</u>		<u>50</u>	<u>50</u>
<u>15.</u>	<u>Cereal preparations in Special Control Areas.</u>	<u>2043</u>	<u>250</u>	<u>150</u>
<u>16.</u>	<u>Blended and prepared flour in Special Control Areas.</u>	<u>2045</u>		
	a. <u>10,000 or more T/yr.</u>		<u>250</u>	<u>150</u>
	b. <u>Less than 10,000 T/yr.</u>		<u>50</u>	<u>50</u>
[n]	[Grain elevators located in Special Control Areas] [20,000 or more T/yr.] [Less than 20,000 T/yr.]	[4221]	[150] [50]	[100] [50]
<u>17.</u>	<u>Grain elevators - storage only located in Special Control Areas.</u>	<u>4221</u>		
	a. <u>20,000 or more T/yr.</u>		<u>150</u>	<u>100</u>
	b. <u>Less than 20,000 T/yr.</u>		<u>50</u>	<u>50</u>
<u>18.</u>	<u>Grain elevators - primarily engaged in buying and/or marketing grain - in Special Control Areas.</u>	<u>5053</u>		
	a. <u>20,000 or more T/yr.</u>		<u>300</u>	<u>225</u>
	b. <u>Less than 20,000 T/yr.</u>		<u>50</u>	<u>50</u>
<u>19.</u>	[o] Redimix concrete	3273	75	50
<u>20.</u>	[p] Plywood manufacturing	2432	150	100
<u>21.</u>	[q] Veneer manufacturing (not elsewhere included)	2434	75	75
<u>22.</u>	[r] Particleboard manufacturing	2492	300	150
<u>23.</u>	[s] Hardboard manufacturing	2493	200	100
<u>24.</u>	[t] Charcoal manufacturing	2861	200	100
<u>25.</u>	[u] Battery separator manufacturing	2499	75	50
	[v] [Furniture and fixtures 100 or more employees]	[2511]	[125]	[100]
<u>26.</u>	<u>Battery manufacturing</u>	<u>3691</u>	<u>100</u>	<u>75</u>

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classification Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determination Fee</u>
<u>27.</u>	<u>Furniture and fixtures</u>	<u>2511</u>		
	<u>a. 100 or more employees</u>		\$ <u>125</u>	\$ <u>100</u>
	<u>b. 10 employees or more but less than 100 employees</u>		<u>75</u>	<u>50</u>
<u>28.</u>	[w] Glass manufacturing	3231	100	75
<u>29.</u>	[x] Cement manufacturing	3241	300	150
<u>30.</u>	[y] Lime manufacturing	3274	150	100
<u>31.</u>	[z] Gray iron and steel foundries	3321 3323		
	<u>a. 3,500 or more tons per year production</u>		300	150
	<u>b. Less than 3,500 tons per year production</u>		100	100
<u>32.</u>	[aa] Steel works, rolling and finishing mills	3312	300	175
	[bb] [Incinerators (not elsewhere included) more than 2,000 lb/hr. capacity]		[100]	[100]
<u>33.</u>	<u>Incinerators</u>			
	<u>a. Greater than 4,000 lbs/hr capacity</u>		<u>100</u>	<u>100</u>
	<u>b. 40 lb/hr to 4,000 lb/hr capacity</u>		<u>75</u>	<u>75</u>
	[cc] [Fuel burning equipment (not elsewhere included) Residual oil 5 million or more btu per hour (heat input) Wood fired 5 million or more btu per hour (heat input)]	[4961]		
			[100]	[50]
			[100]	[50]

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>34.</u>	<u>Fuel burning equipment</u>	<u>4961*</u>		
	<u>a. Residual oil</u>			
	1) <u>250 million or more btu/hr. (heat input)</u>		\$ <u>150</u>	\$ <u>100</u>
	2) <u>5 million or more but less than 250 million btu/hr. (heat input)</u>		<u>100</u>	<u>50</u>
	3) <u>Less than 5 million btu/hr. (heat input)</u>		<u>25</u>	<u>25</u>
	<u>b. Distillate oil</u>			
	1) <u>250 million or more btu/hr. (heat input)</u>		<u>150</u>	<u>100</u>
	2) <u>5 million or more but less than 250 million btu/hr. (heat input)</u>		<u>25</u>	<u>25</u>
	<u>c. Wood fired</u>			
	1) <u>250 million or more btu/hr. (heat input)</u>		<u>150</u>	<u>100</u>
	2) <u>5 million or more but less than 250 million btu/hr. (heat input)</u>		<u>100</u>	<u>50</u>
	3) <u>Less than 5 million btu/hr. (heat input)</u>		<u>25</u>	<u>25</u>
	<u>d. Coal fired</u>			
	1) <u>250 million or more btu/hr. (heat input)</u>		<u>150</u>	<u>100</u>
	2) <u>5 million or more but less than 250 million btu/hr. (heat input)</u>		<u>100</u>	<u>50</u>
	3) <u>Less than 5 million btu/hr. (heat input)</u>		<u>25</u>	<u>25</u>

NOTE: The above fees shall be increased by 20% to cover costs of multiple device installations.

*Not limited to fuel burning equipment generating steam for sale but excluding power generation (SIC 4911)

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>35.</u>	[dd] Primary smelting and refin- ing of ferrous and nonfer- rous metals not elsewhere classified	3313 3339		
	<u>a.</u> 2,000 or more tons per year production		\$ 300	\$ 175
	<u>b.</u> Less than 2,000 tons per year production		100	75
<u>36.</u>	[ee] Synthetic resin manufacturing	<u>2821</u> [2831]	100	100
<u>37.</u>	[ff] Seed cleaning located in Special Control Areas (not elsewhere included)	0719	0	0
<u>38.</u>	[gg] Kraft pulp and paper production	2611 2621 2631	300	175
<u>39.</u>	[hh] Primary aluminum production	3334	300	175
<u>40.</u>	[ii] Industrial inorganic and organic chemicals manu- facturing (not elsewhere included)	2810	250	125
<u>41.</u>	[jj] Sawmill and planing	2421		
	<u>a.</u> 25,000 or more bd.ft./shift		75	50
	<u>b.</u> Less than 25,000 bd.ft./shift		25	25
	[kk] [Mill work]	[2431]	[75]	[50]
<u>42.</u>	<u>Mill work with 10 employees or more</u>	<u>2431</u>	<u>75</u>	<u>50</u>
	[ll] [Furniture and fixtures less than 100 employees]	[2511]	[75]	[50]
<u>43.</u>	[mm] Minerals, earth and rock ground or otherwise treated [(not elsewhere included)]	3295 <u>1442</u>	100	75

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>44.</u>	[nn] Brass and bronze foundries	3362	\$ 75	\$ 50
<u>45.</u>	[oo] Aluminum foundries (not elsewhere included)	3361	75	50
<u>46.</u>	[pp] <u>Galvanizing and pipe coating - exclude all other activities</u>	3479	75	50
<u>47.</u>	[qq] <u>Smoke houses with 5 or more employees</u>	2013	75	50
<u>48.</u>	[rr] Herbicide manufacturing	2879	225	175
<u>49.</u>	[ss] <u>Building paper and building board mills [(not elsewhere included)]</u>	2661	150	100
	[tt] [Incinerators (not elsewhere included) 2,000 to 4,000 pounds per hour capacity)]		[75]	[75]
	[uu] Fuel burning equipment (not elsewhere included)	[4961]		
	Residual oil less than 5 million btu/hr (heat input)		[25]	[25]
	Distillate oil 5 million or more btu/hr (heat input)		[25]	[25]
	Wood fired less than 5 million btu/hr (heat input)]		[25]	[25]
<u>50.</u>	<u>Hardwood mills</u>	<u>2426</u>	<u>50</u>	<u>25</u>
<u>51.</u>	<u>Shake and shingle mills</u>	<u>2429</u>	<u>50</u>	<u>25</u>
<u>52.</u>	<u>Beet sugar manufacturing</u>	<u>2063</u>	<u>150</u>	<u>100</u>
<u>53.</u>	<u>Electroplating, polishing and anodizing with 5 or more employees</u>	<u>3471</u>	<u>75</u>	<u>50</u>

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>54.</u>	<u>Electric power generation</u>	<u>4911</u>	<u>\$ 350</u>	<u>\$ 225</u>
<u>55.</u>	<u>Gas production and/or manufacturing</u>	<u>4925</u>	<u>350</u>	<u>225</u>
<u>56.</u>	<u>Petroleum refining</u>	<u>2911</u>	<u>450</u>	<u>325</u>
<u>57.</u>	<u>Wood Preserving</u>	<u>2491</u>	<u>75</u>	<u>50</u>



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

PAUL E. BRAGDON
Portland

MORRIS K. CROTHERS
Salem

ARNOLD M. COGAN
Portland

—
DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

To : Environmental Quality Commission

From : Director

Subject: Agenda Item No. 7G, November 26, 1973, EQC Meeting

Public Hearing to Amend OAR
Chapter 340, Section 24-100, Regulation Pertaining
to Motor Vehicle Inspection

Background

The Environmental Quality Commission at its meeting on October 25, 1972, reviewed and approved the basic concepts of a vehicle emission control inspection program as outlined in the Department report presented at the meeting. On March 2, 1973, the Commission held a public hearing and adopted a rule, pursuant to ORS 481.190, which designated Clackamas, Columbia, Multnomah and Washington Counties as within the inspection program area. An effective date of January 1, 1974 was established.

Legislative delays in providing funding requirements necessitate a delay in the effective date of regulatory inspections. No specific funds were actually made available for the vehicle inspection program until the State Emergency Board action of August 15, 1973, allowed the Department to expend the appropriation provided for the inspection program by the 1973 Legislative Assembly. The State Emergency Board in this action also requested that Columbia County be deleted from the inspection program requirements.

The Department has prepared proposed admendments to Oregon Administrative Rules, Chapter 340, Subdivision 4, Section 24-100, which remove Columbia County from the list of counties designated by the Environmental Quality Commission as counties in which motor vehicles registered therein are subject to the vehicle inspection program requirements. These proposed admendments also extend the effective date of the rule to May 31, 1974; which is the latest date projected in the Transportation Control Strategy for the inspection program start-up.

Recommendation

It is the Director's recommendation that public testimony be heard concerning the proposed rule admendments at a public hearing in Portland on November 26, 1973, and that appropriate action be taken on these admendments after giving consideration to the testimony received.


DIARMUID F. O'SCANNLAIN

RCH:sb
10/10/73

REGULATION PERTAINING TO MOTOR VEHICLE INSPECTION

24-100 COUNTY DESIGNATIONS.

(1) Pursuant to the requirements of ORS ~~481.190~~ 449.957, Clackamas, ~~Columbia,~~ Multnomah and Washington Counties are hereby designated by the Environmental Quality Commission as counties in which all motor vehicles registered therein, unless otherwise exempted by statute or by rules subsequently adopted by the Commission, shall be equipped with a motor vehicle pollution control system ~~or~~ and shall comply with motor vehicle emission standards adopted by the Commission.

(2) The effective date of this regulation is ~~January 1, 1974~~ May 31, 1974.

= deletion

_____ = addition

Testimony of Fred Foshaug, Chairman, Board of Commissioners,
Columbia County, Oregon.

Before DEQ, November 26, 1973

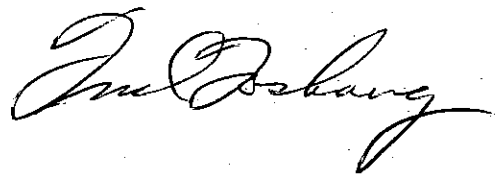
I am here to testify on behalf of the Board of County Commissioners and the people of Columbia County.

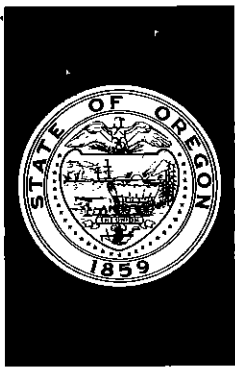
We support the proposed amendment to the Oregon Administrative Rules, Chapter 340, Subdivision 4, Section 24-100, regarding counties for mandatory motor vehicle inspections.

Columbia County today is not part of the metropolitan area. There is no reason to include us in on the mandatory inspections. Certainly, there is less reason than there would be to include Lane and Marion Counties.

Most of our citizens trade locally or in the Astoria or Longview-Kelso area. Perhaps some, less than a majority, from the south end of the county (the Scappoose end) trade in the Portland area on a regular basis. Our residents do not use the metropolitan area facilities any more than do the other small county residents from throughout the state.

This amendment would put us on a par with the other small counties regarding vehicle inspections. They are not yet needed in the small counties.

A handwritten signature in cursive script, appearing to read "Fred Foshaug". The signature is written in dark ink and is located in the lower right quadrant of the page.



DEPARTMENT OF ENVIRONMENTAL QUALITY

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

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item H, November 26, 1973 EQC Meeting

Chem-Nuclear Systems, Inc. Application to Establish a
Hazardous Waste Disposal Site in Gilliam County near
Arlington, Oregon (Staff Report)

Background

In 1971, The Oregon Legislature enacted legislation which placed regulatory responsibility for disposal of radioactive and other environmentally hazardous wastes on this Department. The Commission, in March 1972, adopted rules pertaining to license applications for environmentally hazardous waste disposal sites. Subsequently in June 1972, Chem-Nuclear submitted an application to the Department for a license to dispose of both radioactive and chemical wastes at a site near Arlington, Oregon. In 1970 the State Health Division had issued Chem-Nuclear a license to store radioactive wastes at the Arlington site. By the time Chem-Nuclear's application was filed with the Department, approximately eleven-hundred 55 gallon drums of radioactive wastes were already stored at the site under authorization and in accordance with conditions of the State Health Division license.

At the request of the Department, the Commission held a public hearing at Arlington on September 5, 1972 to receive public and expert testimony related to the proposed Chem-Nuclear Arlington disposal site. At this hearing, several Arlington residents stated their opposition to the proposed site based on concern regarding disposal of hazardous wastes at the proposed site and possible groundwater contamination that might result. In addition, the Oregon Environmental Council presented a

statement indicating that group's concern that the company would not be financially able to carry out a sustained operation. Representatives of the Gilliam County Court and Planning Commission presented statements at the hearing favoring approval of the Arlington facility. Following the September 5 public hearing, an advisory committee was appointed by the Department to evaluate the financial condition and corporate status of Chem-Nuclear Systems, Inc.

Later at the November 30, 1972 Commission meeting, the Department presented a staff report outlining the Department's evaluation and recommendations concerning Chem-Nuclear's application and the proposed disposal site. The November 30 staff report recommended that the Department be authorized to take the following action:

1. Notify Chem-Nuclear Systems, Inc. that henceforth, consideration of its license application by the Department will preclude radioactive wastes (pursuant to OAR, Chapter 340, Section 62-035 (4)).
2. Request the State Health Division to amend Chem-Nuclear's existing radioactive materials handling license so that storage of radioactive wastes at the Arlington site will not be permitted after a specified date.
3. Proceed with processing Chem-Nuclear's application for licensing the proposed disposal facility for non-radioactive chemical wastes only.
4. Subject to receipt of additional detailed information and acceptable engineering plans from Chem-Nuclear, draft a proposed license which would specify the types and volumes of wastes and disposal methods to be permitted and the necessary safeguards to be provided at the disposal facility.
5. Condition said license to require formal application and public hearing to amend the initial license before disposing of any additional wastes or constructing new disposal facilities which are not included as part of the initial license.
6. Make any finally proposed license available to the public and schedule a public hearing no less than 30 days thereafter for the purpose of receiving public and expert comment upon the specific conditions of the proposed license prior to its issue.

The Commission adopted these recommendations with the condition that the company was found to be financially responsible and that items 1, 2 and 3 be reconsidered if the company could demonstrate that the operation would not be feasible if radioactive wastes are eliminated.

As a result of the Commission's action at the November 30, 1972 meeting, the company agreed to investigate chemical waste disposal only at the proposed site in order to determine the economic feasibility of disposal of only non-radioactive wastes. Chem-Nuclear requested the Department to determine the cash bond amount that would be required under ORS 459.590 to offset costs of site closure and perpetual monitoring so that this cost could be included in the economic evaluation. The Department informed Chem-Nuclear by letter on January 30, 1973, that the total amount of the proposed bond for chemical waste-only would be \$120,000, of which one-half of the bond amount, or \$60,000, would be required at the time the license is issued and that the remaining \$60,000 could be paid into the bond account in equal annual installments over a ten-year period. It should be noted that the bond amount and conditions for payment would be subject to Commission approval.

Chem-Nuclear initially advised the Department that the economic evaluation of chemical-only disposal would be completed by no later than May 1, 1973, but by the May 29, 1973 EQC meeting the Department had received no communication from Chem-Nuclear relative to the evaluation other than an indication from the company that it still intended to pursue the application.

On a related matter, Chem-Nuclear informed the Department in May 1973 that the company had brought two shipments of low-level radioactive wastes into the Arlington site in early 1973 and one more shipment into the site was scheduled for June 1973. These three shipments were understood to originate from the U.S. Navy at Pearl Harbor, Hawaii. Although the company still stores low-level radioactive wastes at the site as authorized by the State Health Division license issued in 1970, it had been the Department's understanding that no additional wastes had been brought into the site since December 1972. In a May 11, 1973 letter to the Department from the State Health Division, it was recommended that the wastes stored at the site (approximately eleven-hundred 55 gallon drums) either be removed from the site to an approved disposal site or

that burial at the site be authorized by the Department to protect against possible loss of integrity of the storage containers.

At the May 29, 1973 EQC meeting, the Department presented a staff report pertaining to Chem-Nuclear's economic evaluation of chemical-only disposal, to storage of radioactive wastes at the site and to continued shipment of radioactive wastes into the site. The May 29 staff report recommended that the Department be authorized to:

1. Request the State Health Division to modify Chem-Nuclear's existing license for storage of radioactive wastes at Arlington to preclude shipment of additional wastes into the site after June 30, 1973.
2. Bring the matter of Chem-Nuclear's application before the Commission for consideration of denial of the application if Chem-Nuclear does not actively pursue its application and does not provide the Department with the results of its economic evaluation of chemical waste disposal only, by August 15, 1973.

The Commission adopted these recommendations, with the additional provision (to item 1) that, after the June 30, 1973 deadline, the company be permitted only one shipment of radioactive wastes into the site from the U.S. Navy for which the company had already contracted.

Chem-Nuclear submitted the chemical-only economic feasibility report to the Department on August 10, 1973. Review of this report by the staff revealed several areas for which clarification or additional information was required and the company submitted the requested additional clarification and information in a letter dated October 11, 1973.

Factual Analysis

Chem-Nuclear's letter of August 10, 1973 transmitting their economic evaluation report states that in the company's judgement "...the inescapable conclusion is that it would be a very poor risk for Chem-Nuclear Systems and the State of Oregon to establish a chemicals-only waste disposal site at Arlington." The company's analysis of the Oregon chemical waste market indicated that approximately 82,000 cubic feet per year of wastes from various sources might be potentially available for disposal at the Arlington site. Of this volume, the company states in its report that a minimum of 58,000 cubic feet annually must be brought into the site, at prices ranging from \$4 to \$7 per cubic foot and resulting in gross annual

revenues of approximately \$300,000 or greater "...before Chem-Nuclear could begin to consider that the site was making an adequate contribution to general corporate overhead and profit." Chem-Nuclear has indicated that it is unlikely that the required chemical waste volume could be committed and assured to their operation and the company concludes that "...at this time the only way to have an environmentally hazardous waste site in Oregon that could provide reasonable charges and an adequate return to the operator is on the basis of accepting both chemical wastes and low-level rad wastes."

Chem-Nuclear, in the economic evaluation report, has also proposed a new system for disposal of pesticide wastes. The greatest proportion of pesticide wastes in Oregon are by-product residues resulting from 2,4-D and MCP manufacture by Rhodia, Inc. of Portland. Chem-Nuclear has proposed a subsurface bio-degradation system for these wastes which would employ gravel beds several feet in depth in two of the small enclosed natural basins at the Arlington site. Although this proposed system may be technically feasible, it is essentially an untried, untested system which the company hopes to adopt on a trial basis. Other pesticide waste disposal methods, such as incineration and soil incorporation, have been successful in some applications, but Chem-Nuclear does not favor either of these methods because incineration is economically unattractive and the Arlington site is not suited to soil incorporation.

At the Department's request, Chem-Nuclear's economic evaluation also addressed the alternative of disposing both chemical and low-level radioactive wastes. In this part of the evaluation, the company showed that the disposal of low-level radioactive wastes would add considerable income and that radioactive waste disposal is considerably more profitable and predictable than chemical waste disposal. Chem-Nuclear's report states that with both chemical and radioactive waste disposal at the Arlington site, the operation would be economically feasible.

With regard to sources of wastes considered in Chem-Nuclear's evaluation, approximately 82,000 cubic feet per year of chemical wastes from only Oregon were included. Of the total 60,000-65,000 cubic feet per year of radioactive wastes considered in the company's report, approximately 6,000 to 10,000 cubic feet per year are indicated to originate from Oregon sources, 35,000 cubic feet per year from U.S. Navy facilities at Pearl Harbor, Hawaii and Bremerton, Washington and the remaining 20,000 cubic feet per year from other sources outside Oregon.

In addition to the above analysis of Chem-Nuclear's economic evaluation, there are several other relevant and important factors which deserve consideration in determining the proper course of action with respect to Chem-Nuclear's Arlington site license application. These factors include the following:

1. The Department's hazardous waste planning activities of the last year and one-half have shown that one of the major limitations to proper hazardous waste disposal for chemical wastes at the present time is the lack of a licensed disposal site within Oregon. Many hazardous wastes are now being disposed in Oregon by unacceptable methods such as landfilling, burial or dumping on private property and discharge into streams and sanitary sewers. Much of this waste should be disposed in a hazardous waste disposal site, as the law requires. The existing hazardous waste laws in Oregon are certainly strong enough, but without an available site, the Department cannot properly enforce the law, nor can the Department require adequate disposal, in many cases.
2. Since enactment of the State's hazardous waste statutes in 1971, no firm, except Chem-Nuclear, has indicated significant interest in providing an adequate, licensed disposal facility for hazardous wastes within Oregon.
3. Some of Oregon's hazardous wastes are now or have recently been disposed at sites located in the State of Washington. For example, Oregon's small volume of low-level radioactive wastes are presently disposed at a privately-operated disposal site near Richland, Washington. Another private disposal site near Pasco, Washington has accepted a substantial volume of pesticide manufacturing waste and other chemical wastes from several Oregon industries. The Pasco site, however, has recently become involved in a dispute with a local governing body which could well result in prohibition of waste shipment to that site from Oregon.
4. Since the time the Commission last considered Chem-Nuclear's proposal, the disposal of radioactive wastes at the Atomic Energy Commission Hanford, Washington reservation has received considerable attention in the press and by the public. In view of

this recent publicity it should be reiterated that proposed radioactive waste disposal operations at the Arlington site involve low-level and not the high-level wastes of concern at Hanford.

5. The financial advisory committee appointed to evaluate Chem-Nuclear's financial and corporate status has not yet completed this task. Based on recent financial statements submitted by the company, Chem-Nuclear's financial position appears to be sound. Nonetheless, it would seem advisable for the advisory committee to complete its analysis on this matter for the Department's consideration.
6. Chem-Nuclear has not yet submitted fully detailed engineering plans required for the proposed facility.

With respect to specific actions that might be taken by the Department and the Commission, the following items should be considered:

1. The Commission could act at this time to deny Chem-Nuclear's entire license application. This action would preclude further consideration of hazardous waste disposal by Chem-Nuclear at the Arlington site.
2. The Commission could act to preclude further consideration of any radioactive waste disposal operations and encourage licensing and development of the Arlington site for non-radioactive waste disposal. It is likely that this action would be unacceptable to Chem-Nuclear and that the company would withdraw its application.
3. As a third alternative, the Commission could direct the Department to continue consideration of Chem-Nuclear's application for both radioactive and chemical waste disposal. If disposal of chemical and radioactive wastes were permitted at the site, it must be recognized that some of these wastes could or would come into the site from outside Oregon. However it is believed possible to regulate the volume coming into the site from outside the State by limiting the total volume and by requiring priority for wastes originating in Oregon through the licensing process.
4. A fourth possible alternative might be for the Department to establish and operate a disposal site. The Department does not advocate a State-operated site, nor is the Department presently authorized or funded for such an undertaking, but this possibility

can be considered. Although a State-operated site could preclude wastes from outside Oregon, it would seem more advantageous at this time for private industry to operate such a site and for the Department to maintain a regulatory role.

5. Any final action by the Commission and the Department concerning Chem-Nuclear's application must provide for satisfactory disposition of radioactive wastes presently stored at the Arlington site. If disposal of radioactive wastes were allowed at the Arlington site, then the rad wastes now stored there could be disposed at the site in accordance to license conditions. If disposal of radioactive wastes at the site were not permitted by the Commission removal of these stored radioactive wastes from the site and disposal at an approved site would be necessary.

Conclusions:

Based on the background and facts outlined above concerning Chem-Nuclear's disposal site license application, the following conclusions have been reached:

1. A site within Oregon for disposal of hazardous chemical wastes is urgently needed at this time in order to achieve adequate hazardous waste management. Moreover, the State of Oregon and producers of hazardous chemical wastes within the State cannot depend on continued availability of hazardous waste disposal sites in other states.
2. The need for a site within Oregon for the disposal of low-level radioactive wastes is not apparent at the present time.
3. In view of Chem-Nuclear's economic evaluation of chemicals-only, disposal of only chemical wastes at the proposed site appears economically unfeasible. Consequently, the company would not be expected to pursue the license application unless disposal of both radioactive and chemical wastes were allowed.
4. The site near Arlington which has been proposed by Chem-Nuclear would be suitable for disposal of both radioactive and non-radioactive hazardous wastes if adequate safeguards are provided and the site is operated and monitored under a properly conditioned license.

5. It appears feasible to license the proposed facility for chemical wastes plus a limited quantity of radioactive wastes that would be consistent with economical operation. Any limitations on waste volumes should be viewed as interim limits which could be revised if warranted by changes in site economics or other circumstances.
6. It appears desirable for the Commission and the Department to license a privately-operated site rather than establish a State-operated disposal site.

Director's Recommendations

In view of the findings of the Department, the Director recommends that the Commission authorize and direct the Department to continue to process Chem-Nuclear's application as follows:

1. Draft a proposed license which would specify the types and volumes of low-level radioactive and chemical wastes (consistent with site economics), disposal methods to be permitted and the necessary safeguards to be provided at the disposal facility. Drafting of the proposed license would be contingent upon the findings of the financial advisory committee, and upon receipt of additional detailed information and acceptable engineering plans proposing suitable waste disposal methods, waste volumes, safeguards and other necessary facilities for the site.
2. Make any finally proposed license available to the public and schedule a public hearing no less than 30 days thereafter for the purpose of receiving public and expert comment upon the specific conditions of the proposed license prior to its issue.
3. Condition said license to require formal application and public hearing to amend the initial license before disposing of any additional wastes or constructing new disposal facilities which are not included as part of the initial license.
4. In the event a license is issued, periodically evaluate the company's license, performance, site economics and other related factors and revise the license conditions as may be warranted to protect the environment and public health and welfare.



DIARMUID F. O'SCANNLAIN

1622 E. 9th Ave #11
The Dalles, Oregon 97058
November 25, 1973

Mr. Pat Wicks
Public Service Building
Portland, Or.

Dear Mr. Wicks:

Revival of the Chem Nuclear issue at Arlington

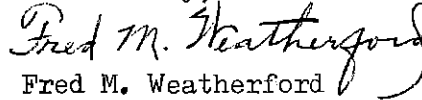
Oregon site is without jurisdiction.

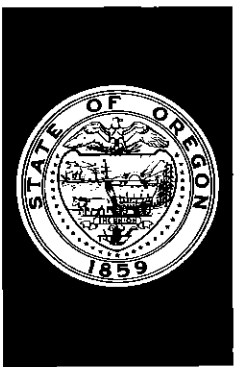
License for ChemNuclear was formally refused

by the Environmental Quality Commission

calling it dead--no further action.

So please kick it!

Yours truly,

Fred M. Weatherford



DEPARTMENT OF ENVIRONMENTAL QUALITY

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

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item I, November 26, 1973 EQC Meeting

Metropolitan Service District (MSD) Grant Application for Supplemental Funds

Background

November 10, 1972, the State Emergency Board authorized the Environmental Quality Commission through the Department of Environmental Quality to grant up to \$1,129,630 from Pollution Control Bonds to assist local governments in the development of Regional Solid Waste Management Action Plans. The Department has since been providing administrative, coordinative, and technical assistance to twenty-three (23) projects encompassing the entire State. Plans from these projects are being finalized and are scheduled for official adoption in early 1974.

A grant of \$325,00 was authorized to MSD, an agency with Regional implementing authority, to perform the Solid Waste Management planning for the entire area of Clackamas, Multnomah, Washington, and Columbia Counties. All local governments involved entered into agreements for MSD to perform the planning function for the area outside, but contiguous to its metropolitan boundaries through the Columbia Region Association of Governments (CRAG).

Discussion

The present MSD planning period and project will expire December 31, 1973, by which time it is expected that an action-oriented conceptual plan will be completed and ready to consider for formal adoption.

MSD is meeting or exceeding all conditions of the original grant agreement and work plan. Of special interest on a national scale is a Tire Ordinance which has been drafted and adopted for controlling the disposal of more than 1,000,000 tires annually in the Metropolitan area that are presently creating nuisance conditions. The plan being developed contemplates transfer stations for public convenience, and emphasizes recycling wherever possible, with milling to aid resource recovery.

The current MSD planning project has gathered region-wide support from the local government units, and it now appears that the role of Solid Waste Management in the Counties of Clackamas, Washington, and Multnomah can be assumed by the District as soon as it is prepared to accept the responsibility. Considerable public involvement and support has been generated and the project is concluding with the momentum of the MSD program at its greatest.

Conclusions

It has become apparent to MSD and DEQ that the current planning project upon completion will not bring the MSD Region into a ready-to-implement position. The project has necessarily and appropriately been 90% consultant oriented to determine the best engineered conceptual solid waste handling system. The project funds will be depleted prior to meeting all the implementation and organizational planning needs which necessarily lead to the actual facility construction. MSD is therefore requesting a supplemental grant of up to \$350,000 over a two year period (January 1, 1974-December 31, 1975) to acquire and sustain a permanent MSD staff which will develop the management system needed to implement and maintain the MSD programs.

Recommendation

The State Solid Waste Management Citizens' Advisory Committee (CAC) reviewed the MSD grant application on October 31, 1973, and unanimously recommended to the Director that it be approved with the condition that the Final Report to the concluding grant funded project be reviewed by the CAC and approved by the DEQ prior to release of additional funds.

The Department staff fully agrees with the recommendation of the CAC, and supports the entire program.

It is the Director's recommendation that the Commission authorize a request to the Emergency Board for an increase in the limitation to spend established in 771, Section 4(3), Oregon Laws 1973 to allow a grant of \$350,000 to the Metropolitan Service District for advance planning of Solid Waste facilities.



DIARMUID F. O'SCANNLAIN

GLG:mm
11/14/73

Attachments (9)



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5360

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item J, November 26, 1973, EQC Meeting

Public Hearing to Consider Adoption of Special Air Pollution
Control Rules for Clackamas, Columbia, Multnomah and
Washington Counties

Background

The Columbia-Willamette Air Pollution Authority, formed pursuant to Chapter 425, Oregon Laws 1967, was a regional air quality control agency approved by the State Sanitary Authority effective January 1, 1968 for the counties of Multnomah, Clackamas, Columbia, and subsequently Washington County.

On 1 July 1973, the EQC approved the transfer to the Department of all CWAPA plans and programs. On the 29 June 1973, the EQC by order adopted all presently effective CWAPA rules as temporary rules of the Environmental Quality Commission.

Recognizing the need to insure continuity of existing control programs, compliance schedules and enforcement in the former CWAPA territory, on the 22 October 1973, the EQC authorized the

Department to hold a public hearing on 26 November 1973 in Portland for the purpose of obtaining appropriate public testimony and to consider the adoption of certain special air pollution control rules to be applicable to the areas of Clackamas, Columbia, Multnomah and Washington Counties.

Appropriate notice of the public hearing to be held has been given by the Department and copies of the proposed special rules were made available for public inspection.

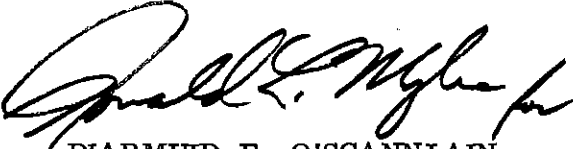
Conclusion

The Department has reviewed the rules and regulations of the former Columbia-Willamette Air Pollution Authority and has deleted portions of those rules which have been determined to be similar or identical with existing rules of the Department. Proposed for adoption is that portion of the former CWAPA rules which have been determined to be more restrictive than existing Department rules or as may be necessary to ensure continuity of existing control programs. No new rules or more restrictive regulations are proposed than formerly were in effect in the CWAPA territory.

It is concluded to maintain the high degree of control required in the four-county area, to ensure continuity of control programs and to achieve the objective of the Oregon Clean Air Act Implementation Plan, the special air pollution control rules as proposed be adopted as permanent rules of the Department of Environmental Quality.

Director's Recommendation

It is recommended that after consideration of public testimony, the attached specific air pollution rules for Clackamas, Columbia, Multnomah and Washington Counties be adopted by the Commission.



(DIARMUID F. O'SCANNLAIN

Attachment

PROPOSED RULES

(Note: The section numbers are subject to change following adoption and filing with the Secretary of State)

DIVISION 2

AIR POLLUTION CONTROL

Subdivision 8

SPECIFIC AIR POLLUTION RULES FOR CLACKAMAS, COLUMBIA, MULTNOMAH AND WASHINGTON COUNTIES

28-001 PURPOSES AND APPLICATION: The rules in this subdivision shall apply in Clackamas, Columbia, Multnomah and Washington Counties. The purposes of these rules are to provide continuity of the air quality control program previously administered by the Columbia-Willamette Air Pollution Authority and to deal specially with the critical and unique air quality control needs of the four county area. These rules shall apply in addition to all other rules of the Environmental Quality Commission. The adoption of these rules shall not, in any way, affect the applicability in the four county area of all other rules of the Environmental Quality Commission and the latter shall remain in full force and effect, except as expressly provided otherwise. In cases of apparent duplication, the most stringent rule shall apply.

28-003 EXCLUSIONS: The requirements contained in this subdivision shall apply to all activities conducted in Clackamas, Columbia, Multnomah and Washington Counties, other than those for which specific

industrial standards have been adopted (Subdivision 5 of this Division 2),
except for the reduction of animal matter, Section 25-055(1) and (2);
Upset Conditions, Section 21-065 and 21-070.

28-005 DEFINITIONS:

As used in this Subdivision:

- (1) "Domestic Rubbish" means rubbish generated by a private dwelling housing four families or less.
- (2) "Fuel burning equipment" means a device which burns a solid, liquid, or gaseous fuel, the principal purpose of which is to produce heat, except marine installations and internal combustion engines that are not stationary gas turbines.
- (3) "Odor" means the property of a substance which allows its detection by the sense of smell.
- (4) "Open outdoor fire" means the burning of any material outdoors in an open fire, a burn barrel or any similar device.
- (5) "Rubbish" means non-putrescible wastes consisting of both combustible and non-combustible wastes, such as but not limited to ashes, paper, cardboard, yard clippings, wood, glass, cans, bedding, household articles and similar materials.
- (6) "Special Restricted Area" means a special area established to control specific practices or to maintain specific standards.
 - (a) In Columbia, Clackamas and Washington Counties, Special Restricted Areas are all areas within Rural Fire Protection Districts, including the areas of incorporated cities within or surrounded by said Districts, but excluding the Timber and Tri-City Rural Fire Protection Districts.
 - (b) In Multnomah County, the Special Restricted Area is all area west of the Sandy River.

28-010 OPEN OUTDOOR FIRES - GENERAL:

- (1) No person shall cause or permit to be ignited or maintained any open outdoor fire which is specifically prohibited by any rule of the Department.
- (2) Open outdoor fires in violation of any rule of the Department shall be extinguished by the person in attendance upon notice by the Department.

28-015 OPEN OUTDOOR FIRES - DOMESTIC: No person shall cause or permit

to be ignited or maintain any open outdoor fire containing domestic rubbish within Special Restricted Areas, except such open outdoor fires are permitted:

(1) Until 1 July 1974 in Columbia County,

(2) Until 1 July 1974 in Clackamas County in

- a) Clarkes Rural Fire Protection District
- b) Estacada Rural Fire Protection District No. 69
- c) Colton-Springwater Rural Fire Protection District
- d) Molalla Rural Fire Protection District
- e) Hoodland Rural Fire Protection District
- f) Monitor Rural Fire Protection District
- g) Scotts Mills Rural Fire Protection District
- h) Aurora Rural Fire Protection District

(3) Until 1 January 1975 for the burning of wood, needle or leaf materials from trees, shrubs or plants, during the period commencing with the last Friday in October and terminating at sundown on the last Sunday in November, and the period commencing the second Friday in April and terminating at sundown on the third Sunday in May. Such burning shall be conducted in strict compliance with the applicable rules, regulations and ordinances of fire protection agencies. No open outdoor fire shall be conducted on any day when the Department advised fire permit issuing agencies to not issue permits because of adverse meteorological or air quality conditions.

28-020 OPEN OUTDOOR FIRES - LAND CLEARING:

No person shall cause or permit to be ignited or maintain any

open outdoor fire as part of any land clearing operation:

- (1) In Washington County within Rural Fire Protection Districts including incorporated cities within or surrounded by said Districts.
- (2) In Control Areas in Clackamas and Multnomah Counties established as:
 - a) Any area in or within three (3) miles of the boundary of any city of more than 1,000 population, but less than 45,000 population.
 - b) Any area in or within six (6) miles of the boundary of any city of 45,000 or more population.
 - c) Any area between areas established by this rule where the distance between the boundaries is three miles or less.
- (3) Whenever two or more cities have a common boundary, the total population of these cities will determine the Control Area classification and the municipal boundaries of each of the cities shall be used to determine the limits of the Control Area.
- (4) Whenever the boundary of a Control Area passes within the boundaries of a city, the entire area of the city shall be deemed to be in the Control Area. If the Control Area boundary within a city is between Control Area (b) and Control Area (a), the entire city shall be deemed to be in Control Area (b).

- (5) The annual population estimate issued by the Center for Population Research and Census, Portland State University, shall establish which municipalities will be used for determination of Control Areas.

28-025 INCINERATORS AND REFUSE BURNING EQUIPMENT:

- (1) No person shall cause, permit or maintain any emission from any refuse burning equipment which does not comply with the emission limitations of these Rules.
- (2) Refuse Burning Hours
 - a) No person shall cause, permit or maintain the operation of refuse burning equipment at any time other than one-half hour before sunrise to one-half hour after sunset, except with prior approval of the Department.
 - b) Approval of the Department for the operation of such equipment may be granted upon the submission of a written request stating:
 - i) Name and address of the applicant
 - ii) Location of the refuse burning equipment
 - iii) Description of refuse burning equipment and its control apparatus
 - iv) Type and quantity of refuse
 - v) Good cause for issuance of such approval
 - vi) Hours during which the applicant seeks to operate the equipment
 - vii) Time duration for which approval is sought

28-030 CONCEALMENT AND MASKING OF EMISSIONS:

- (1) No person shall willfully cause or permit the installation or use of any device or use of any means such as dilution, which, without resulting in a reduction in the total amount of air contaminant emitted, conceals an emission of air contaminants which would otherwise violate rules of the Department.
- (2) No person shall cause or permit the installation or use of any device or use of any means designed to mask the emission of an air contaminant, which air contaminant causes or is likely to cause detriment to health, safety or welfare of any person.

28-040 EFFECTIVE CAPTURE OF AIR CONTAMINANT EMISSIONS:

Air contaminants which are, or may be, emitted to the atmosphere through doors, windows or other openings in a structure or which are or may be emitted from any process not contained in a structure, shall be captured and transferred to air pollution control equipment using the most efficient and best practicable hooding, shrouding or ducting equipment available. New sources shall comply at the time of installation.

28-045 ODOR CONTROL MEASURES:

- (1) Control apparatus and equipment, using the highest and best practicable treatment currently available, shall be installed and operated to reduce to a minimum odor-bearing gases or odor-bearing particulate matter emitted into the atmosphere.

- (2) Gas effluents from incineration operations and process after-burners shall be maintained at a temperature of 1,400 degrees fahrenheit for at least 0.5 second, or controlled in another manner determined by the Department to be equally or more effective.

28-050 STORAGE AND HANDLING OF PETROLEUM PRODUCTS:

- (1) In volumes of greater than 40,000 gallons, gasoline or any volatile petroleum distillate or organic liquid having a vapor pressure of 1.5 p.s.i.a. or greater under actual storage conditions shall be stored in pressure tanks or reservoirs or shall be stored in containers equipped with a floating roof or vapor recovery system or other vapor emission control device.
- (2) Gasoline or petroleum distillate tank car or tank loading facilities handling 20,000 gallons per day or more shall be equipped with submersible filling devices or other vapor emission control systems.
- (3) Gasoline tanks with a capacity of 500 gallons or more, installed after 1 January 1970, shall be equipped with submersible filling device or other vapor emission control systems.

28-055 SHIPS:

While in those portions of the Willamette River and Columbia River

which pass through or adjacent to Clackamas, Columbia and Multnomah Counties, each ship shall minimize emissions from soot blowing and shall be subject to the emission standards and rules for visible emissions, particulate matter size, and sulfur dioxide from fuel burning equipment.

28-060 UPSET CONDITION: Emission of air contaminants in excess of applicable standards as a result of equipment breakdown shall not be considered a violation of said standards provided the conditions of section 21-075 are met.

28-065 EMISSION STANDARDS, GENERAL: Compliance with any specific emission standard in these rules does not preclude required compliance with any other applicable emission standard or requirement contained in any of the rules of the Department.

28-070 VISIBLE AIR CONTAMINANT STANDARDS: No person owning, operating or maintaining non-fuel burning equipment sources of emissions shall discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than thirty (30) seconds in any one hour which is equal to or greater than 20 percent opacity.

28-075 PARTICULATE MATTER WEIGHT STANDARDS:

(1) The maximum allowable emission of particulate matter from any fuel burning equipment shall:

a) Be a function of maximum heat input and shall be determined

from Figure 1, except from existing fuel burning equipment utilizing wood residue, it shall be 0.2 grain, and from new fuel burning equipment utilizing wood residue, it shall be 0.1 grain for each standard cubic foot of exhaust gas, calculated to 12 percent carbon dioxide.

b) Not exceed Smoke Spot #2 for distillate fuel and #4 for residual fuel, measured by ASTM D2156-65, "Standard Method for Test for Smoke Density of the Flue Gases from Distillate Fuels".

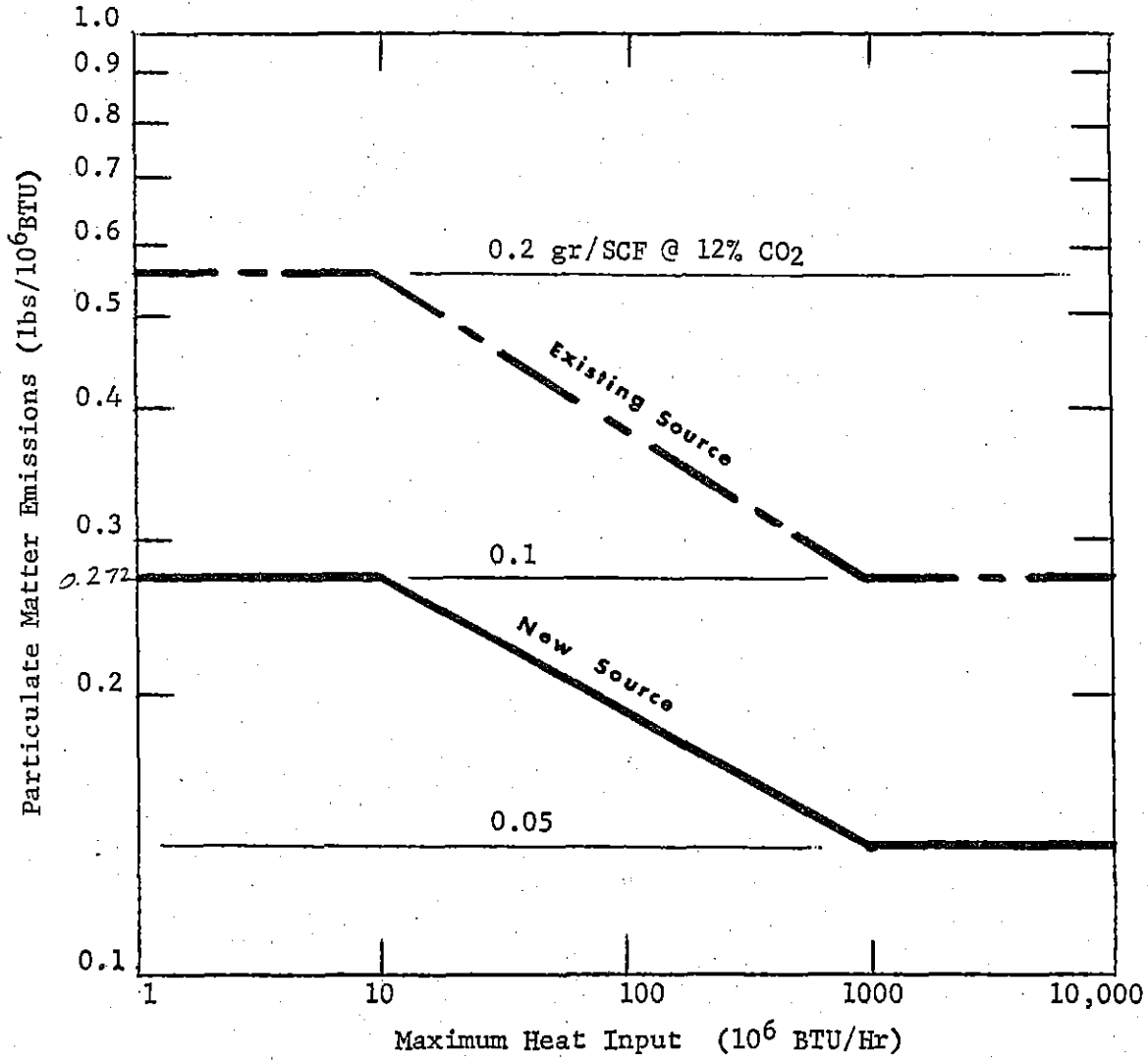
(2) The maximum allowable emission of particulate matter from any refuse burning equipment shall be a function of the maximum heat input from the refuse only and shall be determined from Figure 2.

28-080 PARTICULATE MATTER SIZE STANDARD: No person shall cause or permit the emission of any particulate matter which is larger than 250 microns in size provided such particulate matter does or will deposit upon the real property of another person.

28-085 SULFUR DIOXIDE EMISSION LIMITATIONS:

(1) Fuel Burning Equipment: The following emission standards are applicable to sources installed, constructed or modified after October 1, 1970.

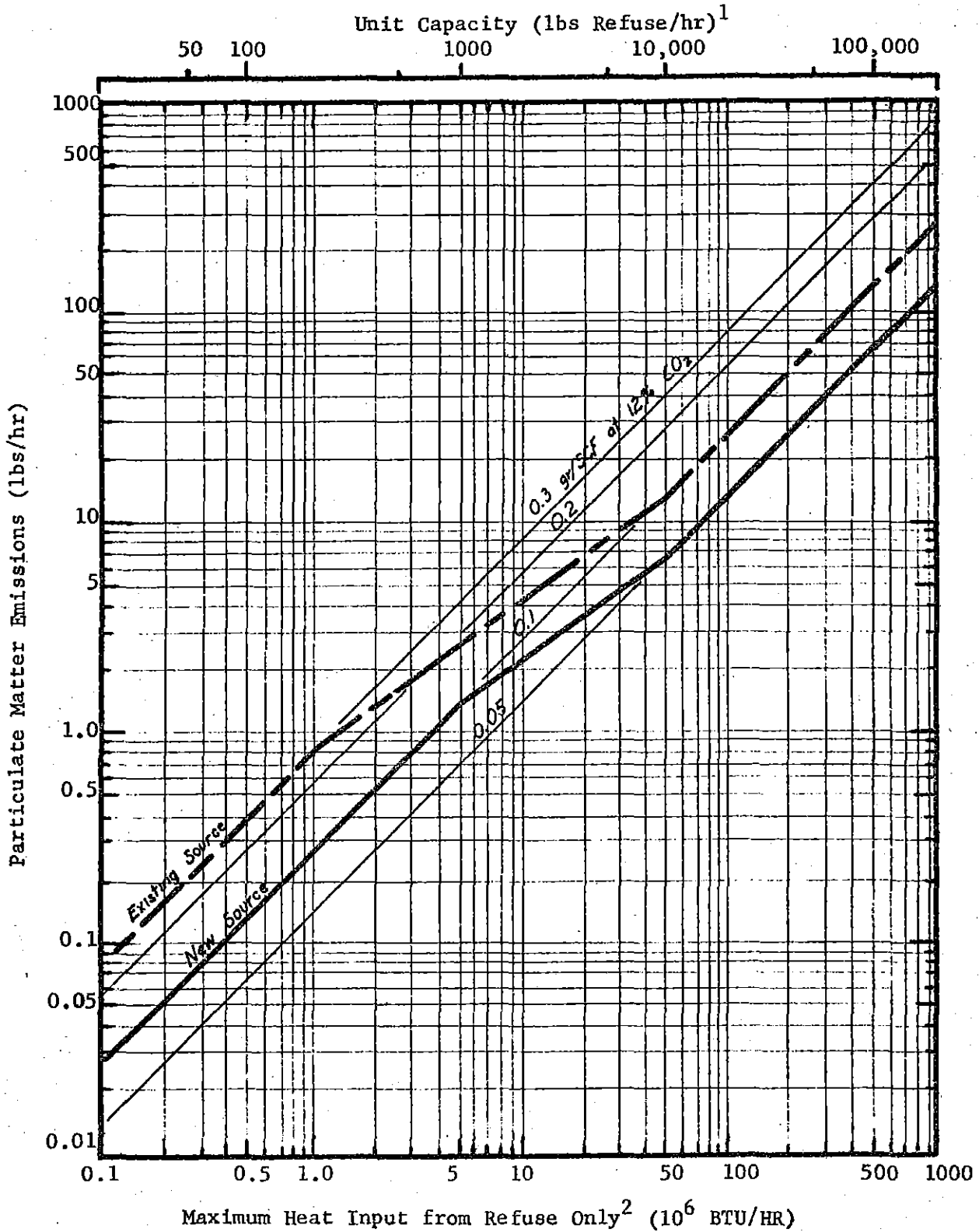
a) For fuel burning equipment having more than 150 million BTU per hour heat input, but not more than 250 million BTU per hour input, no person shall cause, suffer, allow or permit the emission into the atmosphere of sulfur dioxide in



PARTICULATE MATTER EMISSION STANDARDS FOR FUEL BURNING EQUIPMENT

Figure 1

PARTICULATE MATTER EMISSION STANDARDS FOR REFUSE BURNING EQUIPMENT



¹ For refuse having heat content of 5000 BTU/lb as fired

² Excluding any auxiliary heat

Figure 2

excess of:

- i) 0.8 lb per million BTU heat input, maximum 2-hour average, when liquid fuel is burned.
 - ii) 1.2 lb per million BTU heat input, maximum 2-hour average, when solid fuel is burned.
- (2) No person shall cause or permit emission of sulfur dioxide in excess of 1000 ppm from any air contamination source, except those persons burning fuel conforming to provisions of rules relating to the sulfur content of fuels.

28-090 ODORS:

- (1) No person shall cause or permit the emission of odorous matter in such manner as to contribute to a condition of air pollution, or exceed:
- a) A scentometer No. 0 odor strength or equivalent dilution in residential and commercial areas.
 - b) A scentometer No. 2 odor strength or equivalent dilution in all other land use areas.

Scentometer Readings

<u>Scentometer No.</u>	<u>Concentration Range No. of Thresholds</u>
0	1 to 2
1	2 to 8
2	8 to 32
3	32 to 128

- (2) A violation of this Rule shall have occurred when two measurements made within a period of one hour, separated by at least 15 minutes, off the property surrounding the air contaminant source exceeds the limitations of subsection (1).

TESTIMONY ON THE PROPOSED SPECIFIC
AIR POLLUTION RULES FOR CLACKAMAS, COLUMBIA
MULTNOMAH AND WASHINGTON COUNTIES

November 26, 1973

I am Thomas C. Donaca, representing the Air Quality Committee of Associated Oregon Industries.

We understand that these rules are considered for adoption primarily because of the necessity to maintain conformance with the Air Quality Implementation Program filed with, and approved by, the Federal Environmental Protection Agency. The implementation program contained regulations for the four county region promulgated by the Columbia Willamette Regional Air Pollution Authority which no longer exists. However, the consideration of these proposed rules by your commission is a departure from the past approach to air quality by this agency. Previously you have adopted statewide standards applicable either to all sources or to specific classes of sources. Although we understand the necessity to maintain continuity with the implementation program, we believe you should review the question of the desirability of the adoption of standards, other than statewide. You, of course, always have the authority to promulgate area standards under ORS 449.785(1). We believe this authority should be used sparingly and only where truly adverse local conditions would result from your failure to act. We believe statewide standards provide greater uniformity and consistency and therefore we would suggest that you place a time limit on the applicability of the proposal standards, say one year. During that year your staff should review the entire body of air quality regulations and redraft them in their entirety. The final draft should be a set of rules with statewide applicability with few exceptions to meet the needs of particular local airsheds.

We have suggested that the entire air quality rules be redrafted. Here are some of the reasons and difficulties that justify such an approach:

(1) Proposed rule 28-001 in its last line states "In cases of apparent duplication, the most stringent rule shall apply." Under CWAPA the source need only look at the CWAPA rules. Now the source should look at both the special proposed rules and at the DEQ rules in order to be sure which "most stringent" rule does apply.

(2) Proposed rule 28-005(3) adopts a different definition of "fuel-burning equipment" than found in existing rule 28-005(2). We do not suggest which is the better definition but only that they are different. We suggest that when all your rules are redrafted there be a definition section which includes all definitions except those highly specialized definitions found in the "Specific Industrial Standards" and applicable only to those sources. This would eliminate confusion on the part of all persons, public and governmental, who must deal with your rules.

(3) CWAPA had jurisdiction only over air quality, but your commission has jurisdiction over solid waste disposal. It appears essential then, that as you adopt prohibitions such as those relating to open outdoor fires and clearing (28-015 and 28-020) that you are sure that there are other acceptable methods of disposing of such solid waste.

Let us conclude by discussing the proposed sulphur dioxide limitations in proposed rule 28-085. The 1000 ppm limitation has two applications: Releases from process and releases from fuel burning. The proposed rule ties fuel burning to the "sulphur content of fuels" regulation 22-005 and 22-010 which allows 2.5 percent sulphur by weight in residual fuels until July 1, 1974 at which time it drops to 1.75 percent sulphur by weight. We have reason to believe that there may not be adequate supplies of residual fuel oil and some suppliers may not be able to meet the 1.75 percent limitation on July 1. Normally, this would not be a problem because other suppliers would take the account. This is not true today due to the oil allocation system which ties the consumer to his supplier. Any

consumer, industrial; government institutions, local and state; school districts; and hospitals whose supplier can't meet the 1.75 percent regulation may be out of business. We would recommend that you undertake a review of this situation because of the significant economic and employment impact that could result. Also, while it is recognized that Portland generally has the highest concentration of SO₂ we are only at about 50 percent of the national secondary standard. Oregon has no recognized health or general air quality problems from current sulphur dioxide emissions and Oregon was never in the position of many Eastern states of having to roll back or reduce their SO₂ emissions to meet the national standards. It now appears that the residual fuel oil situation may be the critical part of our energy crisis as our natural gas supplies are curtailed for longer periods requiring the use of more fuel oils. We are not asking for any modification of your rules now, but only that you be fully cognizant of the situation, give it your attention, and devise a means of handling the situation expeditiously should it arise.



OREGON STATE UNIVERSITY
DEPARTMENT OF AGRICULTURAL ENGINEERING

CORVALLIS, OREGON 97331

November 16, 1973

Department of Environmental Quality
Air Quality Control Division
1234 S.W. Morrison Street
Portland, Oregon 97205

Gentlemen:

RE: Proposed Ammendments to the Air Contaminant Discharge Rule.

In reading the proposed changes to the Air Contaminant Discharge Rule, OAR 340, Sections 20-033.02 through 20-033.20, I note that you have included odor sources as among those requiring a permit. The statement that is indicated to be added is as follows, "No person shall, without first obtaining a permit from the Department or Regional Authority, construct, install, establish, develop or operate any air contaminant source not listed in Table A which would emit, at the discretion of the Department or Regional Authority, any malodorous odors".

The wording of this proposed regulation has some confusing aspects, however. I interpret this to say that a permit is required for anyone operating an odor producing enterprise if such a permit is requested by the Department or Regional Authority. Without some additional thought, this would not seem to be an appropriate manner to begin controlling odors in the environment.

The criteria of any "malodorous" odors is in marked contrast to the other criteria of ten tons or more per year of various specific measurable pollutants. There is no definition included of "malodorous odors". This would lead to a great number of complaints from residents who may have on a single occasion smelled an odor which they found objectionable. With this loose wording, it should be anticipated that the regulation would be difficult to administer. Unless you have information not available to me, the wording of a permit to an acknowledged odor source would further seem difficult to compose.

Although agricultural operations, including livestock production, are specifically exempt from the air quality regulation, it is important that livestock producers look forward to meeting the same regulatory requirements as other commercial and industrial operations. The definition included in your proposed regulation would be extremely difficult if it were applied to agricultural pursuits, and it therefore creates some uncertainty in the livestock industry's wishes to move toward compliance procedures. Unless further study is planned and can be reflected in the regulation, it would be my recommendation that Section b of 20-033.03 (2) should be eliminated.

If you feel that is is important to include some coverage of odor sources in this regulation, I would be pleased to share what information I have concerning

*Given to HFB
both with
HMP-*


Department of Environmental Quality

November 16, 1973

Page 2

the emission of odorous compounds. By considering the technology currently available, I believe a more suitable regulatory statement can be written which will be more easily administered and which would lead to a more orderly control procedure. Please feel free to call upon me if I may be helpful.

Very truly yours,



J. Ronald Miner, Associate Professor
Department of Agricultural Engineering

JRM:jt

cc; W. T. Cooney
J. R. Davis
T. L. Willrich



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5359

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Addendum, Agenda Item J, November 26, 1973, EQC Meeting

Based upon further review by the staff and public comments thus far received on the proposed specific air pollution rules for Clackamas, Columbia, Multnomah and Washington Counties, the Director recommends the following changes/revisions in the proposed rule.

Page 2, Section 28-003, Exclusions: Delete the phrase "Upset Conditions, Section 21-065 and 21-070". The proposed deleted phrase was inappropriately placed and is not necessary. The language contained in Section 28-060 is sufficient to carry out the intent of the proposed rules.

Page 8, Section 28-055, Ships: Delete the phrase "...and sulfur dioxide from fuel burning equipment." This deletion is necessary to conform with the existing Department rules - Section 22-025, pertaining to the exemption of vessels from the sulfur content of fuel regulation.

Page 9, Section 28-085, Sulfur Dioxide Emission Limitation: Delete subparagraph a) pertaining to the limitation of sulfur dioxide per million BTU heat input for fuel burning equipment. Section 22-055 of the existing

Department rules pertains to the same subject matter and limits sulfur dioxide emissions based on BTU heat input for fuel burning equipment. To insure uniformity of Department rules, this deletion is necessary.

DIARMUID F. O'SCANNLAIN

11/26/73 EWH:h



DEPARTMENT OF ENVIRONMENTAL QUALITY

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

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

TO: Environmental Quality Commission
FROM: Director
SUBJECT: Staff Report for November 26, 1973 Meeting, Agenda Item K

PGE Beaver Turbine Generator Installation Application for an Air Contaminant Discharge Permit

1.0 Background

On August 9, 1973 PGE filed an application for an air contaminant discharge permit with the Department for a 433 megawatt turbine electric generating plant to be located at Port Westward, the former Beaver Military Reservation Site in Columbia County. PGE is proposing to install six General Electric combustion turbines which are anticipated to be fired with crude oil.

On November 13, 1973 a public hearing was held at the Columbia County Courthouse, St. Helens, Oregon regarding an air contaminant discharge permit proposed to be issued by the Department. At this hearing, the Department presented a staff report summarizing its analysis and conclusions with a recommendation that the proposed permit be issued.

On November 14, 1973 a Hearings Officer report was prepared in regard to the November 13, 1973 hearing. This report summarized testimony of witnesses and recommended that the Department evaluate points raised by PGE witnesses prior to issuing a final permit and further that the Department issue the proposed permit in substantially its same form.

On November 15, 1973 the Department received a letter from the North Portland Citizen's Committee containing a summary of 15 questions they raised at the November 13, 1973 public hearing. The Department responded to these questions after consideration of changes requested in their proposed permit by PGE in a letter dated November 20, 1973 and after the Department made certain modifications to the proposed permit.

2.0 Evaluation

In a letter dated November 20, 1973 PGE suggested changes in their proposed permit. The Department has taken these into consideration and modified the proposed permit to the following extent.

Section 1.2.1 of the proposed permit has been modified to delete the requirement of meeting a ten percent (10%) opacity visible emission standard for combined plumes as it has been concluded that this

requirement is unattainable. The Department has maintained the proposed EPA opacity requirement for turbines of ten percent (10%) opacity for a single turbine plume. The Department has added a new visible emission restriction of twenty percent (20%) opacity for the combined turbine plumes which is consistent with general Department visible emission standards and which will insure minimizing visual impact of facility emissions.

Section 1.2.4 of the proposed permit has been modified to require meeting the Oxides of Nitrogen emission standard no later than August 1, 1975. PGE had indicated at the November 13, 1973 public hearing that the only available control system to meet the Oxides of Nitrogen emission standard would involve installation of water injection and an associated water treatment plant which even on an accelerated schedule could not be operational until April 1975. The Department concurs with this fact. In developing the compliance schedule now incorporated in Section 3 of the revised permit, PGE has indicated that August 1, 1975 would be the most practicable date for operation of the water injection system. The Department concurs with this fact.

Section 1.3.3 has been added to the proposed permit to require that fuel oil heating systems particulate emissions not exceed a smoke spot number 2. This is in conformance with existing Department requirements for such equipment.

Section 1.4 has been added to the proposed permit to allow PGE under Department supervision to demonstrate compliance if they so wish to burn other than distillate oil in the fuel oil heating systems.

Section 2.1.2 of the proposed permit has been modified to exclude fuel additives as part of the fuel oil ash content. PGE has indicated that fuel additives may be necessary to maintain durability of the turbines and/or minimize smoke emissions. The Department has reserved the right to approve use of any additive.

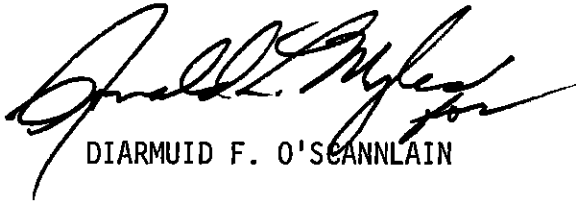
Section 2.5 of this revised permit has been modified to allow other than special stacks to be required if necessary to minimize ambient air impact. This condition has been modified to allow use of the best practicable means of meeting the Department's objective.

Sections 3.1 to 3.5 have been added to the proposed permit. This section contains the Oxides of Nitrogen control compliance schedule previously discussed.

3.0 Director's Recommendation

In view of the facts that the Department has previously recommended issuance of a stringent air contaminant discharge permit, that a public hearing has been held on this matter, that public and PGE

testimony in regards to this matter have been considered and that a revised permit has been prepared, it is the Director's recommendation that the revised permit be issued.



DIARMUID F. O'SCANNLAIN

PORTLAND GENERAL ELECTRIC COMPANY

621 S. W. ALDER ST.

PORTLAND, OREGON 97205

H. H. PHILLIPS
VICE PRESIDENT AND
CORPORATE COUNSEL

November 20, 1973

Mr. E. J. Weathersbee, Administrator
Northwest Region Office
Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Dear Mr. Weathersbee,

We would like to suggest the following changes in the Beaver license:

1.2.1: Delete the words "or combined turbine plume".

Reason: As testified by Mr. Snyder, the opacity of the combined plumes cannot meet the 10 percent limitation. Further this is a departure from the position originally taken by the Department of Environmental Quality.

1.2.4: Add at the end of the sentence the words "after the water injection system has become operative".

Reason: Our testimony was to the affect that water injection would not be available until April, 1975, even on an accelerated schedule. If an interim NO_x limitation is to be imposed, we would suggest 962 pounds per hour.

1.3: Strike the words "fired on number two distillate fuel".

Reason: It is expected that the fuel oil heating system will utilize the same range of fuel as the turbines themselves and the same emission limits should apply.

Mr. E. J. Weathersbee

November 20, 1973

Page 2

- 1.5: Strike in its entirety. Substitute "Sound pressure levels measured at the PGE property line shall not exceed 45 DBA nor shall turbine noise, measured at the same place, exceed the following in any octave band:"

<u>Frequency - Center of Octane Band - Hz</u>	<u>Sound Pressure Level, DB</u>
31.5	66
63	60
125	53
250	45
500	41
1,000	37
2,000	31
4,000	28

Reason: This is consistent with proposed DEQ regulations and with what should be the purpose of the regulation - comfort of nearby residents. Arbitrary sound reduction heard and appreciated by no one adds only cost.

- 2.1.2: Insert before the words "be used" in the last line, the words "of untreated fuel".

Reason: Treatment may alter the apparent ash content of the fuel. It cannot be provided for in fuel procurement contracts.

- 2.4: In the second line strike everything after the word "at" and substitute "the earliest practicable time and in no case later than July 1, 1975".

Reason: As testified at the hearing, water injection hardware will be installed in the engines at the time of their delivery. However the water treatment plant cannot be designed, fabricated and installed by the time the Beaver facilities must go into operation for power production.

Mr. E. J. Weathersbee

November 20, 1973

Page 3

- 2.6: Strike everything in the second line after the word "department". Insert "to the extent that the results of the plume rise impact study and/or ambient air monitoring program indicate that such stacks constitute the highest and best practicable treatment".

Reason: The method of achieving the desired result should be left to the licensee's discretion. Other means might reduce air pollution more effectively or cheaper than combined exhaust stacks.

- 2.7: Strike this section in its entirety.

Reason: If, in the interests of users of electricity and the residents in the area it appears feasible to install a waste heat boiler at some later time, the Company expects to do so. However the decision does not appear to be an appropriate one for the Department of Environmental Quality. Our testimony indicated that the routine operation may exceed 2,000 hours per year after 1975.

- 2.8: Strike this section in its entirety.

Reason: As indicated above, the testimony is that under adverse conditions operation will exceed the schedule included in the application. Under ideal conditions it might be less. In any case the facility has been sited with the view having maximum operating flexibility. It is felt that limitations on this nature are unnecessary.

- 4.1: Remove "particulates: continuous when operating, and".

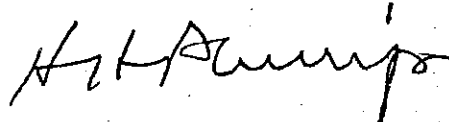
Reason: There is presently no continuous particulate monitoring equipment available. The daily smoke spot tests will be adequate.

Mr. E. J. Weathersbee
November 20, 1973
Page 4

Testimony of Mr. Kathren and Mr. Snyder is attached.

We would greatly appreciate an opportunity to discuss these matters with you at your earliest convenience.

Very truly yours, r



Cc: Honorable A. Silver

P.S. Section 2.1.2 states that "...but in no case shall distillate or crude fuel oil with a sulfur content greater than .3% or ash content greater than .035% by weight be used". This matter was not addressed at the hearing but we are now informed by the same source which supply the very low sulfur content distillate for use in the Bethel and Harborton combustion turbines that the .3% limitation will restrict the availability of crude and residual oils to an extreme degree and greatly increase the possibility that no oil at all will be available. In a report by the turbine manufacturer it was stated:

"The sulfur restriction of 0.3% will severely limit the availability of fuels for these turbines, especially in the residual fuel class. Our data shows that less than 1% of the #4, #5, and #6 fuel oils will be available to meet the sulfur requirement. In addition, special crude oils will be necessary to meet this restriction."

We will, of course, seek the lowest sulfur oil available, regardless of cost, but the proposed .3% limitation may be impossible to meet. We suggest that the .5% sulfur content limitation elsewhere applicable would be more realistic in the circumstance.

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY

OF THE STATE OF OREGON

In the Matter of the Application)
For an Air Contaminant Discharge)
Permit for PORTLAND GENERAL ELECTRIC) HEARINGS OFFICER REPORT
Turbine Generator Installation)
(Beaver, Oregon))

TO: Diarmuid F. O'Scannlain
Director
Department of Environmental Quality

FROM: Arnold B. Silver
Hearings Officer

Pursuant to Notice a public hearing was held on November 13, 1973 at the Columbia County Courthouse, St. Helens, Oregon, regarding the air contaminant discharge permit purposed to be issued to Portland General Electric (PGE) for its turbine generator installation at Beaver, Oregon by the Department of Environmental Quality.

SUMMARY OF WITNESSES

Following a DEQ staff report, PGE presented seven (7) witnesses in support of its application. Six (6) of these witnesses were PGE officers and employes with highly competent technical qualifications. The final witness on behalf of PGE was Robert Johnson, a General Electric Corporation engineer. This company is the manufacturer of the turbines to be installed at the Beaver facility.

Numerous officials of Columbia County submitted views at the hearing, including Raymond Stewart, Port of St. Helens, Jack Minkoff, Columbia County Commissioner on behalf of the Board and as Chairman of the Clatskanie Public Utility Department, the Mayor of Clatskanie and Kenneth Erickson, Chairman, Columbia County Organization of Governments. All these witnesses were supportive of the PGE application.

James Lee, representing the Northwest Environmental Defense Center, did not oppose the issuance of the permit but raised several points he believed should be evaluated. Steven Roso,

on behalf of the Northwest Neighborhood Association, opposed issuance of the permit, at least until several points were clarified. A letter from Fred C. Felter, M.D., of Portland, was also introduced into the record; which opposed issuance of the permit.

SUMMARY OF TESTIMONY

A. PGE witnesses:

1. The proposed permit does not allow for a buffer zone for noise which is inconsistent with the proposed Department rules which contemplate buffer zones. It should be stressed, however, that the Company did not demand or request a buffer zone but only pointed out which they felt was an alleged inconsistency.
2. The language "or combined turbine plume" should be deleted from Section 1.2.1. Testimony indicated this provision was impossible to meet, since the combined plumes may very well exceed the limitation in the Section while a single plume from each turbine would be in compliance with the section.
3. Insufficient data is available as to whether smoke spot #2 is a reasonable limitation with the use of distillate fuel oil. Section 1.2.7.
4. PGE would expect to receive the same allowances for the fuel oil heating system as the fuel for the turbines. Section 1.3. through 1.3.2.
5. The term "special stacks" in Section 2.6 is vague and uncertain and at variance with the DEQ policy not to direct or dictate types of equipment to be utilized but to allow the permittee the option of choosing control methods he deems best to meet DEQ limitations.
6. The requirement to continuously monitor gas turbines as set forth in Section 4.1 is an unknown factor. Very

little is known regarding monitoring gas turbines and the methods utilized for such monitoring may be of little help. The Company suggests studying methods and means used in monitoring gas turbines rather than utilizing the actual monitoring itself.

B. Public Witnesses:

1. James Lee. The Beaver plant will be better than either Bethel or Harborton. Mr. Lee did not oppose the issuance of the permit but did stress turbulence from the turbines cannot be muffled.
2. Steven Roso raised numerous questions which were not necessarily related to an issuance of an air contaminant discharge permit. Among the issues raised by Mr. Roso were as follows:
 - a. How many gallons of oil would the facility use per hour?
 - b. Has the plant been cleared by the Governor's Energy Council?
 - c. Has the plant been cleared by the State of Washington Department of Ecology?
 - d. Is there any real need for this power?
 - e. What provisions have been made for the storage of oil to prevent oil spills?
 - f. Has the Coast Guard agreed to monitor the facility.
 - g. Were the proposed stacks structurally sound?
 - h. What meteorological data is available and, if very little, the plant should not be constructed until it's known.
 - i. Is the plant the best facility to be constructed on the premises? In other words, would another plant which may serve the public be a better facility rather than the Beaver facility.
 - j. What type of oil will the plant consume in the event of a real oil crises and shortage?

While most of the questions may be relevant to other issues, your Hearings Officer feels they are not necessarily relevant to the permit hearing held in St. Helens.


3. Fred Felter, M.D., flatly opposed the issuance of the permit to PGE on the basis that these plants are notoriously inefficient and wasteful of our precious energy sources.

RECOMMENDATION OF YOUR HEARINGS OFFICER

Your Hearings Officer recommends that the permit proposed to be issued by the Department of Environmental Quality be issued to Portland General Electric Company in substantially the same form and with the same terms and provisions that was the subject of the hearing at St. Helens. Your Hearings Officer does, however, recommend that the Department evaluate the points raised by Portland General Electric Company's witnesses prior to issuing a final permit.

Attached to this report are the written views and testimony presented at the hearing.

Dated this 14th day of November, 1973


ARNOLD B. SILVER
Hearings Officer

PROPOSED
AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS
Issued by the
Department of Environmental Quality for
Portland General Electric Company - Beaver

Expiration Date 1 January 1977
Page 2 of _____
Appl. No.: 0237
File No.: 05-2520

1. Performance Standards and Emission Limits

- 1.1 The permittee shall at all times maintain and operate all processes and all control equipment at full efficiency and effectiveness such that the emission of air contaminants and noise are kept at the lowest practicable levels.
- 1.2 Emissions of air contaminants shall not exceed any of the following:
 - 1.2.1 An opacity (as defined by OAR, Chapter 340, Section 21-005(4)) equal to or greater than 10 percent (10%) for a period or periods aggregating more than three (3) minutes in any one (1) hour from any single turbine plume or greater than 20 percent (20%) for combined turbine plumes.
 - 1.2.2 The maximum allowable emission rates of particulate matter from any single combustion turbine shall be a function of heat input as determined from Figure 1 of this permit for new sources,
 - 1.2.3 50 pounds per hour of particulate matter for any single turbine,
 - 1.2.4 280 pounds per hour of Nitrogen Oxide (NOx) for any single turbine, after the NOx control system becomes operable but in no case later than after August 1, 1975,
 - 1.2.5 282 pounds per hour of Sulfur Dioxide (SO₂) for any single turbine,
 - 1.2.6 416 pounds per hour of Carbon Monoxide (CO) for any single turbine,
 - 1.2.7 Smoke Spot number 2 as measured by the American Society for Testing Materials procedure D2156-65 for any single turbine when fired with distillate fuel oil and smoke spot number 4 when fired with crude fuel oil.
- 1.3 Emissions from the fuel oil heating system fired on number 2 distillate fuel shall not exceed the following:
 - 1.3.1 An opacity equal to or greater than ten percent (10%) for a period or periods aggregating more than three (3) minutes in any one (1) hour,
 - 1.3.2 The maximum allowable emission rates of particulate matter shall be a function of heat input as determined from Figure 1 of this permit for new sources,
 - 1.3.3 Smoke Spot number 2 as measured by the American Society for Testing Materials procedure D2156-65

PROPOSED
AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS
Issued by the
Department of Environmental Quality for
Portland General Electric Company - Beaver

Expiration Date 1 January 1977
Page 3 of _____
Appl. No.: 0237
File No.: 05-2520

- 1.4 The fuel oil heating system may be fired on other fuels upon demonstration to the Department that air emission and ambient standards can be complied with. The Department shall approve the demonstration program.
- (1.4) Fuels shall be stored in pressure vessels or reservoirs, or in tanks
- 1.5 equipped with a floating roof or approved vapor recovery systems or other approved vapor emission control devices.
- (1.5) Sound pressure levels emitted from the turbine shall not exceed the limitations
- 1.6 specified in Table I of this condition, when measured at any location 800 feet from the geometric center of the turbine engine installation. Sound pressure levels may be measured at a distance other than 800 feet and corrected, according to the inverse square law, to a reference distance of 800 feet.

Table I

Maximum Sound Pressure Levels at 800 Feet

<u>Frequency - Center of Octave Band, Hz</u>	<u>Sound Pressure Level, db</u>
31.5	73
63	67
125	60
250	52
500	58
1,000	44
2,000	42
4,000	38
8,000	35
Overall	74.5

2. Special Conditions

2.1 Fuel usage shall conform to the following:

- 2.1.1 Cleanest burning fuels practicably available shall be used at all times to minimize air contaminant emissions.
- 2.1.2 Any fuel oil used shall be the lowest sulfur content distillate or crude fuel oil available, but in no case shall distillate or crude fuel oil with a sulfur content greater than 0.3% or ash content greater than 0.035% by weight excluding additives approved by the Department be used.
- 2.1.3 The permittee shall cease operation of all combustion turbines when notified by the Department that the three (3) hour and/or twenty-four (24) hour ambient air standards for SO₂ at the Beaver or Oak Point sampling stations are projected to be exceeded by continual operation of the facility.

PROPOSED
AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS
Issued by the
Department of Environmental Quality for
Portland General Electric Company - Beaver

Expiration Date 1 January 1977
Page 4 of _____
Appl. No.: 0237
File No.: 05-2520

- 2.2 The permittee shall submit plans to the Department for review and approval of easily accessible facilities for obtaining samples of fuel oil after purification from the turbine fuel oil feed lines. These plans must be approved and facilities installed prior to operation of the combustion turbines.
- 2.3 The permittee shall submit plans to the Department for review and approval of easily accessible smoke spot sample ports for each combustion turbine. These plans must be approved and facilities installed prior to operation of the combustion turbines.
- (2.4 NOx emission controls acceptable to the Department shall be installed and placed in operation at the time the facility commences commercial operation.)
- (2.5) A study acceptable to the Department shall be conducted to define actual
2.4 plume rise and air quality impact under various meteorological conditions. This study shall be completed within six months of commencing commercial operation.
- (2.6) Special stacks for all turbine exhausts shall be installed as may be required
2.5 by the Department (based on the results of the plume impact study and/or ambient air monitoring program.) to the extent that the results of the plume rise impact study and/or ambient air monitoring program indicate that such stacks constitute the highest and best practicable treatment.
- (2.7) The facility shall be converted to a combined cycle operation at a time
2.6 acceptable to the Department if routine operation is projected to exceed 2,000 hours per year after 1975.
- (2.8) Operation shall not exceed the expected schedule of operation, "Attachment A",
2.7 unless prior written approval is obtained from the Department.
3. Compliance Schedule: The facility shall be in compliance with the performance standards and emission limits of this permit and rules, regulations and standards of the Department at start of commercial operation.
- 3.1 On March 1, 1974 or before, file with the Department a Notice of Construction along with complete engineering plans and specifications of an NOx emission control system.
- 3.2 On April 1, 1974 or before, obtain approval from the Department of engineering plans and specifications with any required amendments.
- 3.3 On May 1, 1974 or before the permittee shall have issued purchase orders for all components of the approved NOx control systems with copies thereof furnished to the Department.
- 3.4 On May 1, 1975 or before the permittee will have initiated on-site construction of the required control systems.
- 3.5 On August 1, 1975 or before, the NOx control systems shall be completely installed and in operation.

4. Monitoring and Reporting

4.1 The permittee shall effectively monitor the operation and maintenance of each combustion turbine. Unless otherwise specified in writing, information shall be collected and submitted for each turbine in accordance with procedures filed by the permittee and approved by the Department and shall include, but not necessarily be limited to, the following parameters and testing frequencies:

Time of operation,
Quantities and types of fuel used related to time of operation,
Electrical output related to time of operation,
Fuel additives used related to time of operation,
Smoke spot, daily,
Nitrogen Oxides (NOx): continuous when operating,
Particulates: continuous when operating, and
Fuel Analysis: total to include but not be limited to ash
content, sulfur content, bound nitrogen, etc.

4.2 The permittee shall document to the Department, the sulfur content of all fuel oils utilized by the type and in a manner that will permit accurate computation of SO₂ emissions resulting from turbine operations.

4.3 The permittee shall install and operate in Beaver, Oregon, and Oak Point, Washington, areas an ambient air monitoring program, that has been approved by the Department, to continuously determine ground-level concentrations of SO₂, and meteorological parameters. The program shall be in operation prior to commercial operation.



DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHWEST REGIONAL OFFICE
1010 N. E. Couch Street
Portland, Oregon 97232

Telephone: (503) 233-7176

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

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. K, November 26, 1973, EQC Meeting

PGE Beaver Turbine Generator Installation Application for an Air Contaminant Discharge Permit

1.0 Background

On August 9, 1973 PGE filed an application for an air contaminant discharge permit with the Department for a 433 megawatt turbine electric generating plant to be located at Port Westward, the former Beaver Military Reservation Site in Columbia County.

1.1 Site Description

The site of the proposed PGE Beaver facility is on the Oregon side of the Columbia River Valley about 45 miles down river from Portland and about 30 miles up river from Astoria (see Figure 1). The Beaver site, which is in a rural area of Columbia County, was at one time a military reservation covering some two square miles lying on relatively low level Columbia River flood plane.

The closest city of significance is Clatskanie, Oregon which is about five miles south of the plant site. The cities of Longview and Kelso, Washington, 12 miles east-southeast, are the most heavily populated areas in the vicinity of the plant site. There are some scattered residences and a school about two to three miles southeast of the plant site along the Quincy-Mayger Road in Columbia County, Oregon (see Figure 2). There are also some scattered residences about one and one-half miles northwest of the plant site on the State of Washington side of the Columbia River in a community called Oak Point. These residences are located on river valley bluffs rising up to 600 feet above the plant site. Similar bluffs are located on the Oregon side of the river two to three miles southeast of the plant site but are very sparsely populated. Such bluffs would be exposed to highest concentrations of air contaminants from the plant due to their closer proximity to plume centerline.

1.2 Site Meteorology

There is no historical meteorological data available for the Beaver site, however, data from Astoria, Longview, Kelso and Portland can be used to generally describe expected ventilation conditions in the plant site vicinity.

The ventilation at Beaver is expected to be slightly better than that at Portland. Annual mean wind speeds should average about 15% greater than at Portland. Relatively low morning mixing heights should be about 20% higher than at Portland while relatively high afternoon mixing heights should be 20% lower than at Portland. Wind rose information indicates transport of Beaver emissions generally would be towards the Oak Point bluff area on the State of Washington side of the Columbia River about 20% of the time, towards Clatskanie about 10% of the time and towards the Longview-Rainier and Portland areas about 5% of the time. This latter condition could be as much as 20% if WNW to NNW winds are channeled by the Columbia River Valley towards Longview and Portland. Wind roses for the Kelso airport and Washington Department of Ecology air sampling site near downtown Longview depict these conditions (see figures 3 and 4). It should be noted that prevailing winds at Longview appear to be oriented more easterly and westerly than winds at Kelso. This is most likely due to channeling of air flow by the Columbia River Valley and adjacent terrain. Actual wind directions at Beaver might be oriented slightly differently than at Longview or Kelso due to local topography.

1.3 PGE Facility Description

PGE is proposing to install six General Electric series 7001 combustion turbines at Beaver capable of a combined peak electric generating

output of 433 megawatts. The facility is anticipated to be fired with crude oil received by tanker, truck and rail. Oil would be stored in floating cover storage tanks having a total capacity of 900,000 barrels. The turbines would also be capable of operation on distillate oil and possibly other gaseous and liquid fuels. Each turbine would have an individual exhaust-sound reducing stack 33 feet high. The facility is projected to operate approximately 4,000 hours during the period August 1974 through July 1975 and less than 300 hours the following yearly period when electrical energy from the Trojan nuclear plant will be available. Operation of the facility is expected to steadily increase after this period until other planned large baseload electrical generating facilities in the region are brought on line. Beaver is planned to continue to serve as a "swing" plant to pick up load deficits in the years between activation of these major new power generating facilities.

Expected air contaminant emissions from the PGE Beaver facility on a daily and yearly basis are shown in Table 1. Oxides of nitrogen (NO_x) emissions are shown with and without use of water injection emission control. Sulfur dioxide (SO₂) emissions are based on 0.4% sulfur fuel, however PGE has indicated the potential of obtaining 0.2% sulfur crude oil.

PGE has indicated the possibility of adding waste heat boilers to the Beaver turbines by 1978. By recovering substantial portions of the turbine heat rejection to the atmosphere nearly 30% more electrical power could be produced with no increase in fuel input. Conversely, for a given power demand or output, fuel usage and correspondingly atmospheric emissions would be 30% less. The so-called combined cycle operation would cause plume rise from the turbines to decrease and air quality impact to increase unless taller stacks were utilized to offset this loss of plume buoyancy.

1.4 Present and Projected Vicinity Emissions

There are no large air contaminant emission sources (emission rates greater than 50 tons/yr.) of particulate, SO₂ or NO_x within five miles of the Beaver site. Largest quantities of air contaminant emissions in the vicinity emanate from the heavily industrialized area of Longview-Kelso, Washington, where 15 large emission sources and numerous smaller emission sources are located. One large emission source is located about 12 miles to the west of Beaver at Wauna, Oregon. Air contaminant emissions in the vicinity of Beaver and in the entire Portland Interstate Air Quality Control Region (PIAQCR) are summarized in Table 2, along with projected emissions in 1975 when significant emission reductions are projected to occur due to requirements of the Oregon and Washington Clean Air Implementation Plans.

A 42% reduction in particulate emissions had been expected in the four-county vicinity of Beaver by 1975, while SO_x and NO_x emissions were to change little. A 47% reduction in particulate emissions in the Portland Interstate Air Quality Control Region has been projected by 1975. SO_x and NO_x emissions in the PIAQCR were to increase by a factor of nearly four and two respectively, primarily due to operation of PP&L's coal fired steam electric generating facility at Centralia, about 40 miles northeast of Beaver.

1.5 Present and Projected Vicinity Air Quality

There is no historical air quality data in the immediate vicinity of the PGE Beaver site. The most extensive air monitoring data available is from the Washington Department of Ecology air monitoring trailer near downtown Longview. This station probably does not reflect the highest air contaminant levels in the Longview area. Highest levels are expected along the Columbia River near Longview where source density is highest but the population density is relatively low. The existing sampling site would be representative of air contaminant levels generally experienced by the highest population density in the vicinity. Air quality in the vicinity of Beaver and other nearby areas on the Oregon side of the Columbia River would be expected to be better than reflected at the Longview monitoring site. Air quality data for the DOE Longview site are shown in Table 3. Data from a suspended particulate monitoring site located at Rainier, Oregon are shown in Table 4.

These data, when compared to State and Federal ambient air standards shown in Table 5, indicate that all air contaminants except for suspended particulate are well below standards. Suspended particulate levels at Rainier are substantially less than at Longview and are probably more indicative of levels at Beaver. The 42% projected reduction in particulate emission in the Longview-Kelso, Rainier vicinity is expected to improve particulate air quality sufficiently to comply with State and Federal standards.

2.0 Evaluation

2.1 Compliance with Emission Standards

Projected emissions from G. E. 7001 turbines indicate the applicable Department emission standards can be met when crude or distillate fuel oil are burned and that EPA new source performance standards (in draft form) for stationary gas turbines can be met if NO_x control is utilized, fuel sulfur content is limited to 0.3% and efficient combustion is maintained to minimize visible emissions.

2.2 Application of Highest and Best Practicable Treatment and Control

The Department's requirements for new sources to apply the highest and best practicable treatment and control can be satisfied if NO_x control is provided, and visible, carbon monoxide emissions, and fuel sulfur content are restricted to requirements proposed by EPA new source performance standards for stationary gas turbines.

2.3 Compliance with Ambient Air Standards

Assessment of maximum air quality impact of the PGE Beaver facility on an annual, 24-hour, and 3-hour basis has been made utilizing latest EPA computerized simulation models and actual worst ventilation conditions extrapolated from Longview and Portland weather data. It should be recognized that these estimates are subject to error due to limitations of the model to take into account rough terrain effects on plume dispersion in the vicinity of Beaver, the probability of rising plumes being trapped by limited mixing heights and the most important factor in this case, the probability of the six individual turbine plumes to partially combine and increase calculated single turbine plume rise.

Enhancement of plume rise due to combining of plumes would have the greatest effect on the nearby areas, notably Oak Point, Washington. Air quality concentrations at greater distances downwind (as at Longview-Rainier) would experience little change whether plumes combined or not. For this reason, predicted air quality impact at nearby Oak Point has been calculated for a minimum to maximum expected range while concentrations at Longview-Rainier are based on most probable impact.

Table 6 presents projected air quality impact of the Beaver facility.

Projected air quality impact of the PGE Beaver facility indicates that ambient air standards should not be exceeded as a result of plant emissions. If little or no enhancement of plume rise occurs as the six

turbine plumes intermingle a potential does exist for SO₂ concentrations to exceed SO₂ odor and taste thresholds as well as ambient standards. With the six turbines in line with Oak Point it is highly likely that enhancement of plume rise will occur and resulting air quality will be near the lower limits projected. Precautions can be taken to prevent any potential problem through air monitoring, regulating plant operation, and if necessary increasing stack heights. A 100 meter stack, for instance, would result in projected maximum air quality impact at Oak Point near the present minimum expected impact levels which are essentially negligible.

2.4 Degradation of Air Quality

An evaluation of PGE Beaver has been made with respect to proposed EPA regulations pertaining to prevention of significant air quality deterioration. This evaluation is based on the assumption that impact at Oak Point will approach the lower concentrations projected either through natural plume rise enhancement, or addition of taller stacks. Three of the four plans proposed by EPA (July 16, 1973, Federal Register, Vol. 38, No. 135) contain numerical limits in defining significant deterioration.

Plan 1, the Air Quality Increment Plan, would allow a maximum increase in air quality as follows:

For Particulate Matter:	10 µg/m ³ (annual average)
	30 µg/m ³ (24 hour average)
For Sulfur Dioxide:	15 µg/m ³ (annual average)
	100 µg/m ³ (24 hour average)
	300 µg/m ³ (3 hour average)

PGE Beaver would not be expected to exceed the Plan 1 criteria.

Plan 2, the Emission Limitation Plan, would in essence allow a 20% increase in baseline particulate and SO₂ emissions in the air quality control region. Considering 1970 as a baseline (EPA regulations would set 1972 as baseline year, however the 1972 data is not available for the PIAQCR). PGE Beaver would increase the PIAQCR particulate emissions by 1% and SO₂ emissions by 12%. PGE Beaver would therefore not exceed limits that would be allowed under Plan 2, but would use a considerable portion of the SO₂ allotment.

Plan 3 of EPA would give states the authority to develop their own criteria to determine significant deterioration.

Plan 4, the Area Classification Plan, would allow deterioration limits identical to Plan 1 for Zone II areas. Zone I areas to be designed by the states would be allowed considerable less deterioration as follows:

Particulate:	5 $\mu\text{g}/\text{m}^3$ (annual average)
	15 $\mu\text{g}/\text{m}^3$ (24 hour average)
SO ₂ :	2 $\mu\text{g}/\text{m}^3$ (annual average)
	5 $\mu\text{g}/\text{m}^3$ (24 hour average)
	25 $\mu\text{g}/\text{m}^3$ (3 hour average)

Zone 1 would be intended for areas desired to be retained as ultra clean, such as National and State forests and parks and other recreational areas. PGE Beaver could not comply with Zone 1 criteria.

The EPA plans discussed above are so far only proposed and are now being considered for possible adoption. Some final action on a significant deterioration regulation is expected before the end of the year.

3.0 Conclusions

3.1 Emission Standards

3.1.1 PGE's Beaver turbine installation would comply with all Department's existing emission standards.

3.1.2 NO_x control must be utilized by the facility to comply with the Department's highest and best practicable treatment and control rule. G.E. turbines have adequately demonstrated ability to achieve an NO_x emission rate of .3# NO_x/10⁶ BTU with NO_x control. This represents a 70% reduction in NO_x emissions from Beaver without NO_x control.

3.1.3 Proposed EPA new source performance standards would be exceeded by the Beaver installation unless:

- a. NO_x control is provided to the degree stated in 3.1.2
- b. Sulfur content of fuel is restricted to .3%
- c. Combustion is maintained at peak efficiency to meet the proposed 10% opacity limit

3.2 Ambient Air Impact

3.2.1 The facility by itself would not cause violation of Department's existing ambient air standards.

3.2.2 The facility should not cause ambient air standards to be exceeded when its emissions combine with other vicinity emissions providing control plans now being implemented primarily in the Longview-Kelso area achieve expected results.

3.2.3 Extensive ambient air monitoring, plant operation restrictions, studies of plume rise and possible installation of taller stacks are necessary to prevent potential SO₂ air quality problems in the community of Oak Point, Washington.

3.2.4 If the facility is converted to a combined cycle operation, in 1978 as projected or earlier, (in order to increase fuel utilization efficiency) use of extremely low sulfur content fuel or, more feasibly, installation of a taller stack are expected to be necessary to insure compliance with SO₂ air quality standards on the nearby bluffs of the Columbia River Valley.

3.3 Degradation

Of the three specific degradation regulation plans proposed by EPA, the facility is expected to comply with the Emission Limitation Plan, the Air Quality Increment Plan and Zone II criteria of the Area Classification Plan. The facility would not comply with Zone I criteria of the Area Classification Plan. The facility would use 5% of the particulate and 60% of the SO₂ allotment of the Emission Limitation Plan in the PIAQCR.

4.0 Director's Recommendations

In view of the fact that the PGE Beaver turbine generating facility is capable of complying with all Department regulations, it is the Director's recommendation that the attached permit be issued which provides for:

4.1 Noise surpression equivalent to that required at the PGE Harborton installation.

4.2 Requirements to meet proposed EPA new source performance standards for gas turbines.

4.3 Use of the lowest sulfur fuel oil available.

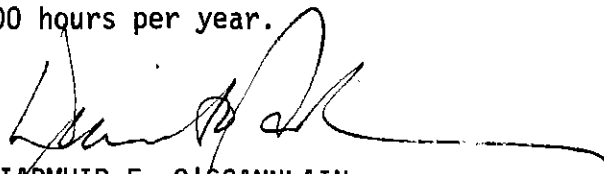
4.4 Establishment of an extensive emission and ambient air monitoring program.

4.5 Curtailment of operation if necessary to insure compliance with Air Quality Standards.

4.6 Conducting a special plume rise and air quality impact study during the first six months of commercial operation.

4.7 Installation of taller stacks if necessary to insure minimal air quality impact dependent upon results of study required under 4.5.

4.8 Conversion of the facility to a more efficient (higher power output to emission ratio) combined-cycle operation if projected operation of the facility after 1975 exceeds 2,000 hours per year.



DIARMUID F. O'SCANNLAIN

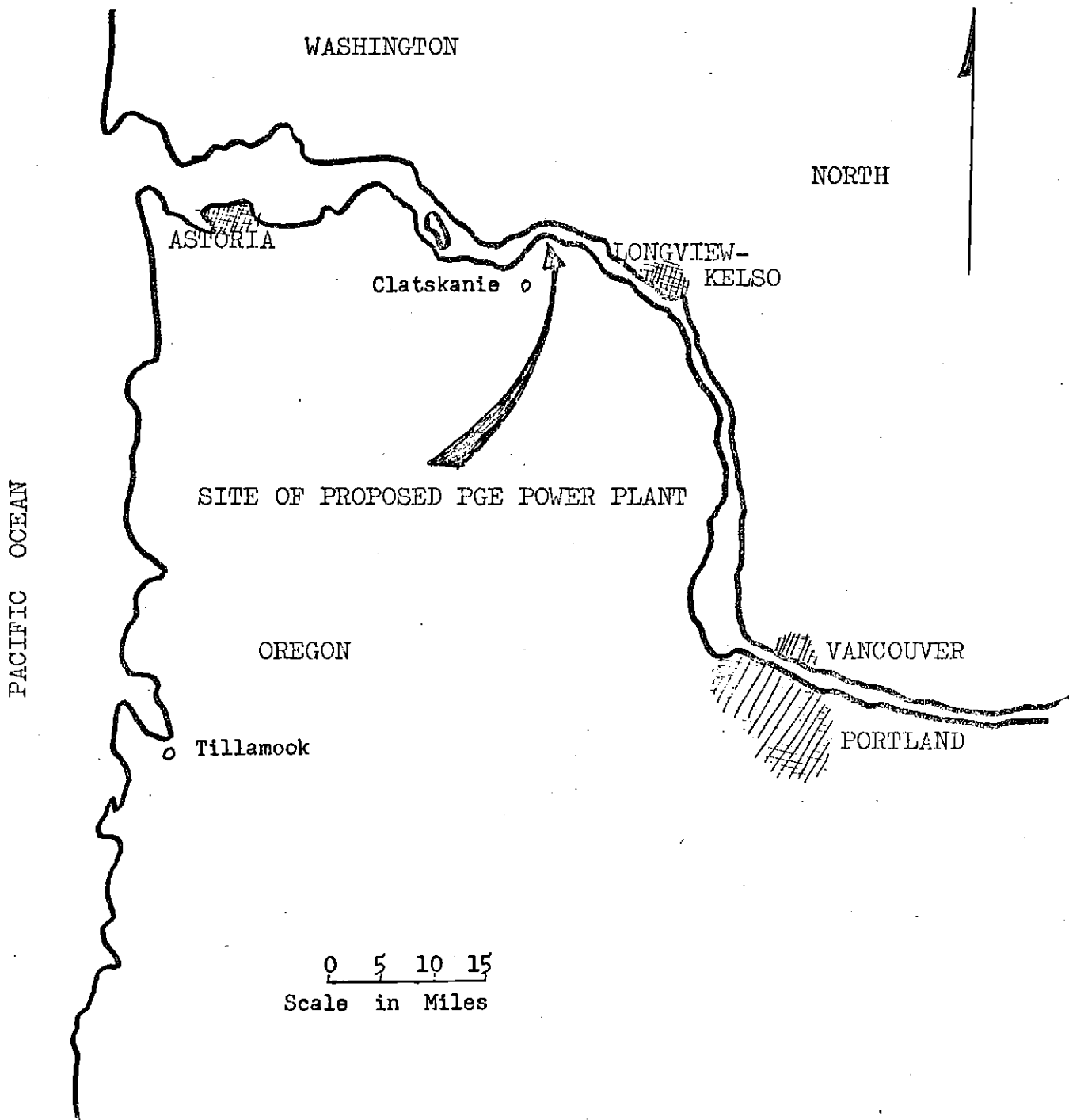


Figure 1
PGE Beaver Turbine Generator Site

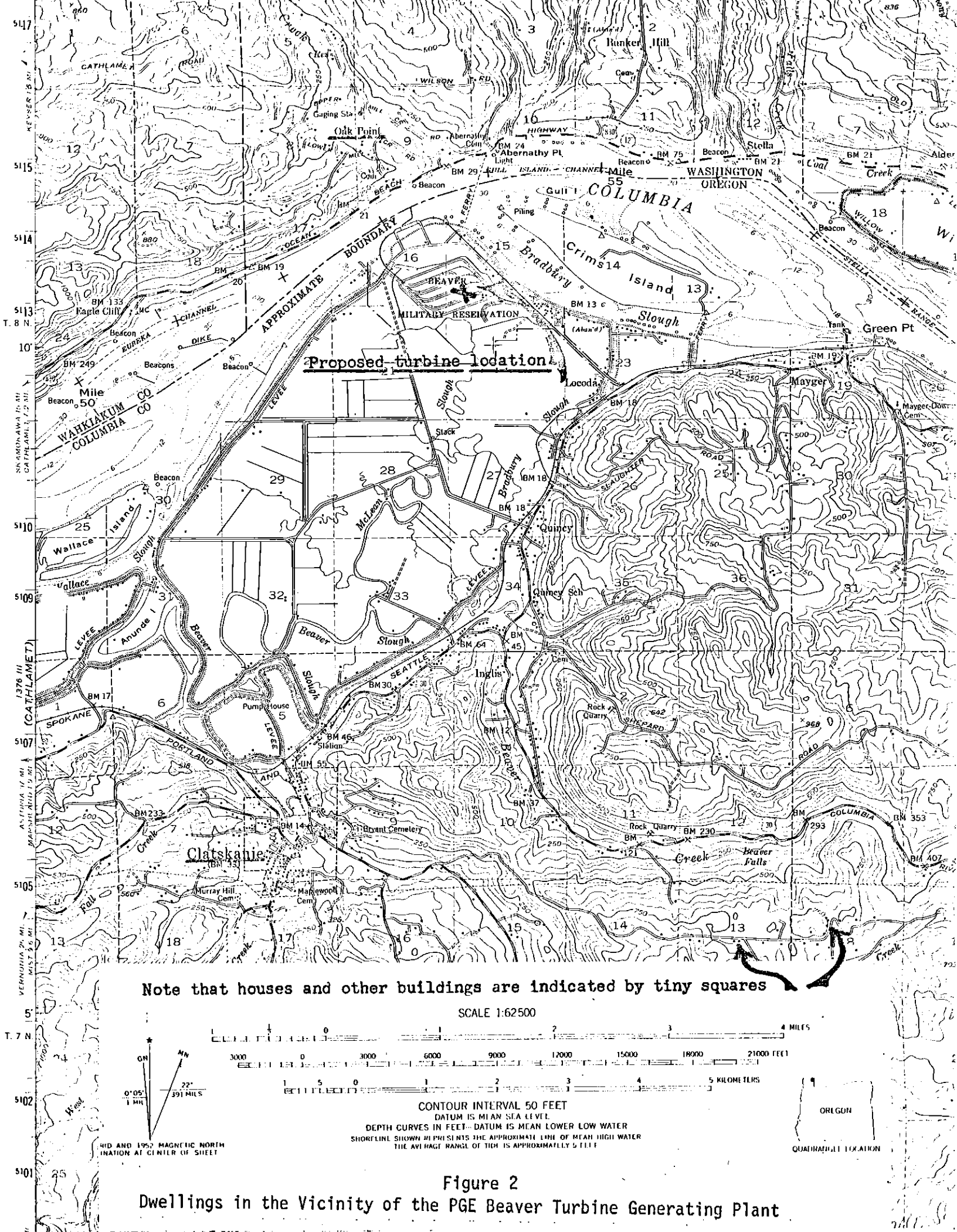
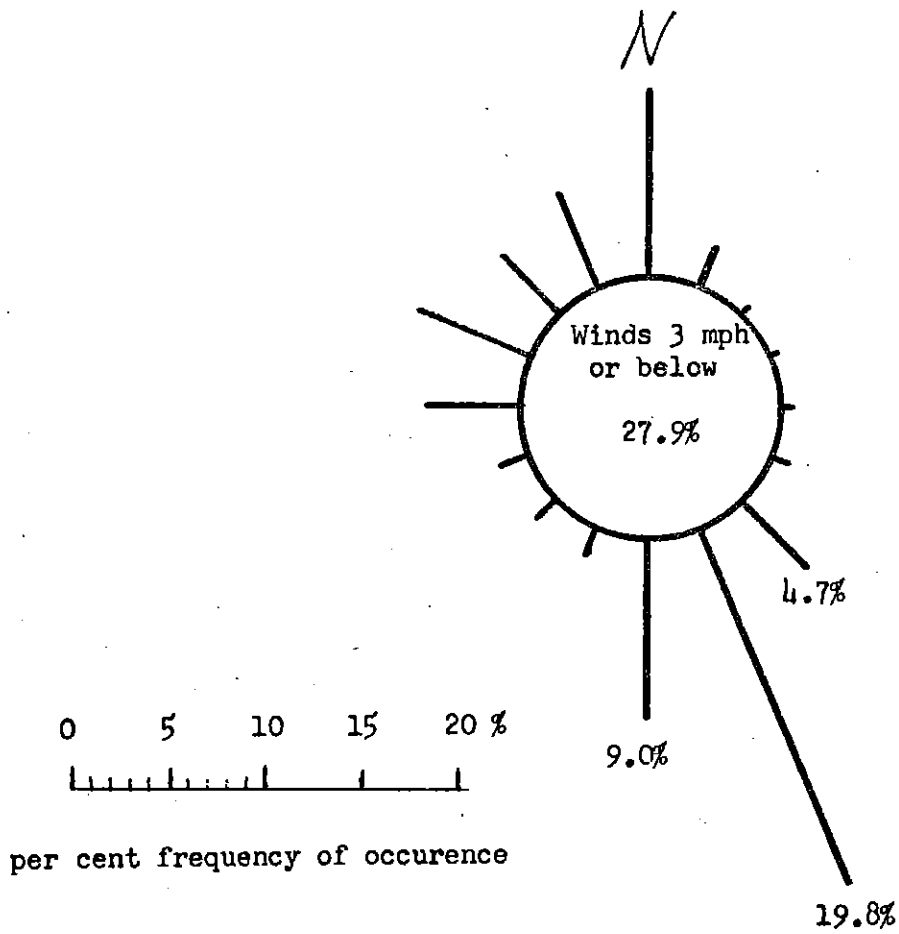


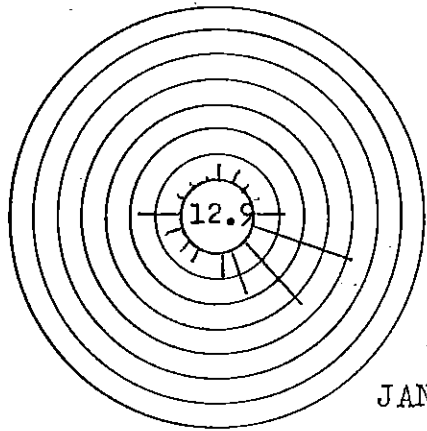
Figure 2
 Dwellings in the Vicinity of the PGE Beaver Turbine Generating Plant

Figure 3
ANNUAL WIND ROSE
Kelso, Washington

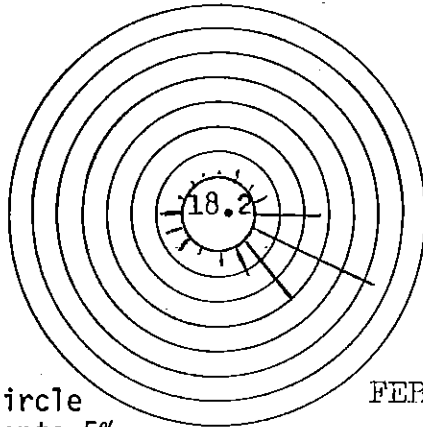


LONGVIEW trailer - Washington Department of Ecology

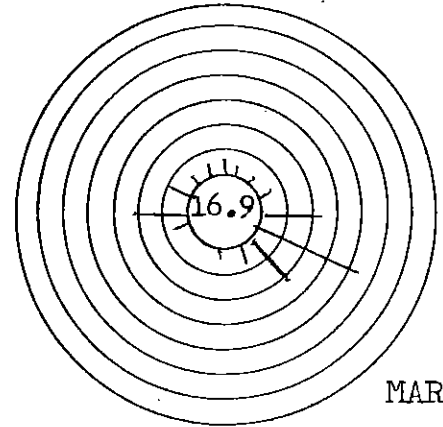
% Calm equal to or less than 2 miles per hour



JAN

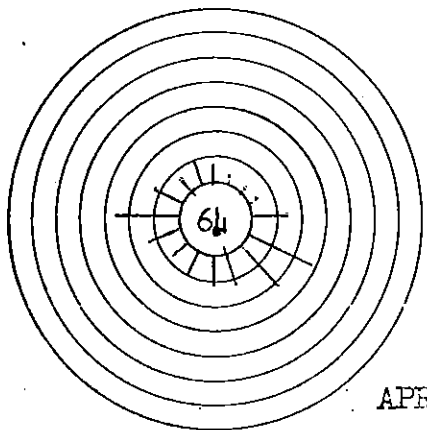


FEB

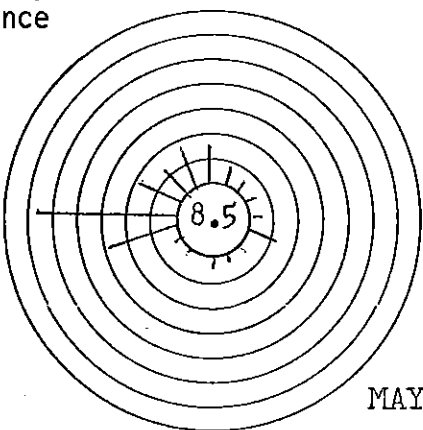


MAR

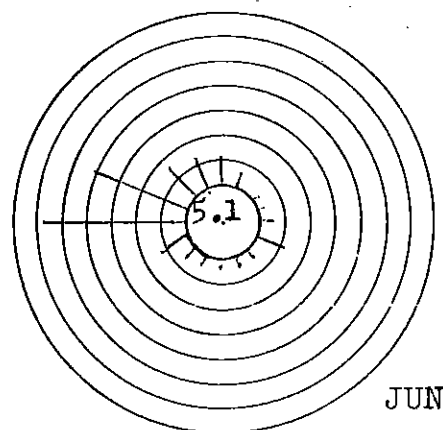
each circle represents 5% frequency of occurrence



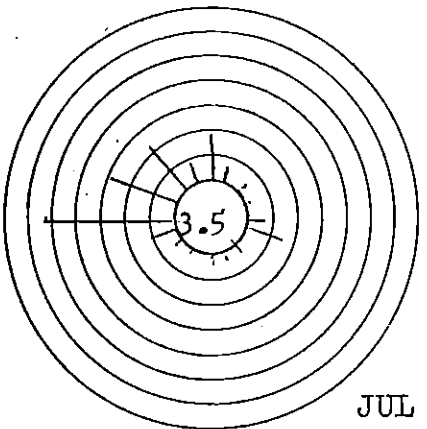
APR



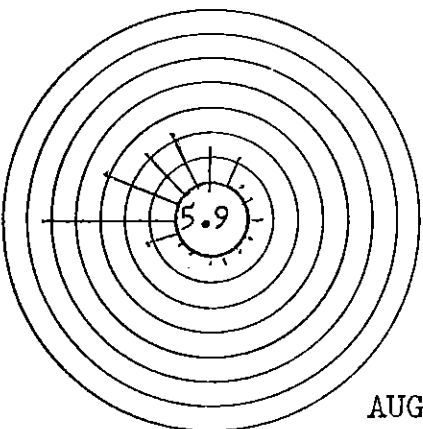
MAY



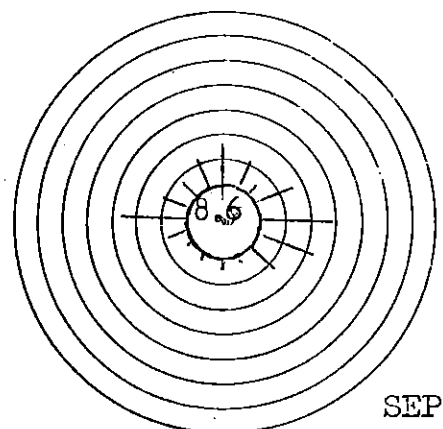
JUN



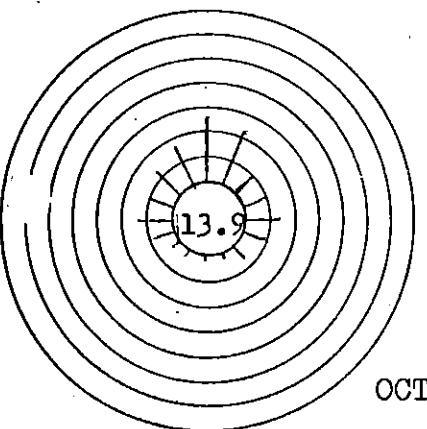
JUL



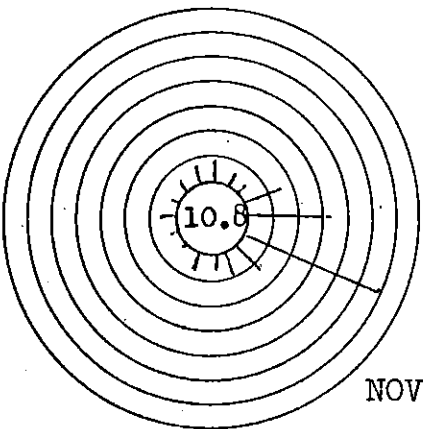
AUG



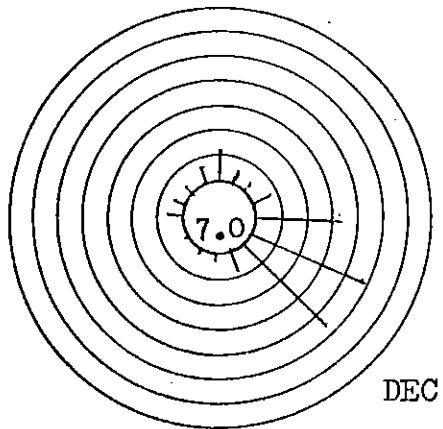
SEP



OCT



NOV



DEC

TABLE 1

PGE Beaver Plant Site Emissions

	<u>Pounds Per hour</u>	<u>Tons Per Year (4,000 hrs. of operation)</u>
Particulate	270	527
SOx ¹ (.4% sulfur fuel)	1400	3712
NOx w/o water injection	4700	9183
NOx with water injection	1400	2735

¹ For different sulfur content fuels, SOx emissions would be proportional to the difference in sulfur content from the stated 0.4%.

TABLE 2

Summary of Air Contaminant Emissions
In Vicinity of PGE Beaver
 (Not including PGE Beaver Facility)

tons/year

	<u>Washington¹</u>		<u>Oregon²</u>		<u>PIAOCR³</u>	
	<u>1970</u>	<u>1975</u>	<u>1970</u>	<u>1975</u>	<u>1970</u>	<u>1975</u>
Particulate	21,245	12,464	4,463	1,823	130,712	69,656
SOx	6,923	6,117	1,606	1,527	49,099	181,637
NOx	11,404	11,715	4,954	4,985	117,448	208,759

¹
 Cowlitz and Wahkiakum County

²
 Columbia and Clatsop County

³
 Portland Interstate Air Quality Control Region (Clark, Cowlitz, Wahkiakum, Lewis and Skamania Counties, Washington; Columbia, Clackamas, Washington, Multnomah, Yamhill, Marion, Polk, Linn, Benton and Lane Counties, Oregon)

TABLE 3

Air Quality Data - Longview, Washington D.O.E. Site
 (All Values in Micrograms/m³)

<u>Year</u>	<u>Suspended Particulates</u>	
	<u>Maximum 24 hr. Average</u>	<u>Annual Geometric Mean</u>
1971	165	64
1972	246	67

<u>Year</u>	<u>Sulfur Dioxide</u>		
	<u>Maximum 3 hr. Average</u>	<u>Maximum 24 hr. Average</u>	<u>Annual Arithmetic Mean</u>
1972	332	157	28.3

<u>Year</u>	<u>Nitrogen Dioxide</u>
	<u>Approximate Annual Average</u>
1972	25

<u>Year</u>	<u>Total Oxidants</u>	
	<u>Maximum 1 hr. Average</u>	
1972	118	(3 months data, Oct.-Dec.)
1973	98	(5 months data, Mar.-Jul.)

TABLE 4

Air Quality Data
Rainier, Oregon
 ($\mu\text{g}/\text{m}^3$)

Suspended Particulate

<u>Year</u>	<u>Maximum 24 hr. Average</u>	<u>Annual Geometric Mean</u>
1970	134	28
1971	117	28

TABLE 5

Air Quality Standards
State of Oregon and Federal

	<u>Sulfur Dioxide</u>		<u>Annual Arithmetic Mean</u>
	<u>Maximum 3 Hr. Average</u>	<u>Maximum 24 hr. Average</u>	
Oregon	1300 $\mu\text{g}/\text{m}^3$	260 $\mu\text{g}/\text{m}^3$	60 $\mu\text{g}/\text{m}^3$
Federal	1300 $\mu\text{g}/\text{m}^3$ (secondary)	365 $\mu\text{g}/\text{m}^3$	80 $\mu\text{g}/\text{m}^3$

	<u>Suspended Particulates</u>		<u>Annual Geometric Mean</u>
	<u>24 Hour Maximum</u>	<u>24 hr. conc. not more than 15%/month</u>	
Oregon	150 $\mu\text{g}/\text{m}^3$	100 $\mu\text{g}/\text{m}^3$	60 $\mu\text{g}/\text{m}^3$
Federal	260 $\mu\text{g}/\text{m}^3$	none	75 $\mu\text{g}/\text{m}^3$

Nitrogen Dioxide

	<u>Annual Arithmetic Mean</u>
Oregon	100 $\mu\text{g}/\text{m}^3$
Federal	100 $\mu\text{g}/\text{m}^3$

TABLE 6

PGE Beaver Turbine Generating Plant
Air Quality Impact

Maximum Annual Average ($\mu\text{g}/\text{m}^3$)

<u>Pollutant</u>	<u>Air Standard</u>	<u>PGE Beaver Impact</u>	<u>Critical Location</u>
Particulate	60	0.5	Longview-Rainier
SO ₂ (.3% s fuel)	60	2.6	Longview-Rainier
NO _x as NO ₂			
with water injection	100	2.5	Longview-Rainier
without water injection	100	8.6	Longview-Rainier

Maximum 24 hr. Average

Particulate	150	0-84* 2	Oak Point, Washington Longview-Rainier
SO ₂ (.3% s fuel)	260	0-440* 7	Oak Point, Washington Longview-Rainier

Maximum 3 hr. Average

SO ₂ (.3% s fuel)	1300	0-3100*	Oak Point, Washington
------------------------------	------	---------	-----------------------

*Range based on no enhancement to maximum enhancement of plume rise due to combining of turbine plumes. Some enhancement would be expected when turbine plumes are transported towards Oak Point since all six turbine exhausts are in line with Oak Point. Most probable impact would therefore be closer to the lowest concentrations projected.

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: PORTLAND GENERAL ELECTRIC CO. Power Resources 621 S. W. Alder Portland, OR 97205</p> <p>PLANT SITE: Beaver Turbine Generating Plant in Columbia County near Clatskanie, Oregon</p> <p style="text-align: center; margin-top: 20px;">ISSUED BY DEPARTMENT OF ENVIRONMENTAL QUALITY</p> <p style="margin-top: 20px;">_____ Diarmuid F. O'Scannlain _____ Director Date</p>	<p>REFERENCE INFORMATION</p> <p>Application No. <u>0237</u></p> <p>Date Received <u>10 August 1973</u></p> <p>Other Air Contaminant Sources at this Site:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 65%; text-align: center;">Source</th> <th style="width: 15%; text-align: center;">SIC</th> <th style="width: 15%; text-align: center;">Permit No.</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">(1)</td> <td>_____</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">(2)</td> <td>_____</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
---------------------------------------	---

Permitted Activities

Until such time as this permit expires or is modified or revoked, PORTLAND GENERAL ELECTRIC CO. is herewith permitted to discharge treated exhaust gases containing air contaminants from its six (6) General Electric Company (Model Series 7001-B, combination turbines) fuel burning devices located at the Beaver Turbine Generating Plant, including emissions from those processes and activities directly related or associated thereto, provided operation of the facility and discharges therefrom are in strict conformance with the requirements, limitations and conditions of this permit.

Compliance with the specific requirements, limitations and conditions contained herein shall not relieve the permittee from complying with all rules and standards of the Department and the laws administered by the Department.

15 OCT 1973

PROPOSED
AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS
Issued by the
Department of Environmental Quality for
Portland General Electric Company - Beaver

Expiration Date 1 January 1977
Page 2 of _____
Appl. No.: 0237
File No.: 05-2520

I. Performance Standards and Emission Limits

- 1.1 The permittee shall at all times maintain and operate all processes and all control equipment at full efficiency and effectiveness such that the emission of air contaminants and noise are kept at the lowest practicable levels.
- 1.2 Emissions of air contaminants shall not exceed any of the following:
 - 1.2.1 An opacity (as defined by OAR, Chapter 340, Section 21-005(4)) equal to or greater than 10 percent (10%) for a period or periods aggregating more than three (3) minutes in any one (1) hour from any single turbine plume or greater than 20 percent (20%) for combined turbine plumes.
 - 1.2.2 The maximum allowable emission rates of particulate matter from any single combustion turbine shall be a function of heat input as determined from Figure 1 of this permit for new sources,
 - 1.2.3 50 pounds per hour of particulate matter for any single turbine,
 - 1.2.4 280 pounds per hour of Nitrogen Oxide (NO_x) for any single turbine, after the NO_x control system becomes operable but in no case later than after August 1, 1975,
 - 1.2.5 282 pounds per hour of Sulfur Dioxide (SO₂) for any single turbine,
 - 1.2.6 416 pounds per hour of Carbon Monoxide (CO) for any single turbine,
 - 1.2.7 Smoke Spot number 2 as measured by the American Society for Testing Materials procedure D2156-65 for any single turbine when fired with distillate fuel oil and smoke spot number 4 when fired with crude fuel oil.
- 1.3 Emissions from the fuel oil heating system fired on number 2 distillate fuel shall not exceed the following:
 - 1.3.1 An opacity equal to or greater than ten percent (10%) for a period or periods aggregating more than three (3) minutes in any one (1) hour,
 - 1.3.2 The maximum allowable emission rates of particulate matter shall be a function of heat input as determined from Figure 1 of this permit for new sources,
 - 1.3.3 Smoke Spot number 2 as measured by the American Society for Testing Materials procedure D2156-65

- 1.4 The fuel oil heating system may be fired on other fuels upon demonstration to the Department that air emission and ambient standards can be complied with. The Department shall approve the demonstration program.
- (1.4) Fuels shall be stored in pressure vessels or reservoirs, or in tanks
- 1.5 equipped with a floating roof or approved vapor recovery systems or other approved vapor emission control devices.
- (1.5) Sound pressure levels emitted from the turbine shall not exceed the limitations
- 1.6 specified in Table I of this condition, when measured at any location 800 feet from the geometric center of the turbine engine installation. Sound pressure levels may be measured at a distance other than 800 feet and corrected, according to the inverse square law, to a reference distance of 800 feet.

Table I

Maximum Sound Pressure Levels at 800 Feet

<u>Frequency - Center of Octave Band, Hz</u>	<u>Sound Pressure Level, db</u>
31.5	73
63	67
125	60
250	52
500	58
1,000	44
2,000	42
4,000	38
8,000	35
Overall	74.5

2. Special Conditions

2.1 Fuel usage shall conform to the following:

- 2.1.1 Cleanest burning fuels practicably available shall be used at all times to minimize air contaminant emissions.
- 2.1.2 Any fuel oil used shall be the lowest sulfur content distillate or crude fuel oil available, but in no case shall distillate or crude fuel oil with a sulfur content greater than 0.3% or ash content greater than 0.035% by weight excluding additives approved by the Department be used.
- 2.1.3 The permittee shall cease operation of all combustion turbines when notified by the Department that the three (3) hour and/or twenty-four (24) hour ambient air standards for SO₂ at the Beaver or Oak Point sampling stations are projected to be exceeded by continual operation of the facility.

PROPOSED
AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS
Issued by the
Department of Environmental Quality for
Portland General Electric Company - Beaver

Expiration Date 1 January 1977
Page 4 of _____
Appl. No.: 0237
File No.: 05-2520

- 2.2 The permittee shall submit plans to the Department for review and approval of easily accessible facilities for obtaining samples of fuel oil after purification from the turbine fuel oil feed lines. These plans must be approved and facilities installed prior to operation of the combustion turbines.
- 2.3 The permittee shall submit plans to the Department for review and approval of easily accessible smoke spot sample ports for each combustion turbine. These plans must be approved and facilities installed prior to operation of the combustion turbines.
- (2.4 NOx emission controls acceptable to the Department shall be installed and placed in operation at the time the facility commences commercial operation.)
- (2.5) A study acceptable to the Department shall be conducted to define actual
2.4 plume rise and air quality impact under various meteorological conditions. This study shall be completed within six months of commencing commercial operation.
- (2.6) Special stacks for all turbine exhausts shall be installed as may be required
2.5 by the Department (based on the results of the plume impact study and/or ambient air monitoring program.) to the extent that the results of the plume rise impact study and/or ambient air monitoring program indicate that such stacks constitute the highest and best practicable treatment.
- (2.7) The facility shall be converted to a combined cycle operation at a time
2.6 acceptable to the Department if routine operation is projected to exceed 2,000 hours per year after 1975.
- (2.8) Operation shall not exceed the expected schedule of operation, "Attachment A",
2.7 unless prior written approval is obtained from the Department.
3. Compliance Schedule: The facility shall be in compliance with the performance standards and emission limits of this permit and rules, regulations and standards of the Department at start of commercial operation.
- 3.1 On March 1, 1974 or before, file with the Department a Notice of Construction along with complete engineering plans and specifications of an NOx emission control system.
- 3.2 On April 1, 1974 or before, obtain approval from the Department of engineering plans and specifications with any required amendments.
- 3.3 On May 1, 1974 or before the permittee shall have issued purchase orders for all components of the approved NOx control systems with copies thereof furnished to the Department.
- 3.4 On May 1, 1975 or before the permittee will have initiated on-site construction of the required control systems.
- 3.5 On August 1, 1975 or before, the NOx control systems shall be completely installed and in operation.

PROPOSED
AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS
Issued by the
Department of Environmental Quality for
Portland General Electric Company - Beaver

Expiration Date 1 January 1977
Page 5 of _____
Appl. No.: 0237
File No.: 05-2520

4. Monitoring and Reporting

- 4.1 The permittee shall effectively monitor the operation and maintenance of each combustion turbine. Unless otherwise specified in writing, information shall be collected and submitted for each turbine in accordance with procedures filed by the permittee and approved by the Department and shall include, but not necessarily be limited to, the following parameters and testing frequencies:

Time of operation,
Quantities and types of fuel used related to time of operation,
Electrical output related to time of operation,
Fuel additives used related to time of operation,
Smoke spot, daily,
Nitrogen Oxides (NO_x): continuous when operating,
Particulates: continuous when operating, and
Fuel Analysis: total to include but not be limited to ash
content, sulfur content, bound nitrogen, etc.

- 4.2 The permittee shall document to the Department, the sulfur content of all fuel oils utilized by the type and in a manner that will permit accurate computation of SO₂ emissions resulting from turbine operations.
- 4.3 The permittee shall install and operate in Beaver, Oregon, and Oak Point, Washington, areas an ambient air monitoring program, that has been approved by the Department, to continuously determine ground-level concentrations of SO₂, and meteorological parameters. The program shall be in operation prior to commercial operation.

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Issued by the

Department of Environmental Quality for
Portland General Electric Company - Beaver

Page 6 of 8
Appl. No.: 0237
File No.: 05-2520

5. General Conditions (continued)

- 5.6 The permittee is prohibited from altering, modifying or expanding the subject facilities so as to affect emissions to the atmosphere without prior notice to and approval by the Department.
- 5.7 The permittee shall be required to make application for a new permit prior to substantial modification; alteration, addition or enlargement of the subject facilities which would have a significant impact on air contaminant emission increases or reductions at the plant site.
- 5.8 This permit is subject to revocation for cause, as provided by law, including:
- 5.8.1 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;
 - 5.8.2 Violation of any of the requirements, limitations or conditions contained herein; or
 - 5.8.3 Any material change in quantity or character of air contaminants emitted to the atmosphere.
- 5.9 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>
\$150.00	January 1, 1975
\$150.00	January 1, 1976

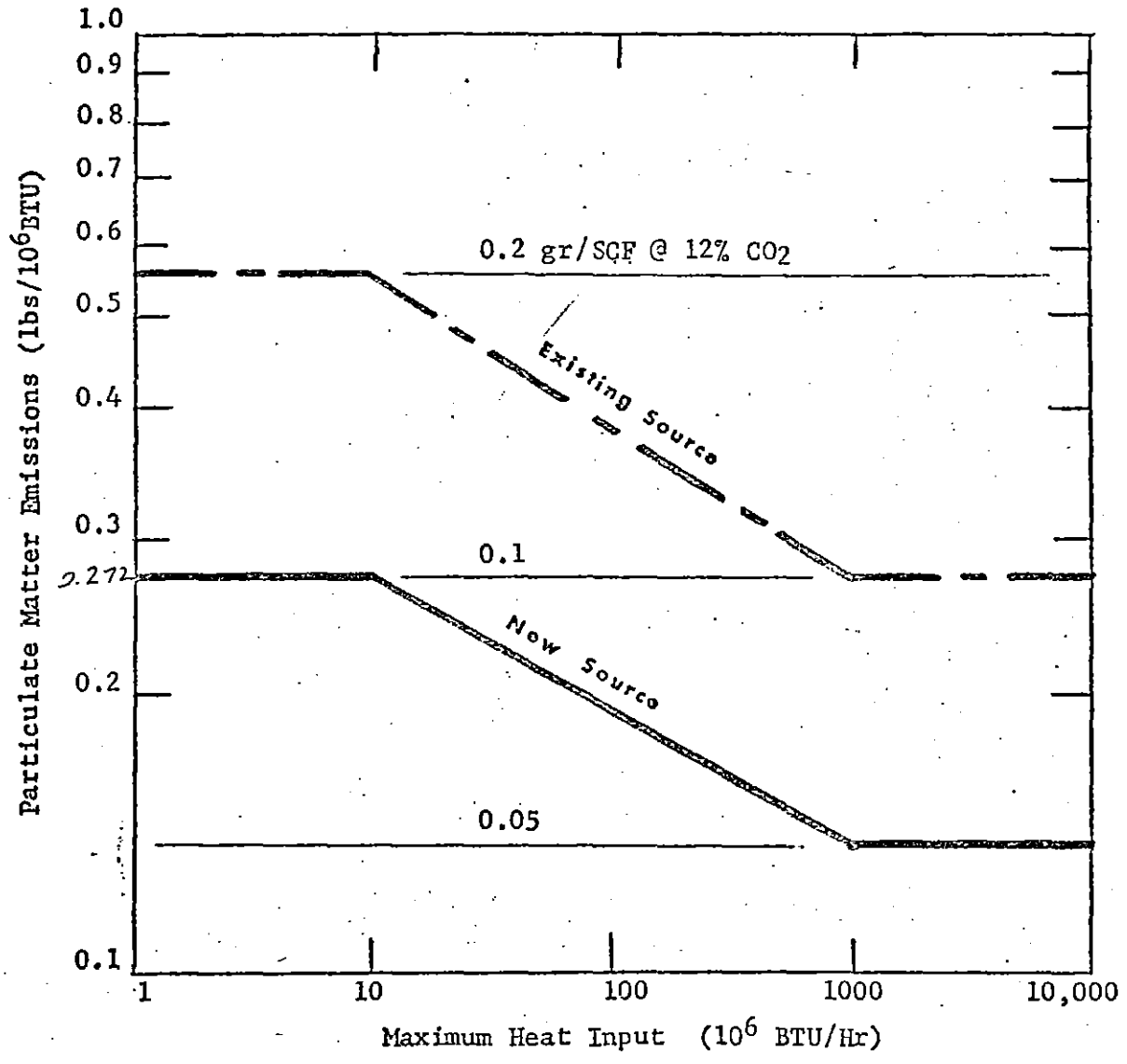
ATTACHMENT A

Portland General Electric Company
Expected Schedule Of
Operation At Beaver

7-24-73

	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>ANNUAL</u>
Energy Available (MW-Mo) 6 units @ 56.6 MW 85% LF	289	285	280	278	270	265	258	262	265	275	284	289	
Base Load 100% LF	340	335	329	327	317	311	303	308	311	323	334	340	
Expected Usage													
1974 MW-Mo	-	-	-	-	-	-	-	90	265	275	283	289	1202
Hours	-	-	-	-	-	-	-	217	614	633	610	632	2706
Fuel Usage (bbl x 10 ³)	-	-	-	-	-	-	-	137	392	419	417	440	1805
1975 MW-Mo	289	150	100	10	3	3	3	3	3	13	9	20	606
Hours	632	301	226	22	7	7	7	7	7	30	19	44	1309
Fuel Usage (bbl x 10 ³)	440	207	152	15	4	4	4	4	4	20	13	31	898
1976 MW-Mo	47	14	14	10	3	3	3	3	13	18	207	289	624
Hours	103	28	32	22	7	7	7	7	30	41	446	632	1362
Fuel Usage (bbl x 10 ³)	72	19	22	15	4	4	4	4	19	27	305	440	935

FIGURE I



PARTICULATE MATTER EMISSION STANDARDS FOR FUEL BURNING EQUIPMENT



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

PAUL E. BRAGDON
Portland

MORRIS K. CROTHERS
Salem

ARNOLD M. COGAN
Portland

DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item No. 4, November 26, 1973, EQC Meeting

Sewage Works Construction Grants - Consideration of Project List

Background

On October 22, 1973, the Environmental Quality Commission approved the Department's proposed program for funding sewage works projects including revised needs priority ranking criteria and a needs priority list. At that time, it was indicated that the next step was to develop from the needs priority list the so-called "project list" or funding list. The project list expands the priority list to include project scheduling information.

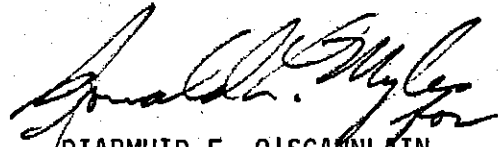
The project list has been developed and is attached as Exhibit I. For reference, the report and recommendations as approved at the October 22, 1973 meeting are attached as Exhibit II.

Environmental Protection Agency regulations require public participation in the process of adoption of the project list. Notice has been given to all cities on the list and to others deemed interested. All have been advised that they will have an opportunity to be heard if they so desire.

It should be noted that no further Federal grants can be awarded until the project list is approved by this Commission and transmitted to EPA for approval.

Director's Recommendation

It is recommended that the project list contained in Exhibit I be approved.



DIARMUID F. O'SCANNLAIN

HLS:ak

November 13, 1973

Encl.

Exhibit I
Exhibit II

Format #5 CONSTRUCTION GRANTS (Ref. 40 CFR Section 35.915)

1. PROJECT LIST

PRIORITY RANKING	MUNICIPALITY	TYPE OF PROJECT AND SCOPE (Extended descriptions may be continued on additional pages)	EST. TOTAL COST	PRELIMINARY PLANS		CONSTRUCTION DRAWINGS AND SPECIFICATIONS		BUILDING AND ERECTION		ESTIMATED EPA ASSISTANCE REQUIRED TO COMPLETE PROJECT (\$)	SIX MONTH PERIOD (July-Dec or Jan-June) WHEN GRANT WILL BE REQUIRED
				EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE		
1	Portland	Gertz-Schmeer Int.	2,100,000	11/71	5/71	6/72	7/73	11/73	8/74	1,575,000	July-Dec. 73
2	Florence	Int.	350,000	3/73	7/73	8/73	11/73	1/74	6/74	262,000	Jan-June 74
3	Foster-Midway	Int.	600,000	8/73	11/73	3/74	12/74	3/75	3/76	450,000	Jan-June 75
4	Corvallis	STP Exp.	12,000,000	7/73	11/73	2/74	7/74	9/74	9/76	9,000,000	July-Dec. 74
5	Salem	STP Exp.	13,500,000	12/70	10/73	7/73	1/74	5/74	1/76	10,125,000	July-Dec. 74
6	Maupin	STP Imp.	235,000	5/71	11/73	12/73	3/74	5/74	11/74	176,000	Jan-June 74
7	Redmond	STP & Int.	2,000,000	1/70	6/74	10/75	6/76	9/76	9/78	1,500,000	July-Dec. 76
8	Winston-Dillard	STP & Int.	800,000	11/73	8/74	9/74	1/75	3/75	6/76	600,000	Jan-June 75
9	Riddle	STP Exp.	480,000	5/72	3/74	6/73	5/74	7/74	9/75	360,000	July-Dec. 74
10	Glendale	STP Exp.	800,000	10/73	4/74	5/74	9/74	12/74	12/75	600,000	Jan-June 75

Format #5 CONSTRUCTION GRANTS (Ref. 40 CFR Section 35.915)

PROJECT LIST

PRIORITY RANKING	MUNICIPALITY	TYPE OF PROJECT AND SCOPE (Extended descriptions may be continued on additional pages)	EST. TOTAL COST	PRELIMINARY PLANS		CONSTRUCTION DRAWINGS AND SPECIFICATIONS		BUILDING AND ERECTION		ESTIMATED EPA ASSISTANCE REQUIRED TO COMPLETE PROJECT (\$)	SIX MONTH PERIOD (July-Dec or Jan-June) WHEN GRANT WILL BE REQUIRED
				EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE		
11	Glide-Ideyld	STP & Int.	1,200,000	5/70	3/74	4/74	12/74	3/75	6/76	900,000	Jan-June 75
12	Redwood S.D.	STP & Int.	900,000	5/70	11/73	12/73	4/74	5/74	5/75	675,000	Jan-June 74
13	Butte Falls	STP & Int.	100,000	2/74	4/74	6/74	12/74	3/75	3/76	75,000	Jan-June 75
14	Gold Hill	STP Exp.	375,000	8/73	10/73	12/73	3/74	5/74	10/74	281,000	Jan-June 74
15	Portland	Col. Blvd. outfall	1,100,000	6/72	7/73	9/73	11/73	1/74	12/74	825,000	Jan-June 74
16	Rufus	STP & Int.	460,000	4/72	5/72	9/73	12/73	2/74	9/74	345,000	Jan-June 74
17	Clatskanie	STP Imp.	300,000	6/73	4/74	2/74	6/74	8/74	8/75	225,000	July-Dec. 74
18	Wauna-Westport	STP & Int.	1,000,000	10/72	4/74	5/74	9/74	10/74	10/75	750,000	July-Dec. 74
19	John Day-Canyon City	STP & Int.	1,600,000	6/70	8/73	2/74	9/74	11/74	11/75	1,200,000	July-Dec. 74
20	Mt. Vernon	STP & Int.	300,000	6/70	11/73	2/74	9/74	11/74	11/75	225,000	July-Dec. 74

Format #5 CONSTRUCTION GRANTS (Ref. 40 CFR Section 35.915)

1. PROJECT LIST

PRIORITY RANKING	MUNICIPALITY	TYPE OF PROJECT AND SCOPE (Extended descriptions may be continued on additional pages)	EST. TOTAL COST	PRELIMINARY PLANS		CONSTRUCTION DRAWINGS AND SPECIFICATIONS		BUILDING AND ERECTION		ESTIMATED EPA ASSISTANCE REQUIRED TO COMPLETE PROJECT (\$)	SIX MONTH PERIOD (July-Dec or Jan-June) WHEN GRANT WILL BE REQUIRED
				EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE		
21	Union	STP	200,000	5/70	3/74	4/74	11/74	3/75	3/76	150,000	Jan-June 75
22	Charleston S.D.	Int.	1,100,000	5/64	7/73	9/73	4/74	6/74	6/75	825,000	Jan-June 74
23	Fruitdale-Harbeck	Int.	110,000	12/68	2/74	4/74	7/74	9/74	3/75	82,000	July-Dec. 74
24	Portland	S.E. Relieving Int.	750,000	1/70	3/74	3/73	5/74	7/74	4/75	562,000	July-Dec. 74
25	Port of Astoria	Int.	400,000	11/73	2/74	2/74	4/74	7/74	4/75	300,000	July-Dec. 74
26	The Dalles	E. Side Int.	390,000	5/72	12/72	12/72	11/73	2/74	9/74	292,000	Jan-June 74
27	Netarts-Oceanside	STP & Int.	600,000	5/70	3/74	5/74	12/74	3/75	3/76	450,000	Jan-June 75
28	Pacific City	STP & Int.	230,000	6/71	2/74	4/74	10/74	3/75	3/75	172,000	Jan-June 75
29	Huntington	Chlorination	22,000	5/71	7/71	3/72	4/72	1/74	3/74	16,000	July-Dec. 73
30	Mapleton	STP & Int.	430,000	2/74	6/74	8/74	2/75	5/75	5/76	322,000	July-Dec. 75

Format #5 CONSTRUCTION GRANTS (Ref. 40 CFR Section 35.915)

1. PROJECT LIST

PRIOR- ITY RANKING	MUNICIPALITY	TYPE OF PROJECT AND SCOPE (Extended de- scriptions may be continued on ad- ditional pages)	EST. TOTAL COST	PRELIMINARY PLANS		CONSTRUCTION DRAWINGS AND SPECIFICAT- IONS		BUILDING AND ERECTION		ESTIMATED EPA ASSISTANCE RE- QUIRED TO COM- plete PROJECT (\$)	SIX MONTH PERIOD (July-Dec or Jan-June) WHEN GRANT WILL BE REQUIRED
				EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE		
31	Lafayette	STP Exp.	100,000	2/73	4/74	8/73	5/74	6/74	3/75	75,000	July-Dec. 74
32	Harbor S.D.	Int.	200,000	12/71	12/73	2/74	9/74	12/74	12/75	150,000	July-Dec. 74
33	Mill City	STP & Int.	1,000,000	2/73	11/73	12/73	12/74	3/75	3/76	750,000	Jan-June 75
34	Coburg	STP & Int.	275,000	1/74	3/74	5/74	11/74	3/75	3/75	206,000	Jan-June 75
35	Toledo	Int. to H.S.	80,000	6/72	12/73	1/74	4/74	5/74	9/74	60,000	Jan-June 74
36	Aurora	Int.	200,000	5/74	11/74	2/75	12/75	3/76	12/76	150,000	Jan-June 76
37	Donald	Int.	180,000	5/74	11/74	2/75	12/75	3/76	12/76	135,000	Jan-June 76
38	Fall City	STP & Int.	235,000	4/74	10/74	1/75	7/75	10/75	10/76	176,000	July-Dec. 75
39	Sutherlin	STP Exp.	1,300,000	5/73	2/74	3/74	6/74	8/74	8/75	975,000	July-Dec. 74
40	Monmouth- Independence	STP & Int.	400,000	11/73	6/74	1/75	7/75	8/75	8/76	300,000	July-Dec. 75

Format #5 CONSTRUCTION GRANTS (Ref. 40 CFR Section 35.915)

1. PROJECT LIST

PRIORITY RANKING	MUNICIPALITY	TYPE OF PROJECT AND SCOPE (Extended descriptions may be continued on additional pages)	EST. TOTAL COST	PRELIMINARY PLANS		CONSTRUCTION DRAWINGS AND SPECIFICATIONS		BUILDING AND ERECTION		ESTIMATED EPA ASSISTANCE REQUIRED TO COMPLETE PROJECT (\$)	SIX MONTH PERIOD (July-Dec or Jan-June) WHEN GRANT WILL BE REQUIRED
				EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE		
41	Bonanza	STP & Int.	600,000	2/74	10/74	11/74	5/75	7/76	4/77	450,000	July-Dec. 76
42	Chiloquin	STP Exp.	450,000	5/72	7/74	10/74	3/75	5/75	5/76	337,000	Jan-June 75
43	Unity	STP	190,000	6/71	12/73	1/74	3/74	6/74	12/74	142,000	Jan-June 74
44	Cloverdale S.D.	STP & Int.	330,000	6/67	4/74	5/74	9/74	11/74	11/75	247,000	July-Dec. 74
45	Arch Cape S.D.	STP & Int.	900,000	1/70	3/73	7/73	12/73	4/74	4/75	675,000	Jan-June 74
46	Rockaway	STP Imp.	170,000	6/69	5/74	7/74	2/75	4/75	4/76	127,000	Jan-June 75
47	Cave Junction	STP Exp.	150,000	1/73	7/73	11/73	3/74	5/74	10/74	112,000	Jan-June 74
48	Shady Cove	STP & Int.	700,000	2/74	12/74	1/75	5/75	7/75	7/76	525,000	July-Dec. 75
49	Merlin - Col. Village	STP & Int.	1,000,000	3/74	12/74	1/75	5/75	7/75	7/76	750,000	July-Dec. 75
50	White City	STP Imp.	230,000	2/74	2/75	3/75	6/75	7/75	7/76	172,000	July-Dec. 75

Format #5 CONSTRUCTION GRANTS (Ref. 40 CFR Section 35.915)

1. PROJECT LIST

PRIOR- ITY RANKING	MUNICIPALITY	TYPE OF PROJECT AND SCOPE (Extended de- scriptions may be continued on ad- ditional pages)	EST. TOTAL COST	PRELIMINARY PLANS		CONSTRUCTION DRAWINGS AND SPECIFICAT- IONS		BUILDING AND ERECTION		ESTIMATED EPA ASSISTANCE RE- QUIRED TO COM- plete PROJECT (\$)	SIX MONTH PERIOD (July-Dec or Jan-June) WHEN GRANT WILL BE REQUIRED
				EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE		
51	Mosier	STP Imp.	200,000	11/72	4/73	11/73	2/74	4/74	10/74	150,000	Jan-June 74
52	Pendleton	Int. (Mt. Hebron)	260,000	12/72	3/72	6/73	8/73	12/73	6/74	195,000	July-Dec. 73
53	Boardman	STP Imp.	150,000	10/73	3/74	4/74	7/74	8/74	6/75	112,000	July-Dec. 74
54	The Dalles	Ind. STP	380,000	6/70	3/74	5/74	10/74	3/75	3/76	285,000	Jan-June 75
55	Long Creek	STP	160,000	10/72	6/73	11/73	2/74	5/74	11/74	120,000	Jan-June 74
56	Corvallis	Airport - Int.	500,000	2/74	5/74	7/74	3/75	7/76	1/77	375,000	July-Dec. 76
57	Corvallis	Mobile Ct. - Int.	90,000	2/74	5/74	7/74	3/75	7/76	1/77	67,000	July-Dec. 76
58	Albany	N.E. Int.	2,000,000	3/72	7/74	9/74	5/75	7/75	1/77	1,500,000	July-Dec. 75
59	West Linn	Lower Tualatin Int.	480,000	12/71	7/74	10/75	3/76	5/76	11/76	360,000	Jan-June 76
60	Gresham	Ruby Jct. - Int.	1,500,000	2/74	8/74	10/74	6/75	8/75	6/76	1,125,000	July-Dec. 75

Format #5 CONSTRUCTION GRANTS (Ref. 40 CFR Section 35.915)

I. PROJECT LIST

PRIOR- ITY RANKING	MUNICIPALITY	TYPE OF PROJECT AND SCOPE (Extended de- scriptions may be continued on ad- ditional pages)	EST. TOTAL COST	PRELIMINARY PLANS		CONSTRUCTION DRAWINGS AND SPECIFICAT- IONS		BUILDING AND ERECTION		ESTIMATED EPA ASSISTANCE RE- QUIRED TO COM- PLETE PROJECT (\$)	SIX MONTH PERIOD (July-Dec or Jan-June) WHEN GRANT WILL BE REQUIRED
				EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE		
61	Clackamas Co. Service Dist.	Int.	700,000	5/70	12/73	1/74	3/74	5/74	4/75	525,000	July-Dec. 74
62	Culver	STP & Int.	300,000	5/72	3/74	7/74	2/75	5/75	5/76	225,000	Jan-June 75
63	Terrebonne	STP & Int.	450,000	3/74	9/74	12/74	8/75	8/76	8/77	337,000	July-Dec. 76
64	Metolius	STP & Int.	345,000	7/71	4/72	1/74	5/74	7/74	7/75	258,000	July-Dec. 74
65	Bend	East Pilot Butte Interceptor	180,000	5/73	8/73	1/74	4/74	5/74	5/75	135,000	Jan-June 74
66	BCVSA	So. Medford Int.	600,000	5/72	9/73	11/73	1/74	3/74	12/74	450,000	Jan-June 74
67	Columbia City	Int.	190,000	5/70	2/74	4/74	5/74	7/74	1/75	142,000	July-Dec. 74
68	Umatilla	McNary Int.	350,000	12/72	1/74	1/74	3/74	5/74	8/74	262,000	Jan-June 74
69	Multnomah Co.	Int.	400,000	6/71	2/74	3/74	6/74	8/74	5/75	300,000	July-Dec. 74
70	Jordan Valley	STP & Int.	310,000	6/71	8/71	9/73	1/74	4/74	4/75	232,000	Jan-June 74

Format #5 CONSTRUCTION GRANTS (Ref. 40 CFR Section 35.915)

1. PROJECT LIST

PRIORITY RANKING	MUNICIPALITY	TYPE OF PROJECT AND SCOPE (Extended descriptions may be continued on additional pages)	EST. TOTAL COST	PRELIMINARY PLANS		CONSTRUCTION DRAWINGS AND SPECIFICATIONS		BUILDING AND ERECTION		ESTIMATED EPA ASSISTANCE REQUIRED TO COMPLETE PROJECT (\$)	SIX MONTH PERIOD (July-Dec or Jan-June) WHEN GRANT WILL BE REQUIRED
				EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE		
71	Aumsville	STP Imp.	80,000	12/73	6/74	8/74	1/75	5/75	11/75	60,000	Jan-June 75
72	Turner	Int. STP	600,000	4/73	1/74	2/74	6/74	8/74	8/75	450,000	July-Dec. 74
73	Tillamook Bay Port of	Int.	600,000	3/74	3/75	5/75	12/75	3/76	3/76	450,000	Jan-June 76
74	Yamhill	STP Imp.	80,000	11/72	3/74	3/74	5/74	7/74	1/75	60,000	July-Dec. 74
75	Silverton	STP Imp.	250,000	1/74	8/74	10/74	4/75	7/75	5/76	187,000	July-Dec. 75
76	Scotts Mill	STP & Int.	100,000	3/74	8/74	10/74	2/75	5/75	5/76	75,000	Jan-June 75
77	Brownsville	STP Imp.	230,000	2/74	2/75	3/75	1/76	3/76	12/76	172,000	Jan-June 76
78	Veneta	STP Exp.	400,000	4/73	4/74	4/74	6/74	7/74	1/75	300,000	Jan-June 74
79	Modoc Point	STP	230,000	1/74	5/74	6/74	2/75	5/75	1/76	172,000	Jan-June 75
80	Portland	Tryon STP Exp.	4,500,000	1/71	2/74	5/73	3/74	6/74	10/75	3,375,000	July-Dec. 74

Format #5 CONSTRUCTION GRANTS (Ref. 40 CFR Section 35.915)

1. PROJECT LIST

PRIORITY RANKING	MUNICIPALITY	TYPE OF PROJECT AND SCOPE (Extended descriptions may be continued on additional pages)	EST. TOTAL COST	PRELIMINARY PLANS		CONSTRUCTION DRAWINGS AND SPECIFICATIONS		BUILDING AND ERECTION		ESTIMATED EPA ASSISTANCE REQUIRED TO COMPLETE PROJECT (\$)	SIX MONTH PERIOD (July-Dec or Jan-June) WHEN GRANT WILL BE REQUIRED
				EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE	EST. START DATE	EST. COMP. DATE		
81	Tangent	STP & Int.	180,000	2/74	4/74	6/74	3/75	6/75	6/76	135,000	Jan-June 75
82	Dufur	STP Imp.	75,000	3/74	1/75	3/75	12/75	3/76	12/76	56,000	Jan-June 76
83	Eagle Point	STP Imp.	100,000	11/73	12/73	3/74	5/74	7/74	2/75	75,000	July-Dec. 74
84	Elgin	STP Imp.	85,000	2/74	8/74	10/74	3/75	6/75	12/75	63,000	Jan-June 75
85	Eugene	E. Side Int.	4,500,000	12/71	5/74	7/74	5/75	3/76	3/77	3,375,000	Jan-June 76
86	LaGrande-Island City	Int.	300,000	6/71	10/74	12/74	6/75	8/75	4/76	225,000	July-Dec. 75
87	Dayton	STP Imp.	290,000	2/74	5/74	6/74	1/75	4/75	12/75	217,000	Jan-June 75
88	Gervais	STP Imp.	80,000	2/74	10/74	1/75	1/76	3/76	3/77	60,000	Jan-June 76
89	Detroit	STP	400,000	1/74	10/74	1/75	1/76	3/76	3/77	300,000	Jan-June 76
90	Sublimity	Int.	440,000	5/71	5/74	8/74	3/75	7/75	3/76	330,000	July-Dec. 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
Corvallis

PAUL E. BRAGDON
Portland

MORRIS K. CROTHERS
Salem

ARNOLD M. COGAN
Portland

DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item No. K, October 22, 1973, EQC Meeting

Sewerage Works Construction Grants, Consideration of Revised
Criteria for Priority Ranking of Projects

Background

At the present time, there are two major sources of funds available to cities to aid in the financing of sewerage systems:

- 1) 75% Federal grants for sewage works construction under PL 92-500.
- 2) 30% maximum State grants and 70% maximum loans from the Oregon pollution control bond fund.

Under Section 204 (a)(3) of PL 92-500, the states are required to establish priority criteria and a priority listing of projects eligible for Federal sewage works grants.

Chapter 771, Oregon Laws 1973 (HB 5090), limits pollution control bond fund expenditures for the biennium beginning July 1, 1973 to \$1.00 for construction of sewage treatment facilities and \$144,852 for already committed projects for planning of sewage and solid waste facilities. Thus, all proposals to expend pollution control bond funds must be presented to the Emergency Board for approval.

The Department's proposals for Federal grant priorities and utilization of State pollution control bond funds for sewerage works planning and construction are presented in the following sections.

Priority System for Federal Grants

EPA has advised the Department of the need to revise its present needs priority system to meet new EPA guidelines. These guidelines require consideration of facility need, basin and stream segment ranking established in the Annual State Strategy, type of facilities needed, and national priorities. Financial need and readiness to proceed cannot be used as a basis for priority.

Attachment A contains the Department's proposed needs priority system for Federal grants. Attachment B contains ranking of needs in accordance with this system. Attachment C contains the needs priority list including cost information.

It is anticipated that the prioritized needs list will have to be periodically revised to incorporate newly identified needs, or priority revisions resulting from receipt of additional information.

Construction Loans from Pollution Control Bond Fund

Since creation of the State pollution control bond fund, the Department has purchased the bonds which many communities have sold to finance the non-grant portion of grant eligible projects. This extends the State's favorable credit rating to the communities. Attachment C contains a column showing the need for funds from the pollution control bond fund for this purpose.

Planning Loans from Pollution Control Bond Fund

New EPA grant regulations require that detailed plans and specifications be complete prior to award of a construction grant. For grant purposes, EPA divides each project into three phases with separate grants for each phase as follows:

- Phase 1 Preparation of Facilities Plan. (Preliminary Engineering Report and Environmental Assessment).
- Phase 2 Preparation of Detailed Plans and Specifications
- Phase 3 Construction of Project.

If a single grant is given at the Phase 3 step, the community can be reimbursed for the grant eligible costs of Phases 1 and 2.

This three separate grant concept causes some practical problems in administration including increased paperwork and difficulty in financing the initial planning phase. In order to aid in the process of developing needed plans and getting projects ready for construction, it is proposed that state funds be advanced as a loan to communities to pay for the preparation of facility plans and engineering plans. At the time of construction, the planning advance would be repaid -- 75% from the Federal grant and 25% from local funding. The planning advances would be made in accordance with an agreement which would require repayment in full of the funds within a specific time or upon receipt of a Federal grant for construction.

Attachment D sets forth proposed criteria for prioritizing anticipated planning advance requests. The criteria are based on stream segment priorities and per capita cost. Attachment E contains a preliminary listing of prioritized planning projects which totals approximately \$1 million in needed funds. It is expected that additional needs will be identified to increase the total to \$1.6 million.

Grant Project Funding

Based on the above concept of State pre-financing of planning phases and the time required for each project to reach the "ready to construct" or "ready for construction grant" status, construction projects will not be funded in the exact order of the needs priority list. A funding list or project list will be derived for each fiscal year from the needs priority list based on the actual project status. Thus, as an example, if the first project on the needs priority list is projected to have plans completed and be ready to proceed with construction in August of 1975, such project would be number one on the FY 76 funding list. If the second project on the needs priority list is ready to construct in January of 1974, such project would be number one on the FY 74 funding list. The needs priority list will remain relatively constant whereas the funding list for any year may be expected to change frequently. However, the funding list for any year will maintain the same relative sequencing order as that established in the needs list.

The necessary funding lists will be developed as soon as the priority system is approved.

Hardship Grants

Due to the lack of sufficient Federal funds, EPA grants eligibility will be limited to treatment works and interceptors for the foreseeable future. Chapter 839, Oregon Laws 1973, extends State grant eligibility to sewage collection systems. Specific criteria for priority for such grants has not been developed yet due to a lack of "needs" information. However, a few projects are known where communities will have difficulty financing projects. In the case of Bend and Redmond, rock excavation will cause per capita costs to be excessive and ability to raise local financing difficult. In other cases, the 13% of true cash value funding limit of sanitary districts can make it impossible to finance a sewerage system without additional assistance. In other cases, correction of health hazards is difficult due to low assessed values of such areas and the resulting difficulties in financing needed systems.

Until such time as an accurate needs list and priority system can be developed, it is proposed that specific requests for State grants for collection systems be considered on their own merit based on demonstration of hardship and inability to finance through normal methods. Each such project would be subject to Environmental Quality Commission and Emergency Board approval.

Special Gleneden Sanitary District Loan

Gleneden Sanitary District and Depoe Bay Sanitary District have entered into an agreement for joint treatment at Depoe Bay. Depoe Bay is ready to construct. Gleneden is in the planning phases. In order to get waste from Gleneden to the Depoe Bay plant site, the interceptor through Depoe Bay must be increased in size. Gleneden will pay \$92,000 for the oversize cost. Gleneden has voted \$1,350,000 bonds but cannot sell them until it is ready to construct. Depoe Bay does not have enough money to prefinance the oversize cost.

As a result, in order to allow Depoe Bay to proceed with construction, Gleneden has requested a loan of \$92,000 from the Department of Environmental Quality to be repaid when its bonds are sold. Such a loan would be handled administratively in the same manner as the planning advances.

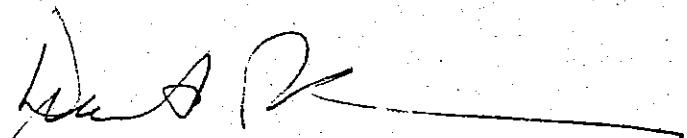
The Department fully supports this request.

Director's Recommendation

It is recommended that:

1. The needs priority ranking criteria contained in Attachment A be adopted.
2. The needs priority list contained in Attachments B and C be approved, subject to later revision and refinement.

3. The concept of Department pre-financing of planning or pre-construction phases of projects be endorsed.
4. The criteria for prioritizing of planning loans contained in Attachment D be adopted.
5. The planning loan priority list contained in Attachment E be approved, subject to later revision and refinement.
6. The Department be authorized to develop the time phased funding list from the needs priority list and revise this funding list as necessary to insure that construction of needed projects is initiated as soon as possible.
7. The concept of handling hardship grants on a case-by-case basis be approved.
8. The Department be authorized to negotiate a \$92,000 loan with Gleneden Sanitary District to permit construction of the badly needed sewerage system in the Depoe Bay area.
9. The Department be instructed to submit a request to the Emergency Board to authorize expenditures from the Pollution Control Bond Fund during the current biennium as follows:
 - a. Construction loans totalling \$35,000,000 based on projected project needs shown in Attachment C with a contingency allowance and including the special loan to Gleneden Sanitary District.
 - b. Planning loans or advances totalling \$1,600,000 based on projects listed in Attachment E with a contingency allowance for projects yet to be identified.


DIARMUID F. O'SCANNLAIN

HLS
10/12/73

Note: Underscored words in recommendations added at presentation in Pendleton. Recommendation was approved as modified.

NEEDS PRIORITY RANKING CRITERIA

Sewerage Works Construction Grants and Loans

<u>Point Assignment</u>	<u>Point Categories</u>
	1. Need
300	A. Health Hazard I -- documented and certified under ORS 224.
250	B. Required by EQC or EPA Order.
	C. Required by Permit -- compliance schedule.
	D. Required by standard changes.
	E. Health Hazard II -- documented but not certified under ORS 224; existing hazard to recreation, fishing, shellfish or water supplies.
200	F. Elimination of interim facility.
	G. Improvement of performance.
150	H. Potential health hazard.
	I. Expansion for future.
77 max.	2. Stream Segment -- ranked in reverse order to that shown in "Annual State Strategy Program, FY 74".
	3. Project Type
50	A. Sewage treatment plant including sewer system rehabilitation as shown by evaluation and analysis.
40	B. Interceptor sewers, pumping stations, pressure sewers.

NEEDS PRIORITY RANKING

Attachment B 18.

Applicant	Environmental Points (A)	River Segment Points(B)	Project Type Points(D)	Total Points	Priority Ranking
Portland (Gertz Schmeer)	300	69	40	409	1
Florence	300	54	40	394	2
Foster-Midway	300	43	40	383	3
Corvallis-STP	250	76	50	376	4
Salem-STP	250	76	50	376	5
Maupin	250	74	50	374	6
Redmond	250	74	50	374	7
Winston-Dillard	250	73	50	373	8
Riddle	250	73	50	373	9
Glendale	250	73	50	373	10
Glide-Ideyld	250	72	50	372	11
Redwood S.D.	250	71	50	371	12
Butte Falls	250	71	50	371	13
Gold Hill	250	71	50	371	14
Portland-Col. Blvd. Outfall	250	69	50	369	15
Rufus	250	69	50	369	16
Clatskanie	250	69	50	369	17
Wauna-Westport	250	69	50	369	18
John Day	250	68	50	368	19
Mt. Vernon	250	68	50	368	20
Union	250	67	50	367	21
Charleston S.D.	250	75	40	365	22
Fruitdale-Harbeck	250	71	40	361	23
Portland-SE relieving	250	69	40	359	24
Port of Astoria	250	69	40	359	25
Netarts-Oceanside	250	57	50	357	26
Pacific City	250	56	50	356	27
Huntington	250	54	50	354	28
Mapleton	250	54	50	354	29
Lafayette	250	46	50	346	30
Harbor S.D.	250	53	40	343	31
Mill City	250	41	50	341	32

NEEDS PRIORITY RANKING

Applicant	Environmental Points (A)	River Segment Points(B)	Project Type Points(D)	Total Points	Priority Ranking
Coburg	250	40	50	340	33
Toledo	250	50	40	340	34
Aurora	250	45	40	335	35
Donald	250	45	40	335	36
Fall City	250	35	50	335	37
Sutherlin	250	33	50	333	38
Monmouth-Independence	200	76	50	326	39
Bonanza	250	26	50	326	40
Chiloquin	250	25	50	325	41
Unity	250	74	50	324	42
Cloverdale S.D.	250	22	50	322	43
Arch Cape	250	22	50	322	44
Rockaway	250	22	50	322	45
Cave Junction	200	71	50	321	46
Shady Cove	200	71	50	321	47
Merlin	200	71	50	321	48
White City S.D.	200	71	50	321	49
Mosier	200	69	50	319	50
Pendleton	250	29	40	319	51
Boardman	200	69	50	319	52
The Dalles-Ind.STP	200	69	50	319	53
Long Creek	200	68	50	318	54
Corvallis-Airport	200	76	40	316	55
Corvallis-Mobile Ct.	200	76	40	316	56
Albany-NE	200	76	40	316	57
West Linn-L.T.	200	76	40	316	58
Gresham-Ruby Jct.	200	76	40	316	59
Clackamas Co. Service Dist.	200	76	40	316	60
Culver	250	15	50	315	61
Terrebonne	250	15	50	315	62

NEEDS PRIORITY RANKING

Applicant	Environmental Points (A)	River Segment Points(B)	Project Type Points(D)	Total Points	Priority Ranking
Metolius	250	15	50	315	63
Bend (Int. in lieu of ps)	200	74	40	314	64
Medford-So. Medford Int.	200	71	40	311	65
Columbia City	200	69	40	309	66
Umatilla-McNary	200	69	40	309	67
Mult. Co.	200	69	40	309	68
Jordan Valley	250	5	50	305	69
Aumsville	200	48	50	298	70
Turner	200	48	40	298	71
Port of Tillamook Bay	200	57	40	297	72
Yamhill	200	46	50	296	73
Silverton	200	45	50	295	74
Scotts Mill	200	45	50	295	75
Brownsville	200	33	50	283	76
Veneta	200	32	50	282	77
Modoc Point	200	28	50	278	78
Portland-Tryon	150	76	50	276	79
Tangent	150	76	50	276	80
Dufur	150	74	50	274	81
Eagle Point	150	71	50	271	82
Elgin	150	67	50	267	83
Eugene - E. side	150	76	40	266	84
LaGrande-Island City	150	67	40	257	85
Dayton	150	46	50	246	86
Gervais	150	45	50	245	87
Detroit	150	41	50	241	88
Sublimity	150	48	40	238	89
Barlow	150	44	40	234	90
Juntura	150	23	50	223	91
Baker	150	7	50	207	92
The Dalles-E.Side Int.	250	69	40	359	25a

DEQ Sewerage Works Needs Priority List - October 1973

(All cost shown in \$1000 units)

Applicant	Project	Priority No.	Project Cost	Cumulative Cost	Grant 75%	Cumulative Grant Amt.	Potential Bond	
							Purchase Bonds	Requirement (25%) Cumulative Bonds
Arlington	STP		217.7				54	54
Gold Beach	STP		371.3				92	146
Coos Bay	STP's		2,745.9				686	832
N. Tillamook Co. S. A.	STP & Int.		1,320.0				330	1,162
Bly S. D.	STP & Int.		254.2				63	1,225
Rogue River	STP & Int.		273.0				68	1,293
Yachats	STP & Int.		666.0				166	1,459
Seneca	STP & Int.		167.5				41	1,500
Newport	Int.		179.5				44	1,544
Bunker Hill S. D.	Int.		246.0				61	1,605
Eastside	Int.		154.0				38	1,643
Winchester Bay S. D.	STP & Int.		589.3				147	1,790
McMinnville	Int.		243.0				60	1,850
Prineville	Int.		561.0				140	1,990
Milwaukie	Int.		661.5				165	2,155
Hillsboro (Rock Cr.)	STP Exp.		1,285.0				321	2,476
Unified Sewerage Agency	Cedar Mill Int.		569.0				142	2,618
Unified Sewerage Agency	Sherwood Int.		550.0				137	2,755
Sweet Home	STP Exp.		1,152.0				288	3,043
Unified Sewerage Agency	Fanno Cr. Int.		2,122.0				530	3,573
Unified Sewerage Agency	Forest Grove STP Exp.		2,798.0				699	4,272
Unified Sewerage Agency	Forest Grove-Cornelius Int.		305.0				76	4,348
Wood Village	Int.		232.0				58	4,406
Bend	Grit facilities		50.0				12	4,418
Ashland	STP Exp.		895.0				223	4,641
Depoe Bay	STP & Int.		1,110.0				277	4,918
Unified Sewerage Agency	Durham STP		25,191.8				6,298	11,216
Wasco	STP		137.0				34	11,250
Portland	Grit facilities		875.0				218	11,468
Madras	STP & Int.		1,152.0				288	11,756
Port of Port Orford	Int.		27.5				6	11,762
Bear Creek Valley S. A.	West Medford Int.		2,515.1				628	12,390

All of the above projects have received a 75% EPA grant.

DEQ Sewerage Works Needs Priority List - October 1973

(All cost shown in \$1000 units)

Applicant	Project	Priority No.	Project Cost	Cumulative Cost	Grant 75%	Cumulative Grant Amt.	Potential Bond	
							Purchase Bonds	Requirement (25%) Cumulative Bonds
Portland	Gertz-Schmeer Int.	1	\$ 1,800	\$ 1,800	\$ 1,350	\$ 1,350	\$ 450	\$12,840
Florence	Int.	2	350	2,150	262	1,612	87	12,927
Foster-Midway	Int.	3	600	2,750	450	2,062	150	13,077
Corvallis	STP Exp.	4	12,000	14,750	9,000	11,062	3,000	16,077
Salem	STP Exp.	5	13,500	28,250	10,125	21,187	3,375	19,452
Maupin	STP	6	235	28,485	176	21,363	58	19,510
Redmond	STP & Int.	7	2,000	30,485	1,500	22,863	500	20,010
Winston-Dillard	STP & Int.	8	800	31,285	600	23,463	200	20,210
Riddle	STP Exp.	9	480	31,765	360	23,823	120	20,330
Glendale	STP Exp.	10	100	31,865	75	23,898	25	20,355
Glide-Ideyld	STP & Int.	11	1,200	33,065	900	24,798	300	20,655
Redwood S.D.	STP & Int.	12	900	33,965	675	25,473	225	20,880
Butte Falls	STP & Int.	13	100	34,065	75	25,548	25	20,905
Gold Hill	STP Exp.	14	375	34,440	281	25,829	93	20,998
Portland	Col. Blvd. Outfall	15	1,100	35,540	825	26,654	275	21,273
Rufus	STP & Int.	16	460	36,000	345	26,999	115	21,388
Clatskanie	STP Imp.	17	300	36,300	225	27,224	75	21,463
Wauna-Westport	STP & Int.	18	850	37,150	637	27,861	212	21,675
John Day	STP & Int.	19	1,600	38,750	1,200	29,061	400	22,075
Mt. Vernon	STP & Int.	20	100	38,850	75	29,136	25	22,100
Union	STP	21	200	39,050	150	29,286	50	22,150
Charleston S.D.	Int.	22	1,100	40,150	825	30,111	275	22,425
Fruitdale-Harbeck	Int.	23	110	40,260	82	30,193	27	22,452
Portland	S.E. relieving Int.	24	250	40,510	187	30,380	62	22,514
Port of Astoria	Int.	25	400	40,910	300	30,680	100	22,614
Netarts-Oceanside	STP & Int.	26	600	41,512	450	31,130	150	22,764
Pacific City	STP & Int.	27	230	41,740	172	31,302	57	22,821
Huntington	Chlorination	28	22	41,762	16	31,318	5	22,826
Mapleton	STP & Int.	29	230	41,992	172	31,490	57	22,883
Lafayette	STP Exp.	30	100	42,092	75	31,565	25	22,908
Harbor S.D.	Int.	31	200	42,292	150	31,715	50	22,958
Mill City	STP	32	280	42,572	210	31,925	70	23,028

DEQ Sewerage Works Needs Priority List - October 1973

(All cost shown in \$1000 units)

Applicant	Project	Priority No.	Project Cost	Cumulative Cost	Grant 75%	Cumulative Grant Amt.	Potential Bond	
							Purchase Bonds	Requirement (25%) Cumulative Bonds
Coburg	STP & Int.	33	275	42,847	206	32,131	68	23,096
Toledo	Int.	34	80	42,927	60	32,191	20	23,116
Aurora	Int.	35	200	43,127	150	32,341	50	23,166
Donald	Int.	36	180	43,307	135	32,476	45	23,211
Fall City	STP & Int.	37	235	43,542	176	32,652	58	23,269
Sutherlin	STP	38	1,300	44,842	975	33,627	325	23,594
Monmouth-Independence	STP & Int.	39	400	45,242	300	33,927	100	23,694
Bonanza	STP & Int.	40	600	45,842	450	34,377	150	23,844
Chiloquin	STP	41	450	46,292	337	34,714	112	23,956
Unity	STP	42	190	46,482	142	34,856	47	24,003
Cloverdale S. D.	STP & Int.	43	330	46,812	247	35,103	82	24,085
Arch Cape S. D.	STP & Int.	44	900	47,712	675	35,778	225	24,310
Rockaway	STP Imp.	45	170	47,882	127	35,905	42	24,352
Cave Junction	STP Exp.	46	150	48,032	112	36,017	37	24,389
Shady Cove	STP & Int.	47	300	48,332	225	36,242	75	24,464
Merlin-Col. Village	STP & Int.	48	1,000	49,332	750	36,992	250	24,714
White City S. D.	STP Imp.	49	230	49,562	172	37,164	57	24,771
Mosier	STP Imp.	50	160	49,722	120	37,284	40	24,811
Pendleton	Int.	51	260	49,982	195	37,479	65	24,876
Boardman	STP Imp.	52	150	50,132	112	37,591	37	24,913
The Dalles	Indust. STP	53	380	50,512	285	37,876	95	25,008
Long Creek	STP	54	160	50,672	120	37,996	40	25,048
Corvallis	Int. - Airport	55	500	51,172	375	38,371	125	25,173
Corvallis	Int. - Mobile Ct.	56	90	51,262	67	38,438	22	25,195
Albany	N. E. Int.	57	2,000	53,262	1,500	39,938	500	25,695
West Linn	Lower Tualatin Int.	58	480	53,742	360	40,298	120	25,815
Gresham	Ruby Jct. Int.	59	1,500	55,242	1,125	41,423	375	26,190
Clackamas Co. Ser. Dist.	Int.	60	5,000	60,242	3,750	45,173	1,250	27,440
Culver	STP & Int.	61	300	60,542	225	45,398	75	27,515
Terrebonne	STP & Int.	62	250	60,792	187	45,585	62	27,577
Metolius	STP & Int.	63	345	61,137	258	45,843	86	27,663
Bend	Int. (in lieu of PS)	64	180	61,317	135	45,978	45	27,708

DEQ Sewerage Works Needs Priority List - October 1973

(All cost shown in \$1000 units)

Applicant	Project	Priority No.	Project Cost	Cumulative Cost	Grant 75%	Cumulative Grant Amt.	Potential Bond	
							Purchase Requirement (25%) Bonds	Cumulative Bonds
Bear Crk. Vly. S. A.	So. Medford Int.	65	\$ 600	\$61,917	\$ 450	\$46,428	\$ 150	\$27,858
Columbia City	Int.	66	160	62,077	120	46,548	40	27,898
Umatilla	McNary Int.	67	350	62,427	262	46,810	87	27,985
Multnomah Co.	Int.	68	400	62,827	300	47,110	100	28,085
Jordan Valley.	STP & Int.	69	310	63,137	232	47,342	77	28,162
Aumsville	STP	70	80	63,217	60	47,402	20	28,182
Turner	Int.	71	600	63,817	450	47,852	150	28,332
Tillamook Bay, Port of	Int.	72	600	64,417	450	48,302	150	28,482
Yamhill	STP	73	80	64,497	60	48,362	20	28,502
Silverton	STP Imp.	74	250	64,747	187	48,549	62	28,564
Scotts Mill	STP & Int.	75	100	64,847	75	48,624	25	28,589
Brownsville	STP Imp.	76	230	65,077	172	48,796	57	28,646
Veneta	STP Exp.	77	400	65,477	300	49,096	100	28,746
Modoc Point	STP	78	230	65,707	172	49,268	57	28,803
Portland-Tryon	STP Exp.	79	4,500	70,207	3,375	52,643	1,125	29,928
Tangent	STP & Int.	80	180	70,387	135	52,778	45	29,973
Dufur	STP	81	75	70,462	56	52,834	18	29,991
Eagle Point	STP Imp.	82	100	70,562	75	52,909	25	30,016
Elgin	STP Imp.	83	85	70,647	63	52,972	21	30,037
Eugene	E. Side Int.	84	4,500	75,147	3,375	56,347	1,125	31,162
La Grande-Island City	Int.	85	300	75,447	225	56,572	75	31,237
Dayton	STP	86	290	75,737	217	56,789	72	31,309
Gervais	STP	87	80	75,817	60	56,849	20	31,329
Detroit	STP	88	400	76,217	300	57,149	100	31,429
Sublimity	Int.	89	440	76,657	330	57,479	110	31,539
Barlow	STP	90	110	76,767	82	57,561	27	31,566
Juntura	STP	91	50	76,817	37	57,598	12	31,578
Baker	STP Imp.	92	150	76,967	112	57,710	37	31,615
The Dalles	Int. (East)	25a	515	77,482	400	58,110	115	31,730

PRIORITY CRITERIA

FOR

SEWERAGE WORKS PLANNING ADVANCES

A. Per capita planning costs

\$ 0 - 2	1	7 - 10	8
3 - 4	3	11 - 50	9
5 - 6	5	51 plus	10

B. Stream segment (FY 74 annual state strategy)

1 - 25	4
26 - 51	3
51 - 77	2

PRELIMINARY PRIORITY RANKING

SEWERAGE WORKS PLANNING ADVANCES

<u>Location</u>	<u>Planning Cost</u>	<u>Cumulative Costs</u>	<u>Priority Points</u>	<u>Priority Ranking</u>
Glendale	\$ 15,000	\$ 15,000	14	1
Tangent	6,500	21,500	14	2
Wedderburn-Knoxtown	15,000	36,500	14	3
Cave Junction	12,500	49,000	13	4
Chiloquin	25,000	74,000	13	5
Lafayette	22,000	96,000	13	6
Mapleton	25,000	121,000	13	7
Charleston	68,500	189,500	12	8
Colonial Valley	30,000	219,500	12	9
Lowell-Dexter	20,000	239,500	12	10
Rockaway	20,000	259,500	12	11
Tillamook-Suburban	20,000	279,500	12	12
Sheridan-Willamina	12,500	292,000	11	13
Boardman	5,000	297,000	10	14
Lincoln City Sub.	30,000	327,000	10	15
St. Paul	3,500	330,500	10	16
Sandy-Boring	40,000	370,500	9	17
Veneta	18,000	388,500	9	18
Bend	100,000	488,500	8	19
Cannon Beach	10,000	498,500	8	20
Clatskanie	9,000	507,500	8	21
Dunes City	15,000	522,500	8	22
Lincoln County-Rural	40,000	562,500	8	23
North Albany S.D.	24,000	586,500	8	24
Otter Rock	8,500	595,000	8	25
Scappoose-St. Helens	60,000	655,000	8	26
S.W. Lincoln Co. Sewer D.	25,000	680,000	8	27
Sutherlin	18,000	698,000	8	28
White City San. Dist.	7,500	705,500	8	29
Winston	12,000	717,500	8	30
Rhododendron-Welches	30,000	747,500	7	31
Florence-Glenada	10,000	757,500	6	32
Monmouth-Independence	30,000	787,500	6	33
Newberg-Dundee	30,000	817,500	6	34
Roseburg Metro	40,000	857,500	6	35
Foster Midway	25,000	882,500	8	22a

No attachments



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

PAUL E. BRAGDON
Portland

MORRIS K. CROTHERS
Salem


ARNOLD M. COGAN
Portland

DIARMUID F. O'SCANNLAIN
Director

To: Environmental Quality Commission
From: Director
Subject: Agenda Item M, November 26 and 27, 1973, EQC Meeting

Tax Credit Applications

Attached are review reports on three (3) Tax Credit Applications. These applications and the recommendations of the Director are summarized on the attached table.


DIARMUID F. O'SCANNLAIN

WEG:ahe
November 19, 1973

Attachments

1. Tax Credit Application Review Reports and Synopsis

TAX CREDIT APPLICATIONS

<u>Applicant</u>	<u>Appl. No.</u>	<u>Facility</u>	<u>Claimed Cost</u>	<u>% Allocable to Pollution Control</u>	<u>Director's Recommendation</u>
Meyerhaeuser Company Wood Products Manufacturing Division	T-412	Underground diesel storage	\$ 3,230		Deny
Lyster Company Portland Plant	T-433	Pressure backflow prevention devices	29,413.79		Deny
International Paper Co. Gardiner Paper Mill - Northern Division	T-453	Sanitary wastes collection and conveyor system	52,369.57		Deny

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Weyerhaeuser Company
Wood Products Manufacturing Division
P. O. Box 389
North Bend, Oregon 97459

The applicant owns and operates a wood products manufacturing complex on Coos Bay at North Bend, Oregon, in Coos County.

2. Description of the Claimed Facility

The claimed facility consists of a 1,000 gallon underground diesel storage tank, one turbine pump connected to existing pipe line to dock with a gas-boy spring loaded reel, hose and nozzle.

The claimed facility was completed and placed in operation in June 1972.

Certification is claimed under the 1969 Act with 100% allocated to pollution control.

Facility Cost: \$3,230 (Documentation provided).

3. Evaluation of Application

Prior to the installation of claimed facilities, a diesel oil storage tank was mounted on the outer stiff boom in the water. The applicant claims that each time the tank was filled from shore it was allowed to overflow resulting in about three gallons of oil lost to the bay. According to the applicant, with the claimed facilities, there is no oil pollution.

The original installation and operating procedures were obviously inadequate and unsafe. The spillage problem could have been solved by providing adequate manpower for proper operation during filling of the tank. Although the claimed facility is apparently good, its primary function is to store diesel oil. Pollution control is only realized because the equipment was properly installed and permits filling without additional manpower.

4. Director's Recommendation

For the reasons stated in Item 3 above, it is recommended that a Pollution Control Facility Certificate be denied for the facility claimed in Application T-412.

HLS:ak

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Hyster Co.
Portland Plant
2902 N. E. Clackamas
Portland, Oregon 97232

The applicant owns and operates a plant to manufacture equipment at the above address in Multnomah County.

2. Description of Claimed Facility

Three (3) reduced pressure backflow prevention devices and two (2) double check valve installations to prevent potential contamination of city water system in the event of reduction of city water system pressure.

The claimed facilities were placed in operation in March 1972.

Certification is claimed under the 1969 Act with 100% allocated to pollution control.

Claimed cost: \$29,413.79.

3. Evaluation of Application

The City of Portland required installation of the claimed facilities to comply with city code and to prevent potential contamination of the city water supply.

ORS 449.605 defines a "pollution control facility" in part as:

"(1) * * * any * * * installation * * * equipment or device reasonably used * * * constructed or installed by any person if a substantial purpose of such use, * * * construction or installation is the prevention, control or reduction of * * * water pollution by:

"(a) The disposal or elimination of or redesign to eliminate 'industrial waste' * * *."

The terms "pollution" and "industrial waste" are defined in ORS 449.075. In particular, pollution refers to "waters of the state," which are also defined in ORS 449.075.

The question then becomes: Do the claimed facilities operate to prevent "pollution" of the "waters of the state" by "industrial waste"?

In a similar situation the Department's legal counsel advised that the water within a city's water system is not "waters of the state".

Hyster Co.

Therefore, it is concluded that the claimed facility is not eligible for certification. Two applications for similar facilities have been denied.

4. Director's Recommendation

It is recommended that certification of the facility claimed in Tax Application T-433 be denied for the reason that the claimed facility does not operate to prevent pollution of the waters of the state by industrial waste.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

International Paper Co.
Gardiner Paper Mill, Northern Division
P. O. Box 854
Gardiner, Oregon 97441

The applicant owns and operates a Kraft Paper Mill on Highway 101 north of Gardiner in Douglas County.

2. Description of Claimed Facility

The claimed facility consists of piping and pump stations to collect and convey sanitary wastes (sewage) from the mill to the Gardiner-Reedsport sewage system.

The claimed facility was completed and placed in operation in December 1972. Construction began in January 1972.

Certification is claimed under the 1969 Act with 100% allocated to pollution control.

Claimed cost: \$52,369.57.

3. Evaluation of Application

ORS 449.605 (2) excludes facilities for human waste from the definition of a pollution control facility. As a result, the claimed facilities are not eligible for certification.

4. Director's Recommendation

It is recommended that certification of the facilities claimed in Application T-453 be denied.



DEPARTMENT OF ENVIRONMENTAL QUALITY

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

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

To : Environmental Quality Commission
From : Director
Subject: Agenda Item No. N, November 27, 1973, EQC Meeting

Status of Department of Environmental Quality Laboratories

BACKGROUND

The primary purpose of this report is to inform the Environmental Quality Commission that the current laboratory facilities on which they depend for technical data for decision making are no longer adequate either in size or physical capability for providing needed data. In fact, the current laboratory is too small, inadequately equipped, is a fire-explosion hazard, has very poor hooding and venting facilities and is a dangerous place from both staff and equipment angles. Under these adverse conditions of space, equipment and working difficulty, it is becoming impossible to carry through the responsibilities assigned to the Laboratories. A second purpose is to request the aid and experience of EQC in obtaining rapid funding for a new - expanded facility to replace the rapidly deteriorating laboratories at Raleigh Hills.

Heavy demands for data are building up because of expanded local, state and federal laws and the resultant data requirements for monitoring, surveillance, permits, standards, compliance inspections, enforcement procedures and other environmental control decision situations. It is the

job of the Laboratories and Applied Research Division personnel to sample, measure, evaluate and report on these environmental problems, so that control measures can be formulated from the ensuing data. Currently the laboratories cannot keep up, needs are increasing and the problem must have some relief if we are to survive.

DEQ Laboratories and Applied Research Division is the major laboratory for environmental work in the State of Oregon. Work is closely coordinated with ancillary laboratories in the Health Division, Department of Agriculture, Environmental Protection Agency, Geological Survey, universities and small local government or private laboratories. None of these laboratories has major capabilities in the kind of operations in air, water and solid wastes that are charged to DEQ. Research is done by EPA, universities and others organized in this area. DEQ only does special project work where a short-term study will delineate a particularly difficult problem with imminent need for answers. Solid wastes leachates, Columbia River Slime, Willamette Sludge Rafts are examples.

Sampling and testing are done on a priority based on need in 20 major river basins which include about 500 stations, 11 bays and estuaries, 300 sewage treatment plants, 495 water supplies, 200 solid waste areas, 40 air stations, 700 industrial effluents with air, water and solid wastes problems and various unidentified or non-point sources in air, water and solid wastes. Because of the perishable nature of samples collected many of the tests are both field and laboratory. Although testing appears repetitive and routine, skilled people are essential to be able to observe, test, and relate data to environmental quality needs. To handle increased industrial wastes monitoring and to permit rapid testing of new environ-

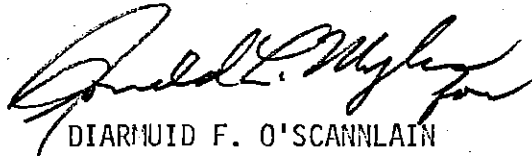
mental parameters such as hydrocarbons, lead and other trace toxic chemicals, a switch from the regular routine tests is past due. This will necessitate better space, more equipment and additional skilled help to identify and evaluate the complex materials involved.

A proposal was made in the DEQ portion of the Governor's 1973-75 budget document for a ten year plan which envisioned a need of 70,000 square feet of laboratory space and 95 people by 1983 at a \$5,090,000 estimated cost. Subsequently the Executive Department helped in preparation of an architect's report which was submitted as evidence in House Bill 5094 which passed both houses with appropriation referral to the Emergency Board. Some effort has been made both by DEQ and the Executive Department to get the matter before the Emergency Board, but no effective results have been noted.

Commission members have asked for a re-appraisal of the needs of the DEQ Laboratory for a short-range with the design to be flexible enough for ready expansion when necessary. The DEQ Laboratory staff has undergone a long period of time with inadequate facilities, too few people and promises for the future and is fearful that the pressure for saving money will keep them in a state of inadequacy. However, the situation in the existing laboratory is so dire that some interim-bare-bones needs solution has to be found. The following plan has been promulgated as the minimum we feel is acceptable for providing the major portion of data needed in the next few years. We recognize with fear and dread that we must somehow hold the current facilities in which we exist together for at least two years while design and building are progressing. The need is imminent and must be addressed.

DIRECTOR'S RECOMMENDATIONS

It is the Director's recommendation that the commission review and evaluate the status report and authorize the Department to pursue the expeditious acquisition of new laboratory facilities through the Emergency Board of the legislature.



DIARMUID F. O'SCANNLAIN

WCW:bmf
11/21/73

Interim-Minimal Plan for
Department of Environmental Quality Laboratories

The following assumptions are made for putting together a minimal plan:

1. EQC and DEQ are going to continue to protect and enhance environmental concerns and in doing their jobs will require increasing amounts of adequate data for making decisions.
2. DEQ Laboratories will be doing the work because it would be inordinately expensive and impractical to "farm out" this work.
3. The present laboratory is inadequate and unsafe and should be abandoned as soon as practicable. Some laboratory equipment is salvageable, but the furnishings are not. They are worn out.
4. State property large enough to handle ultimate expansion is available in a properly zoned area.
5. The design must be flexible to provide easy internal changes and easy expansion. Easy access is essential to the operation.
6. Treatment facilities must be built to pretreat wastes that go to municipal sewers in accordance with DEQ and EPA rules.
7. Safety for people and equipment will be built in without cost cutting.
8. Incremental staging will be part of the initial stage approval.

It is vital to have a facility that is accessible for automobile and truck traffic so that samples, equipment and other materials can be routed in and out. A ground floor situation with a loading dock and receiving room for handling materials is the most efficient method. Elevator access is a major bottleneck for laboratories that have multiple floors.

Ground floor space has been considered as the practical alternative because the costs of duct work, plumbing and other facilities required in laboratories of this kind increase considerably in multi-storied units and are usually not efficient. First floor space is also more amenable to expansion. Consideration has been given to use of existing buildings and it was felt that the costs of duct work, plumbing and revamping of facilities in most old structures to bring them into compliance with local zoning, fire and safety rules and with SAIF-OSHA regulations would probably exceed new construction that was designed with zoning, codes and safety incorporated. Because the materials handled in these laboratories are corrosive, flammable, explosive and generally dangerous, there must be ready access for cleaning, repairing and maintaining ducts, water systems, drains and treatment devices. The type building section shown in Figure 1 would allow the flexibility desired.

Treatment facilities for pretreating wastes are necessary because many portions of the laboratories have toxic fumes that are given off in quantities that are above air pollution standards and water carried wastes have toxic materials that would kill a biological sewage treatment plant. The gasses can normally be controlled by scrubbers within or adjacent to the hoods that contain the toxic fumes. When scrubbed, however, the materials pollute water which must be treated. Sample preservatives and chemicals used in tests become pollutants at the conclusion of the tests. These can be treated by normal water treatment

procedures such as coagulation and settling, pH control, carbon absorption and filtration, so that the material can be sent to a sewage treatment plant without serious effect. Pre-treatment is only necessary for part of the flows from the laboratories. These can be selected out to minimize the size of treatment facilities which are programmed at 6,750 square feet. Costs are estimated at \$169,000 (see Appendix 1).

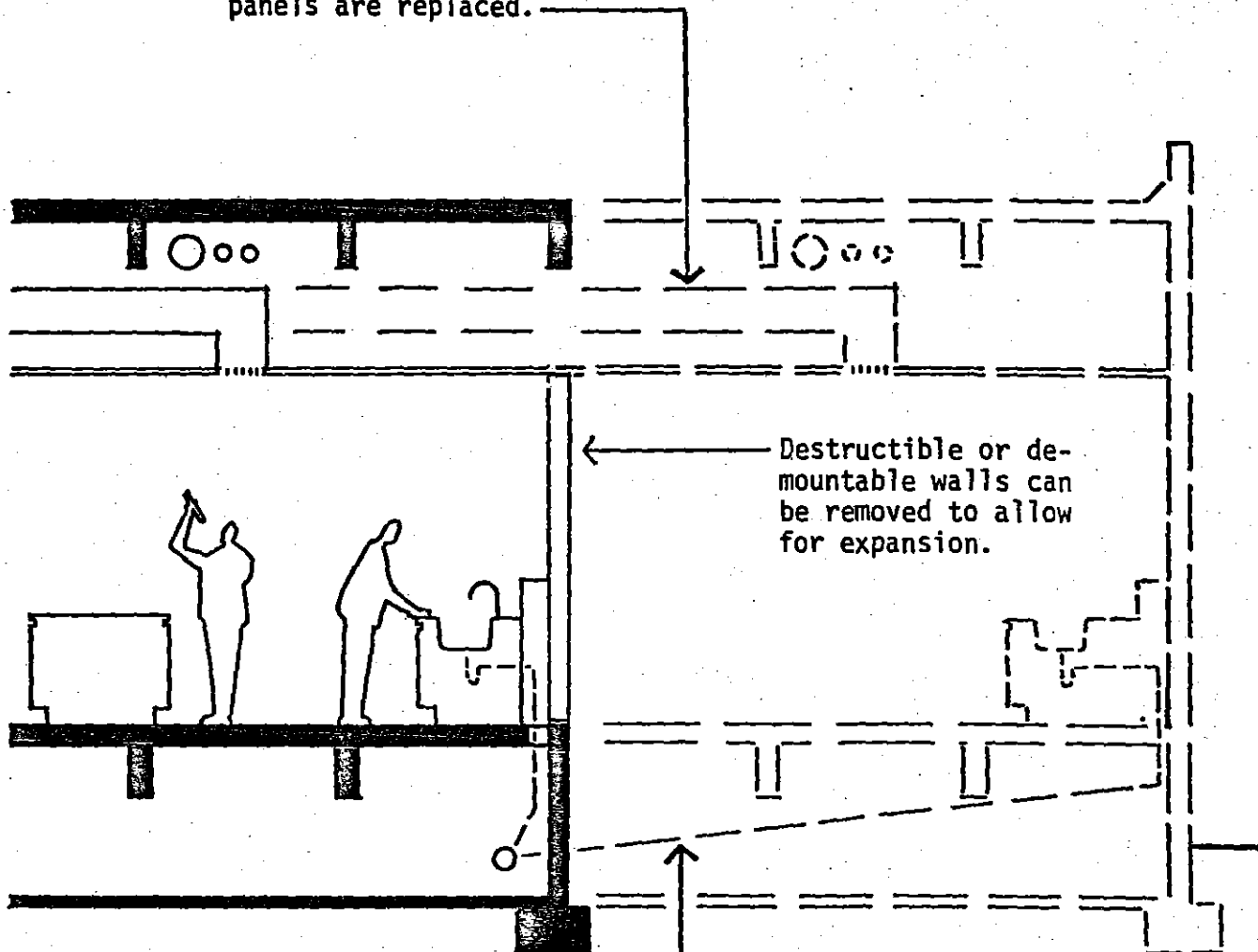
In response to the request for a critical baseline program the staff has physically measured sizes of equipment, reviewed bench space needs and has assessed turn-around room on the basis of tests run, people needed and facilities needed to perform required tests on a bare-bones program. The work sheets of Appendix 2 indicate the results of the survey. Table 1 summarizes minimal personnel and space needs for the 1975 to about 1980 period of time. The staff feels that any reduction below these numbers will provide a laboratory that will not be able to fulfill requirements for data.

Laboratory construction costs appear to range around \$75 to \$100 per square foot in areas with heavy duct work and utilities. Warehouse-office construction on the other hand is closer to \$25 per square foot. This concept is used to arrange the facility in such a way that costly laboratory areas are together, warehousing types together and offices consolidated. The breakdown of estimated costs on this assumption is:

Site preparation, roads, walks, landscaping	-	\$100,000.00
Services (utilities)	-	110,000.00
Waste pre-treatment	-	169,000.00
Construction: Laboratories 12,000 ft ² @ \$80	-	960,000.00
Storage-Office 14,438 ft ² @ \$25	-	360,350.00
Parking 6,500 ft ² @ \$10	-	65,000.00
Contingencies (15%)	-	264,652.00
Professional services (6.6%)	-	116,447.00
Supervision (4%)	-	70,574.00
Furnishings	-	<u>450,000.00</u>
TOTAL		\$2,666,023.00

Figure 1

Above ceiling ducts and pipes can be changed or extended after removing ceiling panels. After changes are made, ceiling panels are replaced.



Destructible or demountable walls can be removed to allow for expansion.

FIRST PHASE

FUTURE EXPANSION

Below floor piping can be changed or extended without tearing out slab.

BUILDING SECTION

Table 1

SUMMARY OF AREA REQUIREMENTS

	(Present) 1973 ft ²	Minimal Need 1975 ft ²
1. Water Quality Lab	2,555	4,075
2. Air Quality Lab	2,545	4,580
3. Solid Wastes Lab	0	1,200
4. Biological Lab	900	1,758
5. Noise Lab (soundproof)	0	400
6. Field Monitoring	1,378	3,900
7. Chemical preparation	0	0
8. Instrument repair	0	375
9. Washing room	750	800
10. Wood, metal & glass shop	0	contract
11. Loading dock and receiving	0	1,300
12. Stockroom	353	600
13. Automobile emission testing.	0	900
14. Administration and services	1,156	3,550
15. Restroom, janitor room, misc. storage	247	800
16. Circulation (hallways, etc.)	450	1,000
17. Mechanical and electrical room	50	1,200
	** 10,284	26,438
Covered Parking	*3,300	6,500
TOTAL SQUARE FEET:	13,584	32,338

*Present parking not covered.

**Includes boat and storage areas. Does not include CAMS or other remote monitoring stations.

SUMMARY OF PERSONNEL REQUIREMENTS

	(Present) 1973	Minimal Need 1975
1. Administrator	1	1
2. Assistant Administrator	1	1
3. Chief Secretary	1	1
4. Secretary	1	1
5. Clerk Typist	-	1
6. Chief Chemist	2+1**	3
7. Section Chief (Monitoring)	1	1
8. Data Acquisition Chief	1	1
9. Environmental Biologist	-	1
10. Aquatic Biologist	1	1
11. Field Technician	2	4
12. Bacteriologist	1	2
13. Chemist	7	11
14. Lab Technicians	6	9
15. Student Trainees	*5	7
16. Dishwashers	-	1
17. Maintenance	-	-
18. Custodial	*1	1
19. Instrument Technicians	1	1
20. Stock purchasing clerk	-	1
21. Safety Officer	-	-
22. Night Watchmen	-	1
TOTAL PERSONNEL:	33	50

*Part-time

**Fill in January, 1975

11/21/73 WCN

Appendix 1

New Laboratory Waste Treatment Facilities

Assume: 25 sinks at 10 gpm each = 250 gpm
5 scrubbers at 20 gpm each = 100 gpm
= Total 350 gpm
= Approx. 500,000 gal/day

Use: 1/2 mgd and 4 separate processes

	<u>Flow gpd</u>	<u>Hrs. Detention</u>	<u>Tank Size</u>		<u>Sludge</u>
			<u>gal</u>	<u>ft³</u>	<u>gal/day</u>
1. Lime flocculation and precipitation	125,000	1	5,000	37,500	75
2. Alum flocculation and precipitation	125,000	2	10,000	75,000	100
3. Adsorption in solution, chemical treatment	125,000	1/4	1,250	9,375	75
4. Ion exchange, carbon adsorption, regeneration	125,000	1/4	1,250	9,375	<u>50</u>
					300

Construction:

1 - 37,500 ft ³ = 80 X 40 X 12	-	\$25,000.00
1 - 75,000 ft ³ = 2 X 80 X 40 X 12	-	50,000.00
2 - 9,375 ft ³ = 40 X 30 X 10	-	36,000.00
Pumps, pipe, instruments	-	10,000.00
Sludge handling equipment	-	20,000.00
Controls	-	8,000.00
Engineering and contingencies	-	<u>30,000.00</u>
		\$169,000.00

INSTRUMENT/TEST PROCEDURE

Instrument/TEST PROCEDURE	Instrument Size (feet)	Instrument Weight (lb)	Power Need X - 110 XX - 220 XXX - both	Water Need H-hot C-cold D-distill I-deionize	Air Need	Vacuum Need	Lighting Need	Natural Gas Need	Pressure Gas Need H-hydrogen A-acetylene O-oxygen He-helium N-nitrogen X-other	Hood Need R-regular P-perchloric F-fume S-specia	Discharge Treatment A-air W-water AW-both	Working Space Need (feet)	Total Bench (feet)	Total Space Required. (sq. ft.)
Auto-Analyzer ^{Fluoride Sulfate Chloride}	9	127	X	H,C		✓	✓			R	W	10	19	95
Spectronic 20	1½	45	X				✓				W	10	11½	57.5
UV-Visible Light Spectrophot.	5	200	X				✓				W	6	11	55
Atomic Absorption Spectrophotometer	8	200	X		✓		✓		H,N,X	S	WA	6	14	70
Infra Red Spectrophotometer	3	126	X				✓				W	6	9	45
Gas Chromatograph	8	240	X				✓			S	WA	10	18	90
Centrifuge	1½	83	X				✓					5	6½	32.5
2 ovens	9	360	X				✓					9	18	90
Furnace (Muffle)	3	212	XX				✓			R		4	7	35
4 Balances	8	160	X				✓					15	23	115
Microscope and Accessories	2	10	X	C,D			✓					5	7	35
pH Meter	1	27	X	H,C,D,I			✓					6	7	35
Steam Baths	6	107	X	H,C			✓			F	A	6	12	60
Hoods: Extraction	12	400	XXX	H,C	✓	✓	✓	✓		F	A	10	22	110
Acid Digestion	12	400	XXX	H,C	✓	✓	✓	✓		P	AW	10	22	110
Calibration	12	400	XXX	H,C,D,I	✓	✓	✓	✓	X	S (Explosion Proof)	A	30	42	210
Chemical Preparation	12	400	XXX	H,C,D,I	✓	✓	✓	✓		R	AW	10	22	110
Low Temperature Asher	3	180	X			✓	✓		0	R	A	10	13	65
Reflux apparatus (Sample-Chem)	1	192	X	C			✓					4	10	50

Air Quality Laboratory
11/21/73
①

INSTRUMENT/TEST PROCEDURE

INSTRUMENT/TEST PROCEDURE	Instrument Size (feet)	Instrument Weight (lb)	Power Need X - 110 XX - 220 XXX - both	Water Need H-hot C-cold D-distilled I-deionize	Air Need	Vacuum Need	Lighting Need	Natural Gas Need	Pressure Gas Need H-hydrogen A-acetylene O-oxygen He-helium N-nitroug Oxi. X-other	Hood Need R-regular P-perchloric F-fume S-special	Discharge Treatment A-air W-water AW-both	Working Space Need (feet)	Total Bench (feet)	Total Space Required. (sq. ft.)
<i>Met Chemical Tests</i>			X	H,C,D,I	✓	✓	✓	✓			N	300	300	1200
<i>Specific Ion Probes</i>	1	7	X	H,C,D,I	✓	✓	✓	✓				7	8	40
<i>Impinger Preparation</i>			X	H,C,D,I	✓	✓	✓	✓				20	20	100
<i>Instrument Calibration</i>			XXX		✓	✓	✓					150	150	750
<i>Minor Repair</i>														
<i>Desks - Calculators - Files</i>			X				✓					180	180	720
<i>Books (Approx 10 people)</i>												100	100	300
<i>Safety Shower, eye wash, Fire Blanket, Extinguishers etc</i>							✓							

Air Quality
Laboratory
11/21/73
②

INSTRUMENT/TEST PROCEDURE

Instrument/TEST PROCEDURE	Instrument Size (feet)	Instrument Weight (lb)	Power Need X - 110 XX - 220 XXX - both	Water Need H-hot C-cold D-distille I-deionized	Air Need	Vacuum Need	Lighting Need	Natural Gas Need	Pressure Gas Need H-hydrogen A-acetylene O-oxygen He-helium N-nitroug Oxi. X-other	Hood Need R-regular P-perchloric F-fume S-special	Discharge Treatment A-air W-water AW-both	Working Space Need (feet)	Total Bench (feet)	Total Space Required. (sq. ft.)
<i>Ammonia Nitrogen</i> Technican Nitro Nitrogen	10	800	X	C		✓	✓			R	W	20	30	150
3" Spectronic "20 & 70"	4 1/2	100	X				✓			R		15	18.5	97.5
Infra Red Spectrophotometer	3	80	X				✓					7	10	50
DV Visible Light Spec.	6	200	X				✓		A, O			5	11	55
Atomic Absorption Spectrophotometer	10	200	XXX	G, I	✓	✓	✓		A, N, X	F	AW	20	30	150
2-Gas Chromatograph	8	200	X				✓		H, O, He, X			10	18	90
Centrifuge	1 1/2	50	X				✓					4 1/2	6	30
6 - Ovens	12	300	X				✓					10	22	110
Muffle Furnace	1 1/2	60	XX				✓					4	5 1/2	27 1/2
2 Balances	4	40	X				✓					6	10	50
Fluorometer	2	20	X				✓					5	7	35
Turbidimeter	1	15	X				✓					4	5	25
2-pH Meters	2	20	X				✓					8	10	50
Conductivity Bridge	1	10	X				✓					4	5	25
Total Organic Carbon Analyzer	7	400	X	H, C, D, I	✓		✓		X			13	20	100
3 Steam Baths	5	250	X	C			✓					5	10	50
Hoods: Extraction	20	1000	X	H, C, D, I	✓	✓	✓	✓		R	AW		20	100
Digestion	20	1000	XXX	H, C, D, I	✓	✓	✓	✓		P	AW		20	100
N. Nitrogen	12	400	XXX	H, C, D, I	✓	✓	✓	✓		R	AW	10	22	110

Water Quality
Laboratory
11/21/75
①

INSTRUMENT/FIRST PROCEDURE

Instrument/First Procedure	Instrument Size (feet)	Instrument Weight (lb)	Power Need X - 110 XX - 220 XXX - both	Water Need H-hot C-cold D-distilled I-deionize	Air Need	Vacuum Need	Lighting Need	Natural Gas Need	Pressure Gas Need H-hydrogen A-acetylene O-oxygen He-helium N-nitrogen X-other	Hood Need R-regular P-perchloric F-fume S-special	Discharge Treatment A-air W-water AW-both	Working Space Need (feet)	Total Bench (feet)	Total Space Required (sq. ft.)
Wet Chemical: Dissolved Oxygen		500	X	HCPDI	✓	✓	✓	✓		R		100	100	500
Biological and chemical Oxygen Demand														
Residue Chemical - Hardness, Alk, Chloride etc.			X	HCPDI	✓	✓	✓	✓		R		100	100	500
Special Chemical - As, Lead etc.			X	HCPDI	✓	✓	✓	✓		R		100	100	100
Incubators	10	600	X	C			✓						10	50
Refrigerators	10	800	X	C			✓						10	50
Gas Chrom/Mass Spectrometer	10	1000	X				✓		He, X			20	30	150
Tests, Calculators, Files } Books (Approx 10 people) }			X				✓					150	180	720
Safety shower, eye wash, fire blanket, Extinguishers etc.												100	100	300
Bacteriological: Autoclave	3	300	XX	D			✓					5	8	40
2 incubators	10	500	XXX	C			✓					5	15	75
Refrigerator	3	200	X	C			✓					2	5	25
Microscope	2	20	X				✓					2	4	20
Membrane Filter Set-up	6	10	X	HCP	✓	✓	✓	✓		W		5	11	55
Stain Identification	3	-	X	HCP	✓	✓	✓	✓		W		5	8	40
	1		✓				✓					4	9	45

Water Quality
Laboratory
11/21/73
②

INSTRUMENT/TEST PROCEDURE

Instrument/TEST PROCEDURE	Instrument Size (feet)	Instrument Weight (lb)	Power Need X - 110 XX - 220 XXX - both	Water Need H-hot C-cold D-distilled I-deionize	Air Need	Vacuum Need	Lighting Need	Natural Gas Need	Pressure Gas Need H-hydrogen A-acetylene O-oxygen He-helium N-nitrogen Oxi. X-other	Hood Need R-regular P-perchloric F-fume S-special	Discharge Treatment A-air W-water AW-both	Working Space Need (feet)	Total Bench (feet)	Total Space Required. (sq. ft.)
Torsion Balance	3	20					✓						5	25
Incubator	5	200	X				✓					1	5	25
Analytical Balance	2	20	X				✓					3	5	25
Oven	3	60	X				✓					2	5	25
Spectronic 20	1 1/2	30	X				✓					5	6.5	32.5
Centrifuge, floor	3	300	X				✓					1	4	20
Centrifuge, hand	2	15					✓					1	3	15
pH meter	1	10	X				✓					3	4	20
Refrigerator	4	200	X				✓						4	20
Microform (Serial Section)	2.5	40	X				✓		X			3.5	6	30
Microtome (Sliding)	2	20					✓		X			3	5	25
Freezer	4	300	X				✓					—	4	20
Vacuum filter apparatus	3	10		H, C, D		✓	✓	✓			AW	1	4	20
Hood, Extraction	6	300	X	H, C, D		✓	✓	✓		F	AW	6	6	30
2 compound Microscopes	6	30	X				✓					6	6	30
2 widefield Microscopes	6	20	X				✓					6	6	30
1 Inverted Microscope	3	15	X				✓					3	3	15
Sample Preparation			X	H, C, D, I		✓	✓	✓		R	AW	15	15	75
Short Bench Area			X			✓	✓	✓				12	12	60

Biological
Laboratory
11/21/73
①

INSTRUMENT/TEST PROCEDURE

INSTRUMENT/TEST PROCEDURE	Instrument Size (feet)	Instrument Weight (lb)	Power Need X - 110 XX - 220 XXX - both	Water Need H-hot C-cold D-distille I-deionizea	Air Need	Vacuum Need	Lighting Need	Natural Gas Need	Pressure Gas Need H-hydrogen A-acetylene O-oxygen He-helium N-nitroug Oxi. X-other	Hood Need R-regular P-perchloric F-fume S-special	Discharge Treatment A-air W-water AW-both	Working Space Need (feet)	Total Bench (feet)	Total Space Required. (sq. ft.)
Cabinets for storage													25	50
Reference library							✓							300
Office - Computer							✓							100
Sampling - Testing Equipment							✓							230
Storage														70
Maps, files, specimens														115
Bioassay Area -			X	H,C,D,I	✓	✓	✓	✓		AW		23	23	50
Cleaning area				H,C,D,I										300
Safety Gear														

Biological
Laboratory
11/21/73
②

INSTRUMENT/TEST PROCEDURE

Instrument/TEST PROCEDURE	Instrument Size (feet)	Instrument Weight (lb)	Power Need X - 110 XX - 220 XXX - both	Water Need H-hot C-cold D-distilled I-deionized	Air Need	Vacuum Need	Lighting Need	Natural Gas Need	Pressure Gas Need H-hydrogen A-acetylene O-oxygen He-helium N-nitroug Oxi. X-other	Hood Need R-regular P-perchloric F-fume S-special	Discharge Treatment A-air W-water AW-both	Working Space Need (feet)	Total Bench (feet)	Total Space Required. (sq. ft.)
Wet Chemistry			X	H, C, D, I	✓	✓	✓	✓		R	AW	100	500	
Spectronic 20"	1 1/2	45	X		✓		✓					10	11 1/2	57.5
pH meter	1	27	X		✓		✓					6	7	35
Oven	4 1/2	180	X		✓		✓					4 1/2	22.5	
Furnace	3	212	XX		✓		✓			R		4	7	35
Sieve Shaker-Hydrator	5	300	X	H, C, D, I			✓			S		10	15	75
Work Table												15	75	
Office													100	
Safety gear													300	

Solid Waste
Laboratory
①

ADMINISTRATION

11/25/73 WCW

Office	Size	ft ²
Administrator	10 x 15	150
Assistant Administrator	10 x 15	150
Chief Secretary	10 x 15	150
Secretary	10 x 15	150
Equipment Coordinator	10 x 10	100
Data Acquisition Chief	10 x 10	100
Library	15 x 20	300
Conference, lunch, meeting room	25 x 30	750
Data vault	15 x 20	300
Filing Area	10 x 10	100
Data Acquisition Equipment Storage, Calculator Room, reception	20 x 30	600
		<u>700</u>
		3550 ft ²

GARAGE AREA (Not covered in Bare-Bones plan.)

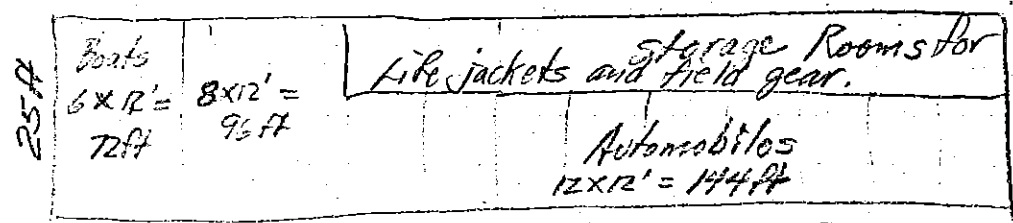
Assigned automobiles
(12)

- Director
- Asst Director
- Stock Clerk
- Air Quality
- Water Quality
- Solid Wastes
- Biological
- Maintenance
- Field crew A
- Field crew B
- Field Crew C
- Field Crew D

- Boats 21 ft
- Trailers 16 ft
- (6) 16 ft
- (6) 12 ft
- Pram
- Canoe

- Mobile AQC
- Trailer AQC
- Laboratory WQC
- Units (6) WQC
- SW
- Biological

- Smoke Generator
- Special Equipment (2)



$144 + 72 + 96 = 312 \text{ ft} \times 25 \text{ ft} = 7800 \text{ ft}^2$

STORAGE AREA REQUIREMENTS (Current Equipment)

11/25/73 ANW-WCW

Air Quality			Water Quality		
Instrument-Equip.	Number	Area Ft ²	Instrument-Equip.	Number	Area Ft ²
High Volume Samplers	82	72	Ice Chests	20	25
Particle Fallout Buckets	302	100	Sample Buckets	18	18
AISI Tape Equip.	18	10	Ropes	20	9
Pumps	32	8	DO Kits	12	20
Ladders	4	10	DO meters	4	3
Recorders	23	40	Conductivity Meters	5	3
SO ₂ Analyzers	3	8	Life Jackets	8	4
NO _x "	1	9	Composite Samplers	5	20
CO "	6	40	Turbidimeters	4	10
O ₃ "	2	4	Recorders	6	10
Hydro carbon analyzers	1	2	Monitors	2	12
Nephelometers	2	4	Dredges	2	2
PFO Stands	80	110	pH kits & meters	25	10
Sulfation Candles	20	6	Chlorine kits	12	2
Motors	14	4	Flow Meters	8	4
Wind Systems	4	6	Kemmerer Bottles	5	3
Bottles	200	6	Nets	20	30
Bubbler Boxes	6	7	Sieves	10	2
NV Housings	100	400	Fish tank apparatus	2	6
Wind Tunnel (Calibration)	1	13	Mailers	6	8
Stack Samplers	5	15	Canoe	1	52
Pipet Tubes	5	1	Pram	1	30
Turners	15	7	Outboard motors	4	16
Net test meters	1	1	Gasoline & oil	10	20
NV calibration Stands	1	3	Spare tires	4	4
Regional Source Test		500	Crab Rings	4	4
Misc. and expansion		300	Fyke Nets	6	6
		1686	Misc. and Expansion		300
					633
Chemical Acid		100	Chemical Acid		100
Alkali		100	Alkali		100
General		250	Hazardous		200
		450	General		250
					650

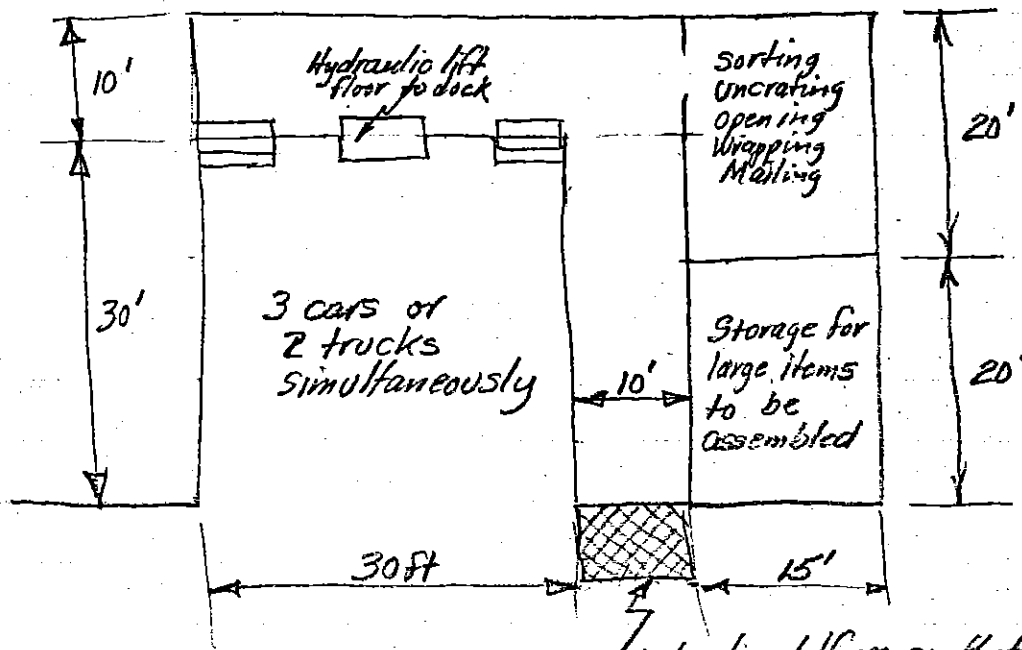
Total 3419 Ft². (Some in Biology, Field Monitoring, Administration).
(Includes vertical storage and walkway areas).

11/25/73 WCN

Loading and Receiving

$$\text{Area } 40 \times 55 \text{ ft} = 2200 \text{ ft}^2$$

For Bare-Bones cut off Hydraulic Platform, allow for only two cars (20 ft) and cut Receiving-storage to 8 ft and docks to 8 feet $36 \text{ ft} \times 38 \text{ ft} = 1368 \text{ ft}^2$



Hydraulic platform so that truck can pull straight in and platform be raised to truck height - then back to dock height with load.

1. Accessible dock for loading and unloading without undue waiting.
2. Elevator dock for various height trucks to avoid lifting & breakage.
3. Special elevator if multiple floor area is used.
4. Hand trucks, hydraulic truck, carts & tables for handling packages.
5. Desk, chair, phone, intercom, labeling gear, filing system etc.
6. Baler or shredder for handling excess packaging for recycle.
7. Area for disposal pickup container.



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-535

TOM McCALL
GOVERNOR

DIARUID F. O'SCANNLAIN
Director

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. 0 , November 27, 1973, EQC Public Hearing
Proposed Revisions to Air Contaminant Discharge Permit Regulations

Background

The Environmental Quality Commission at its October 22, 1972, meeting authorized the scheduling of this hearing for the purpose of receiving testimony relevant to proposed amendments to the Air Contaminant Discharge Permit Regulations, OAR, Chapter 340, Sections 20-033.02 through 20-033.20. A copy of the proposed amended Regulations are appended hereto and made a part of the record of this hearing.

As stated at the October 22, 1973, meeting, the purposes for amending the Air Contaminant Discharge Permit rules, and Table A attached thereto, are to provide clarity to certain sections, and to add new source categories to Table A which would be required to obtain an Air Contaminant Discharge Permit, and to authorize permits and fees for sources not included in Table A which would have uncontrolled emissions of 10 tons annually or emit malodorous odors.

The Notice of Public Hearing and a copy of the amended rules were mailed on October 24, 1973, to approximately 210 addresses on the Department's general mailing list. The notice was also published in the Secretary of State's bulletin on October 15, 1973. As of November 6, 1973, no written comments were received by the Department.

The proposed amendments, which are attached, have been prepared by enclosing language to be deleted from the existing regulations in brackets [], and underlining new or added language. The

proposed amendments are the same as those distributed with the Notice of Public Hearing except that Section 20-033.08 (1) which was essentially unchanged is now re-phrased to make it explicit that a person must obtain the required permit.

Discussion

The proposed amendments will accomplish three general purposes:

1. Add additional emission sources which should be included under permit conditions for better control of emissions.
2. Provide a better interpretation of those industries originally intended to be covered by Table A.
3. Facilitate the processing of permits by the Department and Regional authorities.

Two classes of industrial sources have been added to those which should be included under the permit rules:

1. Unforeseen industries that may in the future locate in the state, and industries (old or new) that are too new to be listed in the Standard Industry Code (SIC) Manual, and
2. Known specific sources that should be controlled by a permit.

Rather than amend Table A to add each significant emitting industry that locates in the State in the future, a general "catch-all" amendment has been added. Section 20-033.08 (2) would provide that:

"No person shall - - - operate any air contaminant source not listed in Table A which would emit:

- a. 10 tons or more per year, if the source were to operate uncontrolled, of any air contaminants including, but not limited to, particulates, SO_x , NO_x , or hydrocarbons; or
- b. at the discretion of the Department or Regional Authority, any malodorous odors."

An industry too new to be listed in the SIC Manual would also, by this new section, be required to have an Air Contaminant Discharge Permit. A known example would be an automobile shredding operation. All industries listed in the SIC Manual known to meet the conditions of this catch-all section are already listed in Table A.

A fee schedule for these sources not listed in Table A has been added to Section 20-033.12 (13), Fees. The variable fees are based upon the anticipated cost of issuing or denying the permit and of compliance inspections:

	Application Investigation and Permit Issuing or Denying Fee	Annual Permit Compliance Determination Fee
If low cost	\$ 25	\$ 25
If medium cost	150	100
If high cost	450	325

The Department and Regional Authorities propose that the following industrial sources be added to Table A:

TABLE A

<u>Item</u>		<u>SIC</u>
26	Battery manufacturing	3691
34	Fuel burning equipment d. Coal fired	4961
46	Pipe coating	3479
52	Beet sugar manufacturing	2063
53	Electroplating, polishing and anodizing	3471
54	Electric power generation	4911
55	Gas production and/or manufacturing	4925
56	Petroleum refining	2911
57	Wood preserving	2491

All of the above industrial sources are either existing or planned in the State and should be included in the permit program for better control.

Further subdivisions of the SIC classifications presently listed in Table A are needed to include all variations of an industry originally intended to be included in the permit program. The SIC classifications 2041 and 2042, "Grain Mill Products" are further subdivided as follows:

Table A

<u>Item</u>	<u>SIC</u>
13 Flour and other grain mill products	2041
14 Prepared feeds for animals and fowls	2042
15 Cereal preparations	2043
16 Blended and prepared flour	2045

The SIC classification 4221, "Grain Elevators," is further subdivided as follows:

Table A

<u>Item</u>	<u>SIC</u>
17 Grain elevators-storage only	4221
18 Grain elevators - primarily engaged in buying and/or marketing grain	5053

It should be noted that item 18, Grain elevators - primarily engaged in buying and/or marketing grain, contains an increase in fees from \$250 and \$150 to \$300 and \$225 for elevators handling 20,000 tons or more per year of grain.

This fee increase reflects the greater emission problem related to this type of grain operation. The lumber manufacturing classification has been further sub-divided into the following categories:

Table A

<u>Item</u>	<u>SIC</u>
50 Hardwood mills	2426
51 Shake and shingle mills	2429

To better facilitate processing of permits, Section 20-033.06, Notice Policy, which covers the 30-day public notice for written

comment prior to issuance of an air contaminant discharge permit was re-drafted. As now proposed, the Department would issue a thirty (30) day public notice of intent to issue an Air Contaminant Discharge Permit. This will allow the staff to prepare the permit while comments are submitted from interested parties instead of waiting until the end of the thirty (30) day period. If adverse comments are received and the Department considers the issue to be controversial, then a public hearing may be scheduled to resolve those issues.

Section 20-033.08 (3), Permit Required, is a new sub-section which makes possible the issuance of a special permit to industrial sources that meet the Table A requirements for a permit, but have no, or insignificant air contaminant emissions. This paragraph allows literal application of Table A and relieves the control agencies from expending effort on non-emitting sources. The sub-sections of this section which specified the phase-in of the permit program are deleted since the time period ends on January 1, 1974. Section 20-033.10, Multiple Source Permit, is simplified for control agency convenience. Section 20-033.12 (14), Fees, is old sub-section (13) except that the statement concerning the deposit of all fees collected by the Regional Authorities into a Department of Environmental Quality Air Emission Permit Account has been deleted. This amendment is in agreement with legislation passed by the 1973 Legislature. In Section 20-033.20 (7), Permit Programs for Regional Air Pollution authorities, the requirement that the Regional Authority submit to the Department a listing of air contaminant sources currently in violation of issued permits is deleted. No useful purpose was found to be served by this requirement.

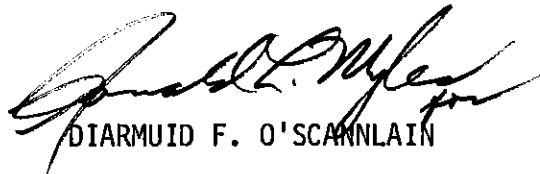
Summary and Conclusions

1. There is a need to require new, potentially polluting industries locating in the state to obtain an Air Contaminant Discharge Permit without having to first revise Table A of the Permit Regulations.
2. Nine (9) additional source categories of air contaminant emissions should be required to obtain an Air Contaminant Discharge Permit to better facilitate control of emissions.

3. Additional sub-divisions within the grain and lumber industries should be included in Table A for clarity. By doing this the control agencies will be provided with a means for better control over the affected source.
4. The Permit Regulations should be amended to facilitate the functioning of the control agencies and be in agreement with new legislation.

Director's Recommendation

It is recommended by the Director that OAR, Chapter 340, Sections 20-033.02 through 20-033.20 be amended as proposed herein, with such further amendments as may be deemed appropriate after consideration of information developed as a result of this hearing.



DIARMUID F. O'SCANNLAIN

RP:mh

11/8/73

Attachments

509J | CORVALLIS SCHOOL DISTRICT
1555 S.W. 35th Street
Corvallis, Oregon 97330-752-5141

November 26, 1973

THOMAS D. WOGAMAN, Ed.D.
SUPERINTENDENT

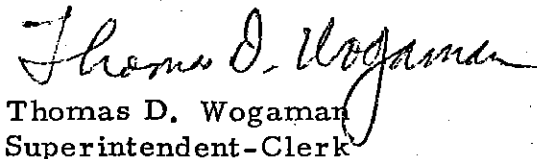
Mr. Diarmuid F. O'Scannlain, Director
Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Dear Sir:

The Board of Directors of Corvallis School District 509J has instructed me to transmit the following information to your department for inclusion in the testimony at the public hearing on November 27, 1973 concerning the proposed rule changes of the Air Contaminant Discharge Rule, OAR 340, Sections 20-033.02 through 20-033.20.

By its motion no. 81 at its meeting held on November 13, 1973, the Board of Directors of Corvallis School District 509J did go on record as opposing the necessity for fuel burning permits for the District on a fee basis.

Very truly yours,


Thomas D. Wogaman
Superintendent-Clerk

RWR:djg

RESOLUTION

We would like to go on record as opposing the actions of the Willamette Valley Air Pollution Board in requiring permits of the public schools. This appears to be an unfair action that is double taxation. All schools have their burners checked on an annual basis, and are cooperating in all ways to help in the fight against pollution.

We feel the permits are simply a fund raising activity. Because districts were not notified of this new regulation, funds were not budgeted.

It is the feeling of this group that public schools should be exempt from this requirement.

Yamhill County I.E.D. Curtis F. Benefield
McMinnville District #40 Orval L. Cross
Amity District #4J Charles W. Wiltse
Carlton District #11 Alta B. Farbeck
Dayton District #8 Travis A. Pummer
Newberg District #29J Loran A. Douglas
Sheridan District #48J William A. Wiltse
Willamina District #30J Donna Mitchell
Yamhill District #16 Raymond E. Wagoner
Yamhill-Carlton District #UH-1 Donald M. Simpson

TESTIMONY ON THE PROPOSED
AMENDMENTS TO THE RULES ON
AIR CONTAMINANT DISCHARGE PERMITS

November 27, 1973

I am Thomas C. Donaca representing the Air Quality Committee of Associated Oregon Industries. The following are our comments on the proposed rules:

1. 20-033.06. We understand the difficulty the Department was having with the time frames of having to give public notice 15 days after an application was accepted for filing, but before any form of permit was prepared. However, the proposed language has no time frame, at least from the applicant's standpoint. This seems in conflict with Rule 14-025 (Issuance of Permit). Subsection (2) of the rule states "If the Department proposes to issue a permit, proposed provisions prepared by the Department will be forwarded to the applicant and other interested persons at the discretion of the Department for comment. All comments must be submitted in writing within 14 days of mailing of the proposed provisions if such comments are to receive consideration prior to final action on the application."

Perhaps changing 14 days to 30 days in Rule 14-025(2) would solve this problem and you could delete proposed Rule 23-033.06 from further consideration.

2. 20-033.03(2). We would suggest that in line four of Subsection (2) after "any" the word "new" be inserted. This would confine this new language only to new operations of a type not otherwise listed in Table A, probably because no such type of operation currently exists in the State.

If you should adopt this language, we ask -- what sources are included that you want to cover that aren't included in Table A? Wouldn't this bring a number of small sources under permit and require of them sophisticated and expensive testing? Why can't Table A be expanded? This has the advantage of putting the source on notice as well as your staff that permits are required. You have started out with

a program certain in its application, and we suggest it be continued as started.

(3) 20-033.12(13). We urge you to put more certainty into the method of determining fees. Low cost, medium cost and high cost is too subjective. It could be based on the cost of the installation, a number of hours of work performed by the agency or other methods. We are also concerned that the proposed high cost fees are above all current fees except those proposed for a new classification in this proposal, and we wonder in what basis it is proposed?

(4) Table A. There are several questions regarding the proposed permit fees.

(a) We note that for (1) Incinerators (formerly bb and tt); fuel burning and uu) equipment (formerly cc/; and minerals, earth and rock ground or otherwise (formerly mm) that the words "not elsewhere included" have been eliminated. Does this mean that separate permits and fees will be charged to each type of installation? If so, this is contradictory to the language of 20-033.08(1) which states "air contaminant discharge permits shall be obtained for the air contaminant sources, including those processes and activities directly related or associated thereto which are listed in Table A." When the permit regulations were first adopted it was clearly understood that the major source was to get the permit which would include all subsidiary sources even though they had an SIC number and were listed in Table A. The three categories most often subject to the question were those for which the language "not elsewhere included" is now deleted. For example a large asphaltic concrete paving plant (Table A(3) might well have a boiler for process heat or steam, an incinerator for disposing of solid waste and a crushing operation. Under prior policy the asphaltic concrete paving plant was the operation receiving the permit because all three other operations were "associated or related". We believe that adoption of these new

categories as written may not be consistent with the stated policy of the Commission at the time of adoption of the permit regulations. We therefore request the reinsertion of "not elsewhere included" where deleted for both clarification sake and policy consistency.

- (b) On page 8j there is a note discussing a 20% increase in costs for multiple device installations. We wonder if this is justifiably confined to boilers and further whether the "Annual Permit Compliance Determination Fee" justifies the increase? We assume that applications for permits have now been received for the January 1 and July 1, 1973 permits and we are within the 60-day period for the January 1, 1974 group of permits. If adopted this change would appear to apply to all fuel burning equipment because of the change in the rule which places under Table A, 34 what was in Sections (cc) and (ww) of Table A. We would request at least that these be applicable only to new operations; that it not affect any existing permittees.
- (c) Again on page 8j there is a * . The language "not limited to fuel burning equipment generating steam for sale but excluding power generation." Does this mean that if a wood products plant generates electric power, and a number do, that they are no longer classed as fuel burning equipment at those fees? If not they will be automatically subject to Table A, 54 "Electric Power Generation" at fees which exceed any fees now being charged for any permit. We request a review of this classification and elimination of any possibility that power generation under these conditions be subject to the fees proposed for electric power generation.
- (c) Table A, 56 "Petroleum refining. Oregon does not now have a major oil refinery but it does have some rerefiners. We suggest the fee is too

high for rerefiners. Further we question the new higher fees and wonder how they were justified. ORS 449.733(2) states "The permit fees contained in the schedule shall be based upon the anticipated cost of filing and investigating the application, of issuing or denying the requested permit, and of an inspection program to determine compliance or non-compliance with the permit. The permit fees are to cover only certain aspects of your permit program and not of your general operational program. We believe there should be adequate justification of the amounts of these proposed new and changed permit fees, particularly where they are higher than other existing classifications.

St. Helens Public Schools

SCHOOL DISTRICT NO. 502
215 S. 2ND STREET
ST. HELENS, OREGON 97051
PHONE 397-3085

November 27, 1973

To: Hearings Officer For
Department of Environmental Quality
State of Oregon

- (1) Public Hearing for the purpose of amending portions of the Air Contaminant Discharge Rule, OAR 340, Sections 20-033.02 through 20-033.20.
- (2) Date of hearing: November 27, 1973; Time: 10:00 a.m.; Place: Auditorium Public Service Building, 920 S.W. Sixth Avenue, Portland, Oregon.
- (3) STATEMENT: By St. Helens School District No. 502, St. Helens, Oregon 97051

We petition that school districts be exempted from the payment of any fees under these or other regulations of the Department of Environmental Quality. Financial support of school districts is derived basically from local taxes and state revenue as authorized by the Oregon legislature.

Assessment of these fees upon school districts is in effect a form of taxation. It is not good governmental fiscal practice for one state agency to tax another agency of the state. This is like taking money out of one pocket and placing it in another of the same coat. Taxing school districts for this purpose will create an unequal tax burden on citizens throughout a given area.

Long ago the United States Supreme Court issued the: "State Instrumentalities" Doctrine." The court held: "that the basic division of power between federal and state governments required that each level of government be prevented from taxing the "instrumentalities" - the property, securities, and activities - of the other, to insure that the taxing power would not be used to weaken the powers of the other level of government."

The taxing of one state agency by another state agency has the effect to weaken the powers of the one that is taxed. To the local tax payer this becomes an added tax. To the local school district this is a direct loss of financial resources. The 1973 legislature granted additional state revenue to school districts for the purpose of lowering local property taxes. Is then, another state agency to be authorized to make assessments which will in turn raise to a degree these same taxes?

We strongly protest to any fee assessment upon school districts, it is a tax, because such agency financing is unsound governmental policy, and is contrary to the public interest.

Respectfully yours,
Wayne Foster
Wayne Foster, Superintendent-Clerk

St. Helens Public Schools

SCHOOL DISTRICT NO. 502
215 S. 2ND STREET
ST. HELENS, OREGON 97051
PHONE 397-3085

November 27, 1973

To: Hearings Officer For
Department of Environmental Quality
State of Oregon

- (1) Public Hearing for the purpose of amending portions of the Air Contaminant Discharge Rule, OAR 340, Sections 20-033.02 through 20-033.20.
- (2) Date of Hearing: November 27, 1973; Time: 10:00 a.m.; Place: Auditorium Public Service Building, 920 S.W. Sixth Avenue, Portland, Oregon.
- (3) STATEMENT: By St. Helens School District No. 502, St. Helens, Oregon 97051

We petition that school districts be exempted from the payment of any fees under these or other regulations of the Department of Environmental Quality. Financial support of school districts is derived basically from local taxes and state revenue as authorized by the Oregon legislature.

Assessment of these fees upon school districts is in effect a form of taxation. It is not good governmental fiscal practice for one state agency to tax another agency of the state. This is like taking money out of one pocket and placing it in another of the same coat. Taxing school districts for this purpose will create an unequal tax burden on citizens throughout a given area.

Long ago the United States Supreme Court issued the: "State Instrumentalities" Doctrine." The court held: "that the basic division of power between federal and state governments required that each level of government be prevented from taxing the "instrumentalities" - the property, securities, and activities - of the other, to insure that the taxing power would not be used to weaken the powers of the other level of government."

The taxing of one state agency by another state agency has the effect to weaken the powers of the one that is taxed. To the local tax payer this becomes an added tax. To the local school district this is a direct loss of financial resources. The 1973 legislature granted additional state revenue to school districts for the purpose of lowering local property taxes. Is then, another state agency to be authorized to make assessments which will in turn raise to a degree these same taxes?

We strongly protest to any fee assessment upon school districts, it is a tax, because such agency financing is unsound governmental policy, and is contrary to the public interest.

Respectfully yours,
Wayne Foster
Wayne Foster, Superintendent-Clerk

St. Helens Public Schools

SCHOOL DISTRICT NO. 502
215 S. 2ND STREET
ST. HELENS, OREGON 97051
PHONE 397-3085

November 27, 1973

To: Hearings Officer For
Department of Environmental Quality
State of Oregon

- (1) Public Hearing for the purpose of amending portions of the Air Contaminant Discharge Rule, OAR 340, Sections 20-033.02 through 20-033.20.
- (2) Date of Hearing: November 27, 1973; Time: 10:00 a.m.; Place: Auditorium Public Service Building, 920 S.W. Sixth Avenue, Portland, Oregon.
- (3) STATEMENT: By St. Helens School District No. 502, St. Helens, Oregon 97051

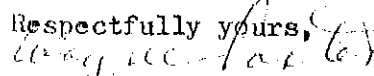
We petition that school districts be exempted from the payment of any fees under these or other regulations of the Department of Environmental Quality. Financial support of school districts is derived basically from local taxes and state revenue as authorized by the Oregon legislature.

Assessment of these fees upon school districts is in effect a form of taxation. It is not good governmental fiscal practice for one state agency to tax another agency of the state. This is like taking money out of one pocket and placing it in another of the same coat. Taxing school districts for this purpose will create an unequal tax burden on citizens throughout a given area.

Long ago the United States Supreme Court issued the: "State Instrumentalities Doctrine." The court held: "that the basic division of power between federal and state governments required that each level of government be prevented from taxing the "instrumentalities" - the property, securities, and activities - of the other, to insure that the taxing power would not be used to weaken the powers of the other level of government."

The taxing of one state agency by another state agency has the effect to weaken the powers of the one that is taxed. To the local tax payer this becomes an added tax. To the local school district this is a direct loss of financial resources. The 1973 legislature granted additional state revenue to school districts for the purpose of lowering local property taxes. Is then, another state agency to be authorized to make assessments which will in turn raise to a degree these same taxes?

We strongly protest to any fee assessment upon school districts, it is a tax, because such agency financing is unsound governmental policy, and is contrary to the public interest.

Respectfully yours,

Wayne Foster, Superintendent-Clerk

St. Helens Public Schools

SCHOOL DISTRICT NO. 502
215 S. 2ND STREET
ST. HELENS, OREGON 97051
PHONE 397-3085

November 27, 1973

To: Hearings Officer For
Department of Environmental Quality
State of Oregon

- (1) Public Hearing for the purpose of amending portions of the Air Contaminant Discharge Rule, OAR 340, Sections 20-033.02 through 20-033.20.
- (2) Date of Hearing: November 27, 1973; Time: 10:00 a.m. ; Place: Auditorium Public Service Building, 920 S.W. Sixth Avenue, Portland, Oregon.
- (3) STATEMENT: By St. Helens School District No. 502, St. Helens, Oregon 97051

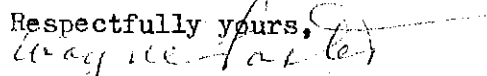
We petition that school districts be exempted from the payment of any fees under these or other regulations of the Department of Environmental Quality. Financial support of school districts is derived basically from local taxes and state revenue as authorized by the Oregon legislature.

Assessment of these fees upon school districts is in effect a form of taxation. It is not good governmental fiscal practice for one state agency to tax another agency of the state. This is like taking money out of one pocket and placing it in another of the same coat. Taxing school districts for this purpose will create an unequal tax burden on citizens throughout a given area.

Long ago the United States Supreme Court issued the: "State Instrumentalities Doctrine." The court held: " that the basic division of power between federal and state governments required that each level of government be prevented from taxing the "instrumentalities" - the property, securities, and activities - of the other, to insure that the taxing power would not be used to weaken the powers of the other level of government."

The taxing of one state agency by another state agency has the effect to weaken the powers of the one that is taxed. To the local tax payer this becomes an added tax. To the local school district this is a direct loss of financial resources. The 1973 legislature granted additional state revenue to school districts for the purpose of lowering local property taxes. Is then, another state agency to be authorized to make assessments which will in turn raise to a degree these same taxes?

We strongly protest to any fee assessment upon school districts, it is a tax, because such agency financing is unsound governmental policy, and is contrary to the public interest.

Respectfully yours,

Wayne Foster, Superintendent-Clerk

St. Helens Public Schools

SCHOOL DISTRICT NO. 502
215 S. 2ND STREET
ST. HELENS, OREGON 97051
PHONE 397-3085

November 27, 1973

To: Hearings Officer For
Department of Environmental Quality
State of Oregon

- (1) Public Hearing for the purpose of amending portions of the Air Contaminant Discharge Rule, OAR 340, Sections 20-033.02 through 20-033.20.
- (2) Date of Hearing: November 27, 1973; Time: 10:00 a.m.; Place: Auditorium Public Service Building, 920 S.W. Sixth Avenue, Portland, Oregon.
- (3) STATEMENT: By St. Helens School District No. 502, St. Helens, Oregon 97051

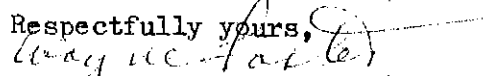
We petition that school districts be exempted from the payment of any fees under these or other regulations of the Department of Environmental Quality. Financial support of school districts is derived basically from local taxes and state revenue as authorized by the Oregon legislature.

Assessment of these fees upon school districts is in effect a form of taxation. It is not good governmental fiscal practice for one state agency to tax another agency of the state. This is like taking money out of one pocket and placing it in another of the same coat. Taxing school districts for this purpose will create an unequal tax burden on citizens throughout a given area.

Long ago the United States Supreme Court issued the: "State Instrumentalities" Doctrine." The court held: " that the basic division of power between federal and state governments required that each level of government be prevented from taxing the "instrumentalities" - the property, securities, and activities - of the other, to insure that the taxing power would not be used to weaken the powers of the other level of government."

The taxing of one state agency by another state agency has the effect to weaken the powers of the one that is taxed. To the local tax payer this becomes an added tax. To the local school district this is a direct loss of financial resources. The 1973 legislature granted additional state revenue to school districts for the purpose of lowering local property taxes. Is then, another state agency to be authorized to make assessments which will in turn raise to a degree these same taxes?

We strongly protest to any fee assessment upon school districts, it is a tax, because such agency financing is unsound governmental policy, and is contrary to the public interest.

Respectfully yours,

Wayne Foster, Superintendent-Clerk



DEPARTMENT OF ENVIRONMENTAL QUALITY

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

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

Notice of Public Hearing

Department of Environmental Quality

State of Oregon

NOTICE IS HEREBY GIVEN that the Department of Environmental Quality will conduct public hearings before a hearings officer designated by the Department for the purpose of amending portions of the Air Contaminant Discharge Rule, OAR 340, Sections 20-033.02 through 20-033.20. The amendments clarify source categories subject to permits, adds new sources required to have permits, and clarifies fees for some source categories.

The Department will hold public hearings to consider testimony relating to the proposed rule changes as indicated below:

Date: November 27, 1973

Time: 10:00 a.m.

Place: Auditorium (2nd Floor)
Public Service Building
920 S. W. Sixth Avenue
Portland, OR

Copies of the proposed rule changes may be obtained from the Department at 1234 S. W. Morrison Street, Portland, Oregon 97205 (telephone 229-5630)

Dated October 4, 1973


DIARMUID F. O'SCANNLAIN, Director

AIR CONTAMINANT DISCHARGE
PERMITS

15 OCT 1973

[ED. NOTE: Unless otherwise specified, sections 20-033.02 through 20-033.20 of this chapter of the Oregon Administrative Rules Compilation were adopted by the Department of Environmental Quality July 28, 1972, and filed with the Secretary of State August 31, 1972 as DEQ 47.]

20-033.02 PURPOSE. The purpose of these regulations is to prescribe the requirements and procedures for obtaining Air Contaminant Discharge Permits pursuant to Chapter 406, Oregon Laws 1971 for stationary sources.

20-033.04 DEFINITIONS. As used in these regulations unless otherwise required by context:

(1) "Department" means Department of Environmental Quality.

(2) "Commission" means Environmental Quality Commission.

(3) "Person" means the United States Government and agencies thereof, a n y state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatever:

(4) "Permit" or "Air Contaminant Discharge Permit" means a written permit issued by the Department or Regional Authority in accordance with duly adopted procedures, which by its conditions authorizes the permittee to construct, install, modify or operate specified facilities, conduct specified activities, or emit, discharge or dispose of air contaminants in accordance with specified practices, limitations or prohibitions.

(5) "Regional Authority" means the [Columbia-Willamette Air Pollution Authority,] Mid-Willamette Valley Air Pollution Authority [,] or the Lane Regional Air Pollution Authority.

20-033.06 NOTICE POLICY. It shall be the policy of the Department of Environmental Quality and the Regional Authorities to issue public notice [as to the receipt of an application within 15 days after the application is accepted for filing.

The public notice shall allow 30 days for written comment from the public and from interested State and Federal agencies.

20-033.08 PERMIT REQUIRED. (1) Air contaminant discharge permits shall be obtained for the air contaminant sources, including those processes and activities directly related or associated thereto which are listed in Table A, appended hereto and incorporated therein by reference [.] [in accordance with the schedules set forth in subsections (2), (3), (4), and (5) of this section.]

(2) No person shall construct, install, establish, develop or operate any air contaminant source listed in Table A appended hereto or any source not listed in Table A which would emit an uncontrolled 10 tons or more per year of any air contaminants including, but not limited to: particulates, SO₂, NO_x, or hydrocarbons ~~or any malodorous emissions without~~ first obtaining a permit from the Department or Regional Authority.

(3) Any source listed in Table A may apply to the Department or Regional Authority for a special ~~Non-Emission~~ Air Contaminant Discharge Permit if operating a facility with no air contaminant discharges. The determination of applicability of this ~~Non-Emission~~ Air Contaminant Discharge Permit shall be made by the Department or Regional Authority having jurisdiction. If issued a special ~~Non-Emission~~ Air Contaminant Discharge Permit, the Application Investigation and Permit Issuing or Denying Fee and/or Annual Permit Compliance Determination Fee, provided by Section 20-033.12, may be waived by the Department or Regional Authority.

[(3) After January 1, 1973, no person shall operate any air contaminant source (a) through (l) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.]

[(4) After July 1, 1973, no person shall operate any air contaminant source (m) through (hh) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.]

[(5) After January 1, 1974, no person shall operate any air contaminant source (ii) through (uu) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.]

20-033.10 MULTIPLE-SOURCE PERMIT. When a single site includes more than one of the air contaminant sources listed in Table A, a single permit may be issued including all sources located at the site. [Such] For uniformity ~~such per-~~ *applicators* ~~mits~~ shall separately identify by subsection each air contaminant source included from Table A. [Applications for multiple-source permits will not be received by the Department or Regional Authority for processing without

prior written agreement between the permit issuing agency and the applicant concerning the overall merit of issuing a multiple-source permit for the site under consideration.

(1) When a single air contaminant source which is included in a multiple-source permit, is subject to permit modification, revocation, suspension or denial, such action by the Department or Regional Authority shall only affect that individual source without thereby affecting any other source subject to that permit.

(2) When a multiple-source permit includes air contaminant sources subject to the jurisdiction of the Department and a Regional Authority, the Department may require that it shall be the permit issuing agency. In such cases, the Department and the Regional Authority shall otherwise maintain and exercise all other aspects of their respective jurisdictions over the permittee.

20-033.12 FEES. (1) All persons required to obtain a permit shall be subject to a three-part fee consisting of a uniform non-refundable Filing Fee of \$25.00, a variable Application Investigation and Permit Issuing or Denying Fee and a variable Annual Permit Compliance Determination Fee. The amount equal to the Filing Fee and the Application Investigation and Permit Issuing or Denying Fee shall be submitted as a required part of the application. The Annual Permit Compliance Determination Fee shall be paid prior to issuance of the actual permit.

(2) The fee schedule contained in the listing of air contaminant sources listed in Table A appended hereto shall be applied to determine the variable permit fees.

(3) The Filing Fee and Application Investigation and Permit Issuing or Denying Fee shall be submitted with each application for a new permit, modified permit, or renewed permit.

(4) Modifications of existing, unexpired permits which are instituted by the Department or Regional Authority due to changing conditions or standards, receipts of additional information or any other reason pursuant to applicable statutes and 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.

(5) Applications for multiple-source permits received pursuant to Section 20-003.10 shall be subject to a single \$25.00 Filing Fee. The application Investigation and Permit Issuing or Denying Fee and Annual Permit Compliance Determination Fee for multiple-source permits shall be equal to the total amounts required by the individual sources involved, as listed in Table A.

(6) At least one Annual Permit Compliance Determination Fee shall be paid prior to final issuance of a permit. Thereafter, the Annual Permit Compliance Determination Fee shall be paid at least 30 days prior to the start of each subsequent permit year. Failure to timely remit the Annual Permit Compliance Determination Fee in accordance with the above shall be considered grounds for not issuing a permit or revoking an existing permit.

(7) If a permit is issued for a period less than one (1) year, the applicable Annual Permit Compliance Determination Fee shall be equal to the full annual fee. If a permit is issued for a period greater than 12 months, the applicable Annual Permit Compliance Determination Fee shall be prorated by multiplying the Annual Permit Compliance Determination Fee by the number of months covered by the permit and dividing by twelve (12).

(8) In no case shall a permit be issued for more than five (5) years.

(9) Upon accepting an application for filing, the Filing Fee shall be considered as non-refundable.

(10) The Application Investigation and Permit Issuing or Denying Fee need not be submitted upon notice in writing by the permit issuing agency or shall be refunded when submitted with applications for modified or renewed permits if the following conditions exist:

(a) The modified or renewed permit is essentially the same as the previous permit.

(b) The source or sources included are in compliance with all conditions of the modified or renewed permit.

(11) When an air contaminant source which is in compliance with the rules of a permit issuing agency relocates or pro-

poses to relocate its operation to a site in the jurisdiction of another permit issuing agency having comparable control requirements, application may be made and approval may be given for an exemption of the Application Investigation and Permit Issuing or Denying Fee. The permit application and the request for such fee reduction shall be accompanied by (1) a copy of the permit issued for the previous location, and (2) certification that the permittee proposes to operate with the same equipment, at the same production rate, and under similar conditions at the new or proposed location. Certification by the agency previously having jurisdiction that the source was operated in compliance with all rules and regulations will be acceptable should the previous permit not indicate such compliance.

(12) If a temporary or conditional permit is issued in accordance with adopted procedures, fees submitted with the application for an air contaminant discharge permit shall be retained and be applicable to the regular permit when it is granted or denied.

(13) Sources required to obtain a permit under Section 20-033.08 (2) not included in Table A shall be subject to, in addition to the Filing Fee of \$25.00, a fee schedule based upon the anticipated costs of investigating the application, of issuing or denying the permit, and of compliance inspections. Said schedules shall be subject to confirmation by the Environmental Quality Commission.

(14) ~~[(13)]~~ All fees shall be made payable to the permit issuing agency, ~~and shall~~ be deposited in the State Treasury by the Department of Environmental Quality to the credit of the Department of Environmental Quality Air Emission Permit Account which is continuously appropriated for the purpose of funding the air contaminant discharge permit program covered by these regulations. ✓

20-033.14 PROCEDURES FOR OBTAINING PERMITS. Submission and processing of applications for permits and issuance, denial, modification, and revocation of permits shall be in accordance with duly adopted procedures of the permit issuing agency.

20-033.16 OTHER REQUIREMENTS. (1) No person shall construct, install, establish, modify or enlarge any air contaminant source listed in Table A or facilities for controlling, treating, or otherwise limiting air contaminant emissions from air contaminant sources listed in Table A without notifying the permit issuing agency as required by ORS 449.712 and rules promulgated thereunder.

(2) Prior to construction, installation, establishment, modification or enlargement of any air contaminant source listed in Table A or facilities for controlling, treating, or otherwise limiting air contaminant emissions from air contaminant sources listed in Table A, detailed plans and specifications shall be submitted to and approved in writing by the Department or Regional Authority upon request as required by ORS 449.712 and rules promulgated thereunder.

20-033.18 REGISTRATION EXEMPTION. Air contaminant sources constructed and operated under a permit issued pursuant to these regulations may be exempted from Registration as required by rules adopted pursuant to ORS 449.707.

20-033.20 PERMIT PROGRAMS FOR REGIONAL AIR POLLUTION AUTHORITIES. Subject to the provisions of this section 20-033.20, the Environmental Quality Commission authorizes each Regional Authority to issue air contaminant discharge permits for air contamination sources within its jurisdiction.

(1) A Regional Authority's permit program, including proposed permits and proposed revised permits, shall be submitted to the Environmental Quality Commission for review and approval prior to final adoption by the Regional Authority. Each permit issued by a Regional Authority shall by its conditions authorize the permittee to construct, install, modify or operate specified facilities, conduct specified activities, or emit, discharge, or dispose of air contaminants in accordance with specified practices, limitations, or prohibitions.

(2) Each permit proposed to be issued or revised by a Regional Authority shall be submitted to the Department of Environmental Quality at least fourteen (14) days prior to the proposed issuance date. Within the fourteen (14) day period, the Department shall give written notice to the Regional Authority of any objection the Department has to the proposed permit or revised permit or its issuance. No permit shall be issued by a Regional Authority unless all objections thereto by

the Department shall be resolved prior to its issuance. If the Department does not make any such objection, the proposed permit or revised permit may be issued by the Regional Authority.

(3) If there is an objection by the Department regarding a proposed or revised permit, the Department shall present its objection before the Board of the Regional Authority in question prior to the issuance of a final permit.

(4) If as a result of objection by the Department regarding a proposed or revised permit, the Regional Authority is unable to meet the time provisions of either this regulation or those contained in an existing permit, the Regional Authority shall

issue a temporary permit for a period not to exceed 90 days.

(5) The Regional Authority shall give written notice to the Department of its intention to deny an application for a permit, not to renew a permit, or to revoke or suspend any existing permit.

(6) A copy of each permit issued or revised by a Regional Authority pursuant to this section shall be promptly submitted to the Department.

(7) The Regional Authority shall prepare and submit to the Department a summary listing of air contaminant sources currently in violation of issued permits. These reports shall be made on a quarterly basis commencing April 1, 1973.

PROPOSED CHANGES TO
TABLE A - AIR CONTAMINANT SOURCES AND
ASSOCIATED FEE SCHEDULE

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
1.	[a] Asphalt production by distillation	2951	\$ 75	\$ 50
2.	[b] Asphalt blowing plants	2951	100	75
3.	[c] Asphaltic concrete paving plants	2951	100	100
4.	[d] Asphalt felts and coating	2952	150	100
5.	[e] Calcium carbide manufacturing	2819	225	150
6.	[f] Alkalies and chlorine manufacturing	2812	225	175
7.	[g] Nitric acid manufacturing	2819	100	75
8.	[h] Ammonia manufacturing	2819	200	125
9.	[i] Secondary lead smelting	3341	225	175
10.	[j] Rendering plants	2094	150	100
11.	[k] Coffee roasting	2095	100	75
12.	[l] Sulfite pulp and paper production	2611 2621 2631	300	175
	[m] [Grain mill products located in Special Control Areas] [10,000 or more T/hr.] [less than 10,000 T/yr.]	[2041] [2042]	[250] [50]	[150] [50]
13.	<u>Flour and other grain mill products in Special Control Areas</u> a. <u>10,000 or more T/yr.</u> b. <u>Less than 10,000 T/yr.</u>	<u>2041</u>	<u>250</u> <u>50</u>	<u>150</u> <u>50</u>

Table A Continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classification Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determination Fee</u>
<u>14.</u>	<u>Prepared feeds for animals and fowls in Special Control Areas.</u>	<u>2042</u>		
	a. <u>10,000 or more T/yr.</u>		\$ <u>250</u>	\$ <u>150</u>
	b. <u>Less than 10,000 T/yr.</u>		<u>50</u>	<u>50</u>
<u>15.</u>	<u>Cereal preparations in Special Control Areas.</u>	<u>2043</u>	<u>250</u>	<u>150</u>
<u>16.</u>	<u>Blended and prepared flour in Special Control Areas.</u>	<u>2045</u>		
	a. <u>10,000 or more T/yr.</u>		<u>250</u>	<u>150</u>
	b. <u>Less than 10,000 T/yr.</u>		<u>50</u>	<u>50</u>
[n]	[Grain elevators located in Special Control Areas] [20,000 or more T/yr.] [Less than 20,000 T/yr.]	[4221]	[150] [50]	[100] [50]
<u>17.</u>	<u>Grain elevators -storage only located in Special Control Areas.</u>	<u>4221</u>		
	a. <u>20,000 or more T/yr.</u>		<u>150</u>	<u>100</u>
	b. <u>Less than 20,000 T/yr.</u>		<u>50</u>	<u>50</u>
<u>18.</u>	<u>Grain elevators - primarily engaged in buying and/or marketing grain - in Special Control Areas.</u>	<u>5053</u>		
	a. <u>20,000 or more T/yr.</u>		<u>300</u>	<u>225</u>
	b. <u>Less than 20,000 T/yr.</u>		100 <u>50</u>	75 <u>50</u>
<u>19.</u>	[o] Redimix concrete	3273	75	50
<u>20.</u>	[p] Plywood manufacturing	2432	150	100
<u>21.</u>	[q] Veneer manufacturing (not elsewhere included)	2434	75	75
<u>22.</u>	[r] Particleboard manufacturing	2492	300	150
<u>23.</u>	[s] Hardboard manufacturing	2493	200	100
<u>24.</u>	[t] Charcoal manufacturing	2861	200	100

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classification Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determination Fee</u>
<u>25.</u>	[u] Battery separator manufacturing	2499	\$ 75	\$ 50
	[v] [Furniture and fixtures 100 or more employees]	[2511]	[125]	[100]
<u>26.</u>	<u>Battery manufacturing</u>	<u>3691</u>	<u>100</u>	<u>75</u>
<u>27.</u>	<u>Furniture and fixtures</u>	<u>2511</u>		
	<u>a. 100 or more employees</u>		<u>125</u>	<u>100</u>
	<u>b. 100 or more but less than 100 employees</u>		<u>75</u>	<u>50</u>
<u>28.</u>	[w] Glass manufacturing	3231	100	75
<u>29.</u>	[x] Cement manufacturing	3241	300	150
<u>30.</u>	[y] Lime manufacturing	3274	150	100
<u>31.</u>	[z] Gray iron and steel foundries	3321 3323		
	<u>a. 3,500 or more tons per year production</u>		300	150
	<u>b. Less than 3,500 tons per year production</u>		100	100
<u>32.</u>	[aa] Steel works, rolling and finishing mills	3312	300	175
	[bb] [Incinerators (not elsewhere included) more than 2,000 lb/hr. capacity]		[100]	[100]
<u>33.</u>	<u>Incinerators (not elsewhere included)</u>			
	<u>a. Greater than 4,000 lbs/hr capacity</u>		<u>100</u>	<u>100</u>
	<u>b. 40 lb/hr to 4,000 lb/hr capacity</u>		<u>75</u>	<u>75</u>

Table A continued	Air Contaminant Source	Standard Industrial Classification Number	Application Investigation and Permit Issuing or Denying Fee	Annual Permit Compliance Determination Fee
[cc] [Fuel burning equipment (not elsewhere included) Residual oil 5 million or more btu per hour (heat input) Wood fired 5 million or more btu per hour (heat input)]		[4961]	\$ [100] [100]	\$ [50] [50]
34.	Fuel burning equipment (not elsewhere included)	4961*		
	a. Residual oil			
	1) 250 million or more btu/hr. (heat input)		<u>150</u>	<u>100</u>
	2) 5 million or more but less than 250 million btu/hr. (heat input)		<u>100</u>	<u>50</u>
	3) Less than 5 million btu/hr. (heat input)		<u>25</u>	<u>25</u>
	b. Distillate oil			
	1) 250 million or more btu/hr. (heat input)		<u>150</u>	<u>100</u>
	2) 5 million or more but less than 250 million btu/hr. (heat input)		<u>25</u>	<u>25</u>
	c. Wood fired			
	1) 250 million or more btu/hr. (heat input)		<u>150</u>	<u>100</u>
	2) 5 million or more but less than 250 million btu/hr. (heat input)		<u>100</u>	<u>50</u>
	3) Less than 5 million btu/hr. (Heat input)		<u>25</u>	<u>25</u>
	d. Coal fired			
	1) 5 million or more but less than 250 million btu/hr. (heat input)		<u>100</u> 150	<u>50</u> 100

NOTE: (2) The above fees shall be increased by 20% to cover costs of multiple device installations.

*Not limited to fuel burning equipment generating steam for sale, but
not limited to any other...
 8j

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>35.</u>	[dd] Primary smelting and refin- ing of ferrous and nonfer- rous metals not elsewhere classified.	3313 3339		
	<u>a.</u> 2,000 or more tons per year production		300	175
	<u>b.</u> Less than 2,000 tons per year production		100	75
<u>36.</u>	[ee] Synthetic resin manufacturing	<u>2821</u> [2831]	100	100
<u>37.</u>	[ff] Seed cleaning located in Special Control Areas (not elsewhere included)	0719	0	0
<u>38.</u>	[gg] Kraft pulp and paper production	2611 2621 2631	300	175
<u>39.</u>	[hh] Primary aluminum production	3334	\$ 300	\$ 175
<u>40.</u>	[ii] Industrial inorganic and organic chemicals manu- facturing (not elsewhere included)	2810	250	125
<u>41.</u>	[jj] Sawmill and planing	2421		
	<u>a.</u> 25,000 or more bd.ft/shift		75	50
	<u>b.</u> Less than 25,000 bd.ft/shift		25	25
	[kk] [Mill work]	[2431]	[75]	[50]
<u>42.</u>	Mill work with 5 employees or more	<u>2431</u>	<u>75</u>	<u>50</u>
	[ll] [Furniture and fixtures less than 100 employees]	[2511]	[75]	[50]
<u>43.</u>	[mm] Minerals, earth and rock ground or otherwise treated for safe (not elsewhere included)	3295 <u>1442</u>	100	75

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
44.	[nn] Brass and bronze foundries	3362	75	50
45.	[oo] Aluminum foundries (not elsewhere included)	3361	75	50
46.	[pp] <u>Galvanizing and pipe coating - exclude all other activities</u>	3479	75	50
47.	[qq] <u>Smoke houses with 5 or more employees</u>	2013	75	50
48.	[rr] Herbicide manufacturing	2879	225	175
49.	[ss] <u>Building paper and building board mills (not else - where included)</u>	2661	150	100
	[tt] [Incinerators (not else- where included) 2,000 to 4,000 pounds per hour capacity)]		\$ [75]	\$ [75]
	[uu] [Fuel burning equipment (not elsewhere included) Residual oil less than 5 million btu/hr (heat input) Distillate oil 5 million or more btu/hr (heat input) Wood fired less than 5 million btu/hr (heat input)]	[4961]	[25] [25] [25]	[25] [25] [25]
50.	<u>Hardwood mills with 5 or more employees</u>	<u>2426</u>	<u>50</u>	<u>25</u>
51.	<u>Shake and shingle mills with 5 or more employees</u>	<u>2429</u>	<u>50</u>	<u>25</u>
52.	<u>Beet sugar manufacturing</u>	<u>2063</u>	<u>150</u>	<u>100</u>
53.	<u>Electroplating, polishing and anodizing with 5 or more employees</u>	<u>3471</u>	<u>75</u>	<u>50</u>

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>54.</u>	<u>Electric power generation</u>	<u>4911</u>	<u>350</u>	<u>225</u>
<u>55.</u>	<u>Gas production and/or manufacturing</u>	<u>4925</u>	<u>350</u>	<u>225</u>
<u>56.</u>	<u>Petroleum refining</u>	<u>2911</u>	<u>450</u>	<u>325</u>
<u>57.</u>	<u>Wood Preserving</u>	<u>2491</u>	<u>75</u>	<u>50</u>
<u>88.</u>	<u>Frozen fruits, juices, vege- tables, and specialties</u>	<u>2087</u>	<u>100</u>	<u>75</u>

TESTIMONY ON THE PROPOSED
AMENDMENTS TO THE RULES ON
AIR CONTAMINANT DISCHARGE PERMITS

November 27, 1973

I am Thomas C. Donaca representing the Air Quality Committee of Associated Oregon Industries. The following are our comments on the proposed rules:

1. 20-033.06. We understand the difficulty the Department was having with the time frames of having to give public notice 15 days after an application was accepted for filing, but before any form of permit was prepared. However, the proposed language has no time frame, at least from the applicant's standpoint. This seems in conflict with Rule 14-025 (Issuance of Permit). Subsection (2) of the rule states "If the Department proposes to issue a permit, proposed provisions prepared by the Department will be forwarded to the applicant and other interested persons at the discretion of the Department for comment. All comments must be submitted in writing within 14 days of mailing of the proposed provisions if such comments are to receive consideration prior to final action on the application."

Perhaps changing 14 days to 30 days in Rule 14-025(2) would solve this problem and you could delete proposed Rule 23-033.06 from further consideration.

2. 20-033.08(2). We would suggest that in line four of Subsection (2) after "any" the word "new" be inserted. This would confine this new language only to new operations of a type not otherwise listed in Table A, probably because no such type of operation currently exists in the State.

If you should adopt this language, we ask -- what sources are included that you want to cover that aren't included in Table A? Wouldn't this bring a number of small sources under permit and require of them sophisticated and expensive testing? Why can't Table A be expanded? This has the advantage of putting the source on notice as well as your staff that permits are required. You have started out with

a program certain in its application, and we suggest it be continued as started.

(3) 20-033.12(13). We urge you to put more certainty into the method of determining fees. Low cost, medium cost and high cost is too subjective. It could be based on the cost of the installation, a number of hours of work performed by the agency or other methods. We are also concerned that the proposed high cost fees are above all current fees except those proposed for a new classification in this proposal, and we wonder in what basis it is proposed?

(4) Table A. There are several questions regarding the proposed permit fees.

(a) We note that for (1) Incinerators (formerly bb and tt); fuel burning and uu) equipment (formerly cc/; and minerals, earth and rock ground or otherwise (formerly mm) that the words "not elsewhere included" have been eliminated. Does this mean that separate permits and fees will be charged to each type of installation? If so, this is contradictory to the language of 20-033.08(1) which states "air contaminant discharge permits shall be obtained for the air contaminant sources, including those processes and activities directly related or associated thereto which are listed in Table A." When the permit regulations were first adopted it was clearly understood that the major source was to get the permit which would include all subsidiary sources even though they had an SIC number and were listed in Table A. The three categories most often subject to the question were those for which the language "not elsewhere included" is now deleted. For example a large asphaltic concrete paving plant (Table A(3) might well have a boiler for process heat or steam, an incinerator for disposing of solid waste and a crushing operation. Under prior policy the asphaltic concrete paving plant was the operation receiving the permit because all three other operations were "associated or related". We believe that adoption of these new

categories as written may not be consistent with the stated policy of the Commission at the time of adoption of the permit regulations. We therefore request the reinsertion of "not elsewhere included" where deleted for both clarification sake and policy consistency.

- (b) On page 3j there is a note discussing a 20% increase in costs for multiple device installations. We wonder if this is justifiably confined to boilers and further whether the "Annual Permit Compliance Determination Fee" justifies the increase? We assume that applications for permits have now been received for the January 1 and July 1, 1973 permits and we are within the 60-day period for the January 1, 1974 group of permits. If adopted this change would appear to apply to all fuel burning equipment because of the change in the rule which places under Table A, 34 what was in Sections (cc) and (ww) of Table A. We would request at least that these be applicable only to new operations; that it not affect any existing permittees.
- (c) Again on page 8j there is a * . The language "not limited to fuel burning equipment generating steam for sale but excluding power generation." Does this mean that if a wood products plant generates electric power, and a number do, that they are no longer classed as fuel burning equipment at those fees? If not they will be automatically subject to Table A, 54 "Electric Power Generation" at fees which exceed any fees now being charged for any permit. We request a review of this classification and elimination of any possibility that power generation under these conditions be subject to the fees proposed for electric power generation.
- (c) Table A, 56 "Petroleum refining. Oregon does not now have a major oil refinery but it does have some rerefiners. We suggest the fee is too

high for rerefiners. Further we question the new higher fees and wonder how they were justified. ORS 449.733(2) states "The permit fees contained in the schedule shall be based upon the anticipated cost of filing and investigating the application, of issuing or denying the requested permit, and of an inspection program to determine compliance or non-compliance with the permit. The permit fees are to cover only certain aspects of your permit program and not of your general operational program. We believe there should be adequate justification of the amounts of these proposed new and changed permit fees, particularly where they are higher than other existing classifications.

509J | CORVALLIS SCHOOL DISTRICT
1555 S.W. 35th Street
Corvallis, Oregon 97330-752-5141

November 26, 1973

THOMAS D. WOGAMAN, Ed.D.
SUPERINTENDENT

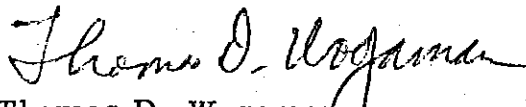
Mr. Diarmuid F. O'Scannlain, Director
Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Dear Sir:

The Board of Directors of Corvallis School District 509J has instructed me to transmit the following information to your department for inclusion in the testimony at the public hearing on November 27, 1973 concerning the proposed rule changes of the Air Contaminant Discharge Rule, OAR 340, Sections 20-033.02 through 20-033.20.

By its motion no. 81 at its meeting held on November 13, 1973, the Board of Directors of Corvallis School District 509J did go on record as opposing the necessity for fuel burning permits for the District on a fee basis.

Very truly yours,


Thomas D. Wogaman
Superintendent-Clerk

RWR:djg



State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

HMP
INTEROFFICE MEMO

To: NW Regional Office of DEQ, MWVAPA, LRAPA
From: H. M. Patterson
Subject: Revision of Air Contaminant Discharge Permit Regulation

Date: November 1, 1973

My attention has been directed to the proposal to require new sources which would emit: "10 tons per year or more, if the source were to operate uncontrolled, of any air contaminants including, but not limited to, SO_x, NO_x, or hydrocarbons; or at the discretion of the Department or Regional Authority, any malodorous odors..." in the revising of the subject regulation.

The question is: Won't this requirement in essence mean that all new sources will have to obtain a permit? And, if so, is this what is desired?

It also appears that the 10 tons is a total of all air contaminants which may be emitted in an uncontrolled state. Is this the proper interpretation?

The attached summaries from the EI indicate that although the number of sources emitting any individual air contaminants (with controls) is great, the impact on total emissions is quite small even at the 100 tons per year level.

By this memo, I am requesting your comments and evaluation of this issue.

After removing those sources which emit 10 tons or less of individual contaminants with controls from the emission inventory, it may not be necessary to adopt the proposed requirement, in its present form.

Please give me your recommendations.

Attachment

GREATER THAN OR =
10.00 TON CRITERIA

SUMMARY OF IMPACT ON
***** THE STATE OF OREGON *****

	LOW ORG	HIGH ORG	TOT ORG	FINE PART	TOT PART	NOX	SOX	CO	OTH INORG
TOTAL ESTIMATED EMISSIONS FOR STATE:	137395.1	161406.3	299051.0	85122.9	151028.0	148131.6	57131.5	1204295.6	3123.7
EMISSIONS TOTALS FOR LISTED SOURCES:	136794.9	160759.5	297809.0	84630.1	149978.8	147616.4	56449.2	1204039.5	3120.2
REMAINING EMISSIONS IN STATE:	600.2	646.8	1241.9	492.8	1049.1	515.1	682.3	256.1	3.5
LISTED TOTAL AS % OF TOTAL:	99.56%	99.59%	99.58%	99.42%	99.90%	99.65%	98.80%	99.97%	99.63%

1230 SOURCES (52.4%) OUT OF 2344 TOTAL WITH EMISSIONS > OR = CRITERIA

NOTE: ALL EMISSIONS VALUES ARE FOR ESTIMATED ANNUAL EMISSIONS IN TONS/YEAR

ALL CATEGORIES OF EMISSIONS COMPARED TO CRITERIA

REPORT GENERATED ON: 09/09/73

GREATER THAN OR =
100.00 TON CRITERIA

SUMMARY OF IMPACT ON

***** THE STATE OF OREGON *****

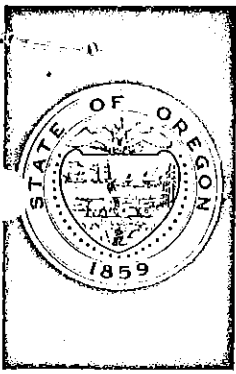
	LOW ORG	HIGH ORG	TOT ORG	FINE PART	TOT PART	NOX	SOX	CO	OTH INORG
TOTAL ESTIMATED EMISSIONS FOR STATE:	137395.1	161406.3	299051.0	85122.9	151028.0	148131.6	57331.5	1204295.6	3123.7
EMISSIONS TOTALS FOR LISTED SOURCES:	132717.2	159556.3	292178.7	79144.3	139183.0	141009.3	51600.9	1195665.6	3091.2
REMAINING EMISSIONS IN STATE:	4677.8	1849.9	6822.3	5978.5	11845.0	7122.2	5530.5	2629.9	32.5
LISTED TOTAL AS % OF TOTAL:	96.59%	98.85%	97.71%	92.97%	92.15%	95.19%	90.31%	99.28%	98.53%

613 SOURCES (26.1%) OUT OF 2344 TOTAL WITH EMISSIONS > OR = CRITERIA

NOTE: ALL EMISSIONS VALUES ARE FOR ESTIMATED ANNUAL EMISSIONS IN TONS/YEAR

ALL CATEGORIES OF EMISSIONS COMPARED TO CRITERIA

REPORT GENERATED ON: 09/09/73



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-535

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. O , November 27, 1973, EQC Public Hearing
Proposed Revisions to Air Contaminant Discharge Permit Regulations

Background

The Environmental Quality Commission at its October 22, 1972, meeting authorized the scheduling of this hearing for the purpose of receiving testimony relevant to proposed amendments to the Air Contaminant Discharge Permit Regulations, OAR, Chapter 340, Sections 20-033.02 through 20-033.20. A copy of the proposed amended Regulations are appended hereto and made a part of the record of this hearing.

As stated at the October 22, 1973, meeting, the purposes for amending the Air Contaminant Discharge Permit rules, and Table A attached thereto, are to provide clarity to certain sections, and to add new source categories to Table A which would be required to obtain an Air Contaminant Discharge Permit, and to authorize permits and fees for sources not included in Table A which would have uncontrolled emissions of 10 tons annually or emit malodorous odors.

The Notice of Public Hearing and a copy of the amended rules were mailed on October 24, 1973, to approximately 210 addresses on the Department's general mailing list. The notice was also published in the Secretary of State's bulletin on October 15, 1973. As of November 6, 1973, no written comments were received by the Department.

The proposed amendments, which are attached, have been prepared by enclosing language to be deleted from the existing regulations in brackets [], and underlining new or added language. The

proposed amendments are the same as those distributed with the Notice of Public Hearing except that Section 20-033.08 (1) which was essentially unchanged is now re-phrased to make it explicit that a person must obtain the required permit.

Discussion

The proposed amendments will accomplish three general purposes:

1. Add additional emission sources which should be included under permit conditions for better control of emissions.
2. Provide a better interpretation of those industries originally intended to be covered by Table A.
3. Facilitate the processing of permits by the Department and Regional authorities.

Two classes of industrial sources have been added to those which should be included under the permit rules:

1. Unforeseen industries that may in the future locate in the state, and industries (old or new) that are too new to be listed in the Standard Industry Code (SIC) Manual, and
2. Known specific sources that should be controlled by a permit.

Rather than amend Table A to add each significant emitting industry that locates in the State in the future, a general "catch-all" amendment has been added. Section 20-033.08 (2) would provide that:

"No person shall - - - operate any air contaminant source not listed in Table A which would emit:

- a. 10 tons or more per year, if the source were to operate uncontrolled, of any air contaminants including, but not limited to, particulates, SO_x , NO_x , or hydrocarbons; or
- b. at the discretion of the Department or Regional Authority, any malodorous odors."

An industry too new to be listed in the SIC Manual would also, by this new section, be required to have an Air Contaminant Discharge Permit. A known example would be an automobile shredding operation. All industries listed in the SIC Manual known to meet the conditions of this catch-all section are already listed in Table A.

A fee schedule for these sources not listed in Table A has been added to Section 20-033.12 (13), Fees. The variable fees are based upon the anticipated cost of issuing or denying the permit and of compliance inspections:

	Application Investigation and Permit Issuing or Denying Fee	Annual Permit Compliance Determination Fee
If low cost	\$ 25	\$ 25
If medium cost	150	100
If high cost	450	325

The Department and Regional Authorities propose that the following industrial sources be added to Table A:

TABLE A

<u>Item</u>		<u>SIC</u>
26	Battery manufacturing	3691
34	Fuel burning equipment d. Coal fired	4961
46	Pipe coating	3470
52	Beet sugar manufacturing	2063
53	Electroplating, polishing and anodizing	3471
54	Electric power generation	4911
55	Gas production and/or manufacturing	4925
56	Petroleum refining	2911
57	Wood preserving	2491

All of the above industrial sources are either existing or planned in the State and should be included in the permit program for better control.

Further subdivisions of the SIC classifications presently listed in Table A are needed to include all variations of an industry originally intended to be included in the permit program. The SIC classifications 2041 and 2042, "Grain Mill Products" are further subdivided as follows:

Table A

<u>Item</u>	<u>SIC</u>
13 Flour and other grain mill products	2041
14 Prepared feeds for animals and fowls	2042
15 Cereal preparations	2043
16 Blended and prepared flour	2045

The SIC classification 4221, "Grain Elevators," is further subdivided as follows:

Table A

<u>Item</u>	<u>SIC</u>
17 Grain elevators-storage only	4221
18 Grain elevators - primarily engaged in buying and/or marketing grain	5053

It should be noted that item 18, Grain elevators - primarily engaged in buying and/or marketing grain, contains an increase in fees from \$250 and \$150 to \$300 and \$225 for elevators handling 20,000 tons or more per year of grain.

This fee increase reflects the greater emission problem related to this type of grain operation. The lumber manufacturing classification has been further sub-divided into the following categories:

Table A

<u>Item</u>	<u>SIC</u>
50 Hardwood mills	2426
51 Shake and shingle mills	2429

To better facilitate processing of permits, Section 20-033.06, Notice Policy, which covers the 30-day public notice for written

comment prior to issuance of an air contaminant discharge permit was re-drafted. As now proposed, the Department would issue a thirty (30) day public notice of intent to issue an Air Contaminant Discharge Permit. This will allow the staff to prepare the permit while comments are submitted from interested parties instead of waiting until the end of the thirty (30) day period. If adverse comments are received and the Department considers the issue to be controversial, then a public hearing may be scheduled to resolve those issues.

Section 20-033.08 (3), Permit Required, is a new sub-section which makes possible the issuance of a special permit to industrial sources that meet the Table A requirements for a permit, but have no, or insignificant air contaminant emissions. This paragraph allows literal application of Table A and relieves the control agencies from expending effort on non-emitting sources. The sub-sections of this section which specified the phase-in of the permit program are deleted since the time period ends on January 1, 1974. Section 20-033.10, Multiple Source Permit, is simplified for control agency convenience. Section 20-033.12 (14), Fees, is old sub-section (13) except that the statement concerning the deposit of all fees collected by the Regional Authorities into a Department of Environmental Quality Air Emission Permit Account has been deleted. This amendment is in agreement with legislation passed by the 1973 Legislature. In Section 20-033.20 (7), Permit Programs for Regional Air Pollution authorities, the requirement that the Regional Authority submit to the Department a listing of air contaminant sources currently in violation of issued permits is deleted. No useful purpose was found to be served by this requirement.

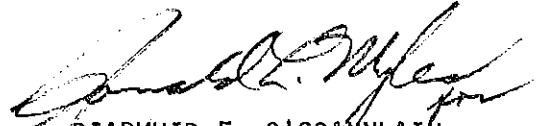
Summary and Conclusions

1. There is a need to require new, potentially polluting industries locating in the state to obtain an Air Contaminant Discharge Permit without having to first revise Table A of the Permit Regulations.
2. Nine (9) additional source categories of air contaminant emissions should be required to obtain an Air Contaminant Discharge Permit to better facilitate control of emissions.

3. Additional sub-divisions within the grain and lumber industries should be included in Table A for clarity. By doing this the control agencies will be provided with a means for better control over the affected source.
4. The Permit Regulations should be amended to facilitate the functioning of the control agencies and be in agreement with new legislation.

Director's Recommendation

It is recommended by the Director that OAR, Chapter 340, Sections 20-033.02 through 20-033.20 be amended as proposed herein, with such further amendments as may be deemed appropriate after consideration of information developed as a result of this hearing.


DIARMUID F. O'SCANNLAIN

RP:mh

11/8/73

Attachments

AIR CONTAMINANT DISCHARGE
PERMITS

[ED. NOTE: Unless otherwise specified, sections 20-033.02 through 20-033.20 of this chapter of the Oregon Administrative Rules Compilation were adopted by the Department of Environmental Quality July 28, 1972, and filed with the Secretary of State August 31, 1972 as DEQ 47.]

20-033.02 PURPOSE. The purpose of these regulations is to prescribe the requirements and procedures for obtaining Air Contaminant Discharge Permits pursuant to [Chapter 406, Oregon Laws 1971] ORS 449.727 to 449.739 and related statutes for stationary sources.

20-033.04 DEFINITIONS. As used in these regulations unless otherwise required by context:

(1) "Department" means Department of Environmental Quality.

(2) "Commission" means Environmental Quality Commission.

(3) "Person" means the United States Government and agencies thereof, a n y state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatever.

(4) "Permit" or "Air Contaminant Discharge Permit" means a written permit issued by the Department or Regional Authority in accordance with duly adopted procedures, which by its conditions authorizes the permittee to construct, install, modify or operate specified facilities, conduct specified activities, or emit, discharge or dispose of air contaminants in accordance with specified practices, limitations or prohibitions.

(5) "Regional Authority" means the [Columbia-Willamette Air Pollution Authority,] Mid-Willamette Valley Air Pollution Authority [,] or the Lane Regional Air Pollution Authority.

[20-033.06 NOTICE POLICY. It shall be the policy of the Department of Environmental Quality and the Regional Authorities to issue public notice as to the receipt of an application within 15 days after the application is accepted for filing.

The public notice shall allow 30 days for written comment from the public and from interested S t a t e and Federal agencies.]

20-033.06 NOTICE POLICY. It shall be the policy of the Department of Environmental Quality and Regional Authority to issue public notice as to the intent to issue an Air Contaminant Discharge Permit allowing at least 30 days for written comment from the public, and from interested State and Federal agencies, prior to issuance of the permit.

[20-033.08 PERMIT REQUIRED. (1) Air contaminant discharge p e r m i t s shall be obtained for the a i r contaminant sources, including those processes and activities directly related or associated thereto which are listed in Table A, appended hereto and incorporated therein by reference, in accordance with the schedules set forth in subsections (2), (3), (4), and (5) of this section.

(2) No person shall construct, install, establish develop or operate any new air contaminant source listed in Table A appended hereto without first obtaining a permit from the Department or Regional Authority.

(3) After January 1, 1973, no person shall operate any air contaminant source (a) through (l) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.

(4) After July 1, 1973, no person shall operate any air contaminant source (m) through (hh) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.

(5) After January 1, 1974, no person shall operate any air contaminant source (ii) through (uu) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.]

20-033.08 PERMIT REQUIRED. (1) No person shall construct, install, establish, develop or operate any air contaminant source, including those processes and activities directly related or associated thereto which are listed in Table A, appended hereto and incorporated herein by reference, without first obtaining a permit from the Department or Regional Authority.

(2) No person shall, without first obtaining a permit from the Department or Regional Authority, construct, install, establish, develop or operate any air contaminant source not listed in Table A which would emit:

- (a) 10 tons or more per year, if the source were to operate uncontrolled, of any air contaminants including, but not limited to, particulates, SO_x, NO_x, or hydrocarbons; or
- (b) at the discretion of the Department or Regional Authority, any malodorous odors.

(3) Any source listed in Table A may apply to the Department or Regional Authority for a special letter permit if operating a facility with no, or insignificant, air contaminant discharges. The determination of applicability of this special permit shall be made solely by the Department or Regional Authority having jurisdiction. If issued a special permit, the Application Investigation and Permit Issuing or Denying Fee and/or Annual Permit Compliance Determination Fee, provided by Section 20-033.12, may be waived by the Department or Regional Authority.

Portable Source

20-033.10 MULTIPLE-SOURCE PERMITS (1) When a single site includes more than one of the air contaminant sources listed in Table A, a single permit may be issued including all sources located at the site. [Such] For uniformity such [permits] applications shall separately identify by subsection each air contaminant source included from Table A. [Applications for multiple-source permits will not be received by the Department or Regional Authority for processing without

(b) upon review

by the Department or Regional Authority

sources known to exist have malodorous emissions

(2)

prior written agreement between the permit issuing agency and the applicant concerning the overall merit of issuing a multiple-source permit for the site under consideration.]

(1) When a single air contaminant source which is included in a multiple-source permit, is subject to permit modification, revocation, suspension or denial, such action by the Department or Regional Authority shall only affect that individual source without thereby affecting any other source subject to that permit.

(2) When a multiple-source permit includes air contaminant sources subject to the jurisdiction of the Department and a Regional Authority, the Department may require that it shall be the permit issuing agency. In such cases, the Department and the Regional Authority shall otherwise maintain and exercise all other aspects of their respective jurisdictions over the permittee.

20-033.12 FEES. (1) All persons required to obtain a permit shall be subject to a three-part fee consisting of a uniform non-refundable Filing Fee of \$25.00, a variable Application Investigation and Permit Issuing or Denying Fee and a variable Annual Permit Compliance Determination Fee. The amount equal to the Filing Fee and the Application Investigation and Permit Issuing or Denying Fee shall be submitted as a required part of the application. The Annual Permit Compliance Determination Fee shall be paid prior to issuance of the actual permit.

(2) The fee schedule contained in the listing of air contaminant sources listed in Table A appended hereto shall be applied to determine the variable permit fees.

(3) The Filing Fee and Application Investigation and Permit Issuing or Denying Fee shall be submitted with each application for a new permit, modified permit, or renewed permit.

(4) Modifications of existing, unexpired permits which are instituted by the Department or Regional Authority due to changing conditions or standards, receipts of additional information or any other reason pursuant to applicable statutes and 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.

(5) Applications for multiple-source permits received pursuant to Section 20-003.10 shall be subject to a single \$25.00 Filing Fee. The application Investigation and Permit Issuing or Denying Fee and Annual Permit Compliance Determination Fee for multiple-source permits shall be equal to the total amounts required by the individual sources involved, as listed in Table A.

(6) At least one Annual Permit Compliance Determination Fee shall be paid prior to final issuance of a permit. Thereafter, the Annual Permit Compliance Determination Fee shall be paid at least 30 days prior to the start of each subsequent permit year. Failure to timely remit the Annual Permit Compliance Determination Fee in accordance with the above shall be considered grounds for not issuing a permit or revoking an existing permit.

(7) If a permit is issued for a period less than one (1) year, the applicable Annual Permit Compliance Determination Fee shall be equal to the full annual fee. If a permit is issued for a period greater than 12 months, the applicable Annual Permit Compliance Determination Fee shall be prorated by multiplying the Annual Permit Compliance Determination Fee by the number of months covered by the permit and dividing by twelve (12).

(8) In no case shall a permit be issued for more than five (5) years.

(9) Upon accepting an application for filing, the Filing Fee shall be considered as non-refundable.

(10) The Application Investigation and Permit Issuing or Denying Fee need not be submitted upon notice in writing by the permit issuing agency or shall be refunded when submitted with applications for modified or renewed permits if the following conditions exist:

(a) The modified or renewed permit is essentially the same as the previous permit.

(b) The source or sources included are in compliance with all conditions of the modified or renewed permit.

(11) When an air contaminant source which is in compliance with the rules of a permit issuing agency relocates or pro-

poses to relocate its operation to a site in the jurisdiction of another permit issuing agency having comparable control requirements, application may be made and approval may be given for an exemption of the Application Investigation and Permit Issuing or Denying Fee. The permit application and the request for such fee reduction shall be accompanied by (1) a copy of the permit issued for the previous location, and (2) certification that the permittee proposes to operate with the same equipment, at the same production rate, and under similar conditions at the new or proposed location. Certification by the agency previously having jurisdiction that the source was operated in compliance with all rules and regulations will be acceptable should the previous permit not indicate such compliance.

(12) If a temporary or conditional permit is issued in accordance with adopted procedures, fees submitted with the application for an air contaminant discharge permit shall be retained and be applicable to the regular permit when it is granted or denied.

(13) Sources required to obtain a permit under Section 20-033.08 (2) not included in Table A shall be subject to, in addition to the Filing Fee of \$25.00, the following fee schedule to be applied in each case by the Department based upon the anticipated cost of issuing or denying the permit, and of compliance inspections:

Schedule	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determination Fee</u>
if low cost	\$ 25	\$ 25
if medium cost	150	100
if high cost	450	325

(14) [(13)] All fees shall be made payable to the permit issuing agency. [and shall be deposited in the State Treasury by the Department of Environmental Quality to the credit of the Department of Environmental Quality Air Emission Permit Account which is continuously appropriated for the purpose of funding the air contaminant discharge permit program covered by these regulations.]

20-033.14 PROCEDURES FOR OBTAINING PERMITS. Submission and processing of applications for permits and issuance, denial, modification, and revocation of permits shall be in accordance with duly adopted procedures of the permit issuing agency.

20-033.16 OTHER REQUIREMENTS. (1) No person shall construct, install, establish, modify or enlarge any air contaminant source listed in Table A or facilities for controlling, treating, or otherwise limiting air contaminant emissions from air contaminant sources listed in Table A without notifying the permit issuing agency as required by ORS 449.712 and rules promulgated thereunder.

(2) Prior to construction, installation, establishment, modification or enlargement of any air contaminant source listed in Table A or facilities for controlling, treating, or otherwise limiting air contaminant emissions from air contaminant sources listed in Table A, detailed plans and specifications shall be submitted to and approved in writing by the Department or Regional Authority upon request as required by ORS 449.712 and rules promulgated thereunder.

20-033.18 REGISTRATION EXEMPTION. Air contaminant sources constructed and operated under a permit issued pursuant to these regulations may be exempted from Registration as required by rules adopted pursuant to ORS 449.707.

20-033.20 PERMIT PROGRAMS FOR REGIONAL AIR POLLUTION AUTHORITIES. Subject to the provisions of this section 20-033.20, the Environmental Quality Commission authorizes each Regional Authority to issue air contaminant discharge permits for air contamination sources within its jurisdiction.

(1) A Regional Authority's permit program, including proposed permits and proposed revised permits, shall be submitted to the Environmental Quality Commission for review and approval prior to final adoption by the Regional Authority. Each permit issued by a Regional Authority shall by its conditions authorize the permittee to construct, install, modify or operate specified facilities, conduct specified activities, or emit, discharge or dispose of air contaminants in accordance with specified practices, limitations, or prohibitions.

(2) Each permit proposed to be issued or revised by a Regional Authority shall be submitted to the Department of Environmental Quality at least fourteen (14) days prior to the proposed issuance date. Within the fourteen (14) day period, the Department shall give written notice to the Regional Authority of any objection the Department has to the proposed permit or revised permit or its issuance. No permit shall be issued by a Regional Authority unless all objections thereto by

the Department shall be resolved prior to its issuance. If the Department does not make any such objection, the proposed permit or revised permit may be issued by the Regional Authority.

(3) If there is an objection by the Department regarding a proposed or revised permit, the Department shall present its objection before the Board of the Regional Authority in question prior to the issuance of a final permit.

(4) If as a result of objection by the Department regarding a proposed or revised permit, the Regional Authority is unable to meet the time provisions of either this regulation or those contained in an existing permit, the Regional Authority shall

issue a temporary permit for a period not to exceed 90 days.

(5) The Regional Authority shall give written notice to the Department of its intention to deny an application for a permit, not to renew a permit, or to revoke or suspend any existing permit.

(6) A copy of each permit issued or revised by a Regional Authority pursuant to this section shall be promptly submitted to the Department.

[(7) The Regional Authority shall prepare and submit to the Department a summary listing of air contaminant sources currently in violation of issued permits. These reports shall be made on a quarterly basis commencing April 1, 1973.]

PROPOSED CHANGES TO
TABLE A - AIR CONTAMINANT SOURCES AND
ASSOCIATED FEE SCHEDULE

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>1.</u>	[a] Asphalt production by distillation	2951	\$ 75	\$ 50
<u>2.</u>	[b] Asphalt blowing plants	2951	100	75
<u>3.</u>	[c] Asphaltic concrete paving plants	2951	100	100
<u>4.</u>	[d] Asphalt felts and coating	2952	150	100
<u>5.</u>	[e] Calcium carbide manufacturing	2819	225	150
<u>6.</u>	[f] Alkalies and chlorine manufacturing	2812	225	175
<u>7.</u>	[g] Nitric acid manufacturing	2819	100	75
<u>8.</u>	[h] Ammonia manufacturing	2819	200	125
<u>9.</u>	[i] Secondary lead smelting	3341	225	175
<u>10.</u>	[j] Rendering plants	2094 2077	150	100
<u>11.</u>	[k] Coffee roasting	2095	100	75
<u>12.</u>	[l] Sulfite pulp and paper production	2611 2621 2631	300	175
	[m] [Grain mill products located in Special Control Areas]	[2041] [2042]		
	[10,000 or more T/yr.]		[250]	[150]
	[less than 10,000 T/yr.]		[50]	[50]
<u>13.</u>	<u>Flour and other grain mill products in Special Control Areas</u>	<u>2041</u>		
	<u>a. 10,000 or more T/yr.</u>		<u>250</u>	<u>150</u>
	<u>b. Less than 10,000 T/yr.</u>		<u>50</u>	<u>50</u>

Table A Continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>14.</u>	<u>Prepared feeds for animals and fowls in Special Control Areas.</u> a. <u>10,000 or more T/yr.</u> b. <u>Less than 10,000 T/yr.</u>	<u>2042 2048</u>	\$ <u>250</u> <u>50</u>	\$ <u>150</u> <u>50</u>
<u>15.</u>	<u>Cereal preparations in Special Control Areas.</u>	<u>2043</u>	<u>250</u>	<u>150</u>
<u>16.</u>	<u>Blended and prepared flour in Special Control Areas.</u> a. <u>10,000 or more T/yr.</u> b. <u>Less than 10,000 T/yr.</u>	<u>2045</u>	<u>250</u> <u>50</u>	<u>150</u> <u>50</u>
[n]	[Grain elevators located in Special Control Areas] [20,000 or more T/yr.] [Less than 20,000 T/yr.]	[4221]	[150] [50]	[100] [50]
<u>17.</u>	<u>Grain elevators - storage only located in Special Control Areas.</u> a. <u>20,000 or more T/yr.</u> b. <u>Less than 20,000 T/yr.</u>	<u>4221</u>	<u>150</u> <u>50</u>	<u>100</u> <u>50</u>
<u>18.</u>	<u>Grain elevators - primarily engaged in buying and/or marketing grain - in Special Control Areas.</u> a. <u>20,000 or more T/yr.</u> b. <u>Less than 20,000 T/yr.</u>	<u>5053 5153</u>	<u>300</u> <u>50</u>	<u>225</u> <u>50</u>
<u>19.</u>	[o] Redimix concrete	3273	75	50
<u>20.</u>	[p] Plywood manufacturing	<u>2432 2435</u>	150	100
<u>21.</u>	[q] Veneer manufacturing ^{only} (not elsewhere included)	<u>2434 2435</u> <u>2436</u>	75	75
<u>22.</u>	[r] Particleboard manufacturing	2492	300	150
<u>23.</u>	[s] Hardboard manufacturing	<u>2493 2499</u>	200	100
<u>24.</u>	[t] Charcoal manufacturing	2861	200	100
<u>25.</u>	[u] Battery separator manufacturing	2499	75	50
	[v] [Furniture and fixtures 100 or more employees]	[2511]	[125]	[100]
<u>26.</u>	<u>Battery manufacturing</u>	<u>3691</u>	<u>100</u>	<u>75</u>

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>27.</u>	<u>Furniture and fixtures</u>	<u>2511</u> 2512		
	<u>a. 100 or more employees</u>		\$ <u>125</u>	\$ <u>100</u>
	<u>b. 10 employees or more but less than 100 employees</u>		<u>75</u>	<u>50</u>
<u>28.</u>	[w] Glass manufacturing	3231	100	75
<u>29.</u>	[x] Cement manufacturing	3241	300	150
<u>30.</u>	[y] Lime manufacturing	3274	150	100
<u>31.</u>	[z] Gray iron and steel foundries	3321		
	<u>a. 3,500 or more tons per year production</u>	3323 3322 25	300	150
	<u>b. Less than 3,500 tons per year production</u>		100	100
<u>32.</u>	[aa] Steel works, rolling and finishing mills	3312	300	175
	[bb] [Incinerators (not else- where included) more than 2,000 lb/hr. capacity]		[100]	[100]
✓ <u>33.</u>	<u>Incinerators</u>			
	<u>a. Greater than 2,000 lbs/hr capacity or 2000</u>		<u>100</u>	<u>100</u>
	<u>b. 40 lb/hr to 2,000 capacity</u>		<u>75</u>	75 50
	[cc] [Fuel burning equipment (not elsewhere included). Residual oil 5 million or more btu per hour (heat input) Wood fired 5 million or more btu per hour (heat input)]	[4961]	[100]	[50]
			[100]	[50]

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classification Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determination Fee</u>
<u>34.</u>	<u>Fuel burning equipment</u>	<u>4961*</u>		
	<u>a. Residual oil</u>			
	1) <u>250 million or more btu/hr. (heat input)</u>		\$ <u>150</u>	\$ <u>100</u>
	<i>schools most</i> 2) <u>5 million or more but less than 250 million btu/hr. (heat input)</u>		<u>100</u>	<u>50</u>
	3) <u>Less than 5 million btu/hr. (heat input)</u>		<u>25</u>	<u>25</u>
	<u>b. Distillate oil</u>			
	1) <u>250 million or more btu/hr. (heat input)</u>		<u>150</u>	<u>100</u>
	2) <u>5 million or more but less than 250 million btu/hr. (heat input)</u>		<u>25</u>	<u>25</u>
	<u>c. Wood fired</u>			
	1) <u>250 million or more btu/hr. (heat input)</u>		<u>150</u>	<u>100</u>
	2) <u>5 million or more but less than 250 million btu/hr. (heat input)</u>		<u>100</u>	<u>50</u>
	3) <u>Less than 5 million btu/hr. (heat input)</u>		<u>25</u>	<u>25</u>
	<u>d. Coal fired</u>			
	1) <u>250 million or more btu/hr. (heat input)</u>		<u>150</u>	<u>100</u>
	2) <u>5 million or more but less than 250 million btu/hr. (heat input)</u>		<u>100</u>	<u>50</u>
	3) <u>Less than 5 million btu/hr. (heat input)</u>		<u>25</u>	<u>25</u>

NOTE: The above fees shall be increased by 20% to cover costs of multiple device installations.

*Not limited to fuel burning equipment generating steam for sale but excluding power generation (SIC 4911)

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>35.</u>	[dd] Primary smelting and refin- ing of ferrous and nonfer- rous metals not elsewhere classified	3313 3339		
	<u>a.</u> 2,000 or more tons per year production		\$ 300	\$ 175
	<u>b.</u> Less than 2,000 tons per year production		100	75
<u>36.</u>	[ee] Synthetic resin manufacturing	2821[2831]	100	100
<u>37.</u>	[ff] Seed cleaning located in Special Control Areas (not elsewhere included)	0719 0723	0	0
<u>38.</u>	[gg] Kraft pulp and paper production	2611 2621 2631	300	175
<u>39.</u>	[hh] Primary aluminum production	3334	300	175
<u>40.</u>	[ii] Industrial inorganic and organic chemicals manu- facturing (not elsewhere included)	2810 2819	250	125
<u>41.</u>	[jj] Sawmill and planing	2421		
	<u>a.</u> 25,000 or more bd.ft./shift		75	50
	<u>b.</u> Less than 25,000 bd.ft./shift		25	25
	[kk] [Mill work]	[2431]	[75]	[50]
<u>42.</u>	<u>Mill work with 10 employees or more</u>	<u>2431</u>	<u>75</u>	<u>50</u>
	[ll] [Furniture and fixtures less than 100 employees]	[2511]	[75]	[50]
<u>43.</u>	[mm] Minerals, earth and rock ground or otherwise treated [(not elsewhere included)]	3295 <u>1442</u>	100	75

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>44.</u>	[nn] Brass and bronze foundries	3362	\$ 75	\$ 50
<u>45.</u>	[oo] Aluminum foundries (not elsewhere included)	3361	75	50
<u>46.</u>	[pp] <u>Galvanizing and pipe coating - exclude all other activities</u>	3479	75	50
<u>47.</u>	[qq] <u>Smoke houses with 5 or more employees</u>	2013	75	50
<u>48.</u>	[rr] Herbicide manufacturing	2879	225	175
<u>49.</u>	[ss] <u>Building paper and building board mills [(not elsewhere included)]</u>	2661	150	100
	[tt] [Incinerators (not elsewhere included) 2,000 to 4,000 pounds per hour capacity]]		[75]	[75]
	[uu] Fuel burning equipment (not elsewhere included)	[4961]		
	Residual oil less than 5 million btu/hr (heat input)		[25]	[25]
	Distillate oil 5 million or more btu/hr (heat input)		[25]	[25]
	Wood fired less than 5 million btu/hr (heat input)]		[25]	[25]
<u>50.</u>	<u>Hardwood mills</u>	<u>2426</u>	<u>50</u>	<u>25</u>
<u>51.</u>	<u>Shake and shingle mills</u>	<u>2429</u>	<u>50</u>	<u>25</u>
<u>52.</u>	<u>Beet sugar manufacturing</u>	<u>2063</u>	<u>150</u>	<u>100</u>
<u>53.</u>	<u>Electroplating, polishing and anodizing with 5 or more employees</u>	<u>3471</u>	<u>75</u>	<u>50</u>

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classification Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determination Fee</u>
<u>54.</u>	Electric power generation <i>excluding hydro electric & nuclear</i>	4911	\$ 350	\$ 225
<u>55.</u>	Gas production and/or manufacturing <i>& handled to utilities</i>	4925	350	225
<u>56.</u>	Petroleum refining <i>including re-refining Lubric Oil</i>	2911 2992	450 100	325 75
<u>57.</u>	Wood Preserving	2491	75	50
<u>58.</u>	Gypsum Products	3270	100	75

STATE OF OREGON
ROUTE SLIP

Date 10-29-73
TO: HMP

FROM: RP

- CHECK
- | | |
|---|--|
| <input type="checkbox"/> Approval | <input type="checkbox"/> Investigate |
| <input 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 checked="" type="checkbox"/> For Your Information |
| <input type="checkbox"/> Your Signature | <input 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:

Section 20-033.08 (1)
has been re-written by HHB
after public notice copies
were mailed.

AIR CONTAMINANT DISCHARGE PERMITS

[ED. NOTE: Unless otherwise specified, sections 20-033.02 through 20-033.20 of this chapter of the Oregon Administrative Rules Compilation were adopted by the Department of Environmental Quality July 28, 1972, and filed with the Secretary of State August 31, 1972 as DEQ 47.]

20-033.02 PURPOSE. The purpose of these regulations is to prescribe the requirements and procedures for obtaining Air Contaminant Discharge Permits pursuant to [Chapter 406, Oregon Laws 1971] ORS 449.727 to 449.739 and related statutes for stationary sources.

20-033.04 DEFINITIONS. As used in these regulations unless otherwise required by context:

(1) "Department" means Department of Environmental Quality.

(2) "Commission" means Environmental Quality Commission.

(3) "Person" means the United States government and agencies thereof, a n y state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatever.

(4) "Permit" or "Air Contaminant Discharge Permit" means a written permit issued by the Department or Regional Authority in accordance with duly adopted procedures, which by its conditions authorizes the permittee to construct, install, modify or operate specified facilities, conduct specified activities, or emit, discharge or dispose of air contaminants in accordance with specified practices, limitations or prohibitions.

(5) "Regional Authority" means the [Columbia-Willamette Air Pollution Authority,] Mid-Willamette Valley Air Pollution Authority [,] or the Lane Regional Air Pollution Authority.

[20-033.06 NOTICE POLICY. It shall be the policy of the Department of Environmental Quality and the Regional Authorities to issue public notice as to the receipt of an application within 15 days after the application is accepted for filing.

The public notice shall allow 30 days for written comment from the public and from interested S t a t e and Federal agencies.]

20-033.06 NOTICE POLICY. It shall be the policy of the Department of Environmental Quality and Regional Authority to issue public notice as to the intent to issue an Air Contaminant Discharge Permit allowing at least 30 days for written comment from the public, and from interested State and Federal agencies, prior to issuance of the permit.

[20-033.08 PERMIT REQUIRED. (1) Air contaminant discharge p e r m i t s shall be obtained for the a i r contaminant sources, including those processes and activities directly related or associated thereto which are listed in Table A, appended hereto and incorporated therein by reference, in accordance with the schedules set forth in subsections (2), (3), (4), and (5) of this section.

(2) No person shall construct, install, establish develop or operate any new air contaminant source listed in Table A appended hereto without first obtaining a permit from the Department or Regional Authority.

(3) After January 1, 1973, no person shall operate any air contaminant source (a) through (l) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.

(4) After July 1, 1973, no person shall operate any air contaminant source (m) through (hh) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.

(5) After January 1, 1974, no person shall operate any air contaminant source (ii) through (uu) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.]

NEW

20-033.08 PERMIT REQUIRED. (1) No person shall construct, install, establish, develop or operate any air contaminant source, including those processes and activities directly related or associated thereto which are listed in Table A, appended hereto and incorporated herein by reference, without first obtaining a permit from the Department or Regional Authority.

(2) No person shall, without first obtaining a permit from the Department or Regional Authority, construct, install, establish, develop or operate any air contaminant source not listed in Table A which would emit:

- (a) 10 tons or more per year, if the source were to operate uncontrolled, of any air contaminants including, but not limited to, particulates, SO_x, NO_x, or hydrocarbons; or
- (b) at the discretion of the Department or Regional Authority, any malodorous odors.

(3) Any source listed in Table A may apply to the Department or Regional Authority for a special letter permit if operating a facility with no, or insignificant, air contaminant discharges. The determination of applicability of this special permit shall be made solely by the Department or Regional Authority having jurisdiction. If issued a special permit, the Application Investigation and Permit Issuing or Denying Fee and/or Annual Permit Compliance Determination Fee, provided by Section 20-033.12, may be waived by the Department or Regional Authority.

20-033.10 MULTIPLE-SOURCE PERMIT. When a single site includes more than one of the air contaminant sources listed in Table A, a single permit may be issued including all sources located at the site. [Such] For uniformity such [permits] applications shall separately identify by subsection each air contaminant source included from Table A.

[Applications for multiple-source permits will not be received by the Department or Regional Authority for processing without

(1) No person shall construct, install, establish, develop or operate any air contaminant source, including those processes and activities directly related or associated thereto which are listed in Table A, appended hereto and incorporated herein by reference, without first obtaining a permit from the Department or Regional Authority.

AIR CONTAMINANT DISCHARGE PERMITS

[ED. NOTE: Unless otherwise specified, sections 20-033.02 through 20-033.20 of this chapter of the Oregon Administrative Rules Compilation were adopted by the Department of Environmental Quality July 28, 1972, and filed with the Secretary of State August 31, 1972 as DEQ 47.]

20-033.02 PURPOSE. The purpose of these regulations is to prescribe the requirements and procedures for obtaining Air Contaminant Discharge Permits pursuant to [Chapter 406, Oregon Laws 1971] ORS 449.727 to 449.739 and related statutes for stationary sources.

20-033.04 DEFINITIONS. As used in these regulations unless otherwise required by context:

(1) "Department" means Department of Environmental Quality.

(2) "Commission" means Environmental Quality Commission.

(3) "Person" means the United States Government and agencies thereof, a n y state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatever.

(4) "Permit" or "Air Contaminant Discharge Permit" means a written permit issued by the Department or Regional Authority in accordance with duly adopted procedures, which by its conditions authorizes the permittee to construct, install, modify or operate specified facilities, conduct specified activities, or emit, discharge or dispose of air contaminants in accordance with specified practices, limitations or prohibitions.

(5) "Regional Authority" means the [Columbia-Willamette Air Pollution Authority,] Mid-Willamette Valley Air Pollution Authority [,] or the Lane Regional Air Pollution Authority.

[20-033.06 NOTICE POLICY. It shall be the policy of the Department of Environmental Quality and the Regional Authorities to issue public notice as to the receipt of an application within 15 days after the application is accepted for filing.

The public notice shall allow 30 days for written comment from the public and from interested S t a t e and Federal agencies.]

20-033.06 NOTICE POLICY. It shall be the policy of the Department of Environmental Quality and Regional Authority to issue public notice as to the intent to issue an Air Contaminant Discharge Permit allowing at least 30 days for written comment from the public, and from interested State and Federal agencies, prior to issuance of the permit.

20-033.08 PERMIT REQUIRED. [(1) Air contaminant discharge permits shall be obtained for the air contaminant sources [including those processes and activities directly related or associated thereto which are listed in Table A, appended hereto and incorporated herein by reference [.] in accordance with the schedules set forth in subsections (2), (3), (4), and (5) of this section.]

(2) No person shall, without first obtaining a permit from the Department or Regional Authority, construct, install, establish, develop or operate any air contaminant source not listed in Table A which would emit:

- (a) 10 tons or more per year, if the source were to operate uncontrolled, of any air contaminants including, but not limited to, particulates, SO_x, NO_x, or hydrocarbons; or
- (b) at the discretion of the Department or Regional Authority, any malodorous odors.

(3) Any source listed in Table A may apply to the Department or Regional Authority for a special letter permit if operating a facility with no, or insignificant, air contaminant discharges. The determination of applicability of this special permit shall be made solely by the Department or Regional Authority having jurisdiction. If issued a special permit, the Application Investigation and Permit Issuing or Denying Fee and/or Annual Permit Compliance Determination Fee, provided by Section 20-033.12, may be waived by the Department or Regional Authority.

[(2) No person shall construct, install, establish develop or operate any ~~air~~ air contaminant source listed in Table A appended hereto without first obtaining a permit from the Department or Regional Authority.]

[(3) After January 1, 1973, no person shall operate any air contaminant source (a) through (l) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.]

[(4) After July 1, 1973, no person shall operate any air contaminant source (m) through (hh) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.]

[(5) After January 1, 1974, no person shall operate any air contaminant source (ii) through (uu) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.]

20-033.10 MULTIPLE-SOURCE PERMIT. When a single site includes more than one of the air contaminant sources listed in Table A, a single permit may be issued including all sources located at the site. [Such] For uniformity such [permits] applications shall separately identify by subsection each air contaminant source included from Table A.

[Applications for multiple-source permits will not be received by the Department or Regional Authority for processing without

prior written agreement between the permit issuing agency and the applicant concerning the overall merit of issuing a multiple-source permit for the site under consideration.]

(1) When a single air contaminant source which is included in a multiple-source permit, is subject to permit modification, revocation, suspension or denial, such action by the Department or Regional Authority shall only affect that individual source without thereby affecting any other source subject to that permit.

(2) When a multiple-source permit includes air contaminant sources subject to the jurisdiction of the Department and a Regional Authority, the Department may require that it shall be the permit issuing agency. In such cases, the Department and the Regional Authority shall otherwise maintain and exercise all other aspects of their respective jurisdictions over the permittee.

20-033.12 FEES. (1) All persons required to obtain a permit shall be subject to a three-part fee consisting of a uniform non-refundable Filing Fee of \$25.00, a variable Application Investigation and Permit Issuing or Denying Fee and a variable Annual Permit Compliance Determination Fee. The amount equal to the Filing Fee and the Application Investigation and Permit Issuing or Denying Fee shall be submitted as a required part of the application. The Annual Permit Compliance Determination Fee shall be paid prior to issuance of the actual permit.

(2) The fee schedule contained in the listing of air contaminant sources listed in Table A appended hereto shall be applied to determine the variable permit fees.

(3) The Filing Fee and Application Investigation and Permit Issuing or Denying Fee shall be submitted with each application for a new permit, modified permit, or renewed permit.

(4) Modifications of existing, unexpired permits which are instituted by the Department or Regional Authority due to changing conditions or standards, receipts of additional information or any other reason pursuant to applicable statutes and 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.

(5) Applications for multiple-source permits received pursuant to Section 20-003.10 shall be subject to a single \$25.00 Filing Fee. The application Investigation and Permit Issuing or Denying Fee and Annual Permit Compliance Determination Fee for multiple-source permits shall be equal to the total amounts required by the individual sources involved, as listed in Table A.

(6) At least one Annual Permit Compliance Determination Fee shall be paid prior to final issuance of a permit. Thereafter, the Annual Permit Compliance Determination Fee shall be paid at least 30 days prior to the start of each subsequent permit year. Failure to timely remit the Annual Permit Compliance Determination Fee in accordance with the above shall be considered grounds for not issuing a permit or revoking an existing permit.

(7) If a permit is issued for a period less than one (1) year, the applicable Annual Permit Compliance Determination Fee shall be equal to the full annual fee. If a permit is issued for a period greater than 12 months, the applicable Annual Permit Compliance Determination Fee shall be prorated by multiplying the Annual Permit Compliance Determination Fee by the number of months covered by the permit and dividing by twelve (12).

(8) In no case shall a permit be issued for more than five (5) years.

(9) Upon accepting an application for filing, the Filing Fee shall be considered as non-refundable.

(10) The Application Investigation and Permit Issuing or Denying Fee need not be submitted upon notice in writing by the permit issuing agency or shall be refunded when submitted with applications for modified or renewed permits if the following conditions exist:

(a) The modified or renewed permit is essentially the same as the previous permit.

(b) The source or sources included are in compliance with all conditions of the modified or renewed permit.

(11) When an air contaminant source which is in compliance with the rules of a permit issuing agency relocates or pro-

poses to relocate its operation to a site in the jurisdiction of another permit issuing agency having comparable control requirements, application may be made and approval may be given for an exemption of the Application Investigation and Permit Issuing or Denying Fee. The permit application and the request for such fee reduction shall be accompanied by (1) a copy of the permit issued for the previous location, and (2) certification that the permittee proposes to operate with the same equipment, at the same production rate, and under similar conditions at the new or proposed location. Certification by the agency previously having jurisdiction that the source was operated in compliance with all rules and regulations will be acceptable should the previous permit not indicate such compliance.

(12) If a temporary or conditional permit is issued in accordance with adopted procedures, fees submitted with the application for an air contaminant discharge permit shall be retained and be applicable to the regular permit when it is granted or denied.

(13) Sources required to obtain a permit under Section 20-033.08 (2) not included in Table A shall be subject to, in addition to the Filing Fee of \$25.00, the following fee schedule to be applied in each case by the Department based upon the anticipated cost of issuing or denying the permit, and of compliance inspections:

Schedule	Application Investigation and Permit Issuing or Denying Fee	Annual Permit Compliance Determination Fee
if low cost	\$ 25	\$ 25
if medium cost	150	100
if high cost	450	325

(14) [(13)] All fees shall be made payable to the permit issuing agency, and shall be deposited in the State Treasury by the Department of Environmental Quality to the credit of the Department of Environmental Quality Air Emission Permit Account which is continuously appropriated for the purpose of funding the air contaminant discharge permit program covered by these regulations.]

20-033.14 PROCEDURES FOR OBTAINING PERMITS. Submission and processing of applications for permits and issuance, denial, modification, and revocation of permits shall be in accordance with duly adopted procedures of the permit issuing agency.

20-033.16 OTHER REQUIREMENTS. (1) No person shall construct, install, establish, modify or enlarge any air contaminant source listed in Table A or facilities for controlling, treating, or otherwise limiting air contaminant emissions from air contaminant sources listed in Table A without notifying the permit issuing agency as required by ORS 449.712 and rules promulgated thereunder.

(2) Prior to construction, installation, establishment, modification or enlargement of any air contaminant source listed in Table A or facilities for controlling, treating, or otherwise limiting air contaminant emissions from air contaminant sources listed in Table A, detailed plans and specifications shall be submitted to and approved in writing by the Department or Regional Authority upon request as required by ORS 449.712 and rules promulgated thereunder.

20-033.18 REGISTRATION EXEMPTION. Air contaminant sources constructed and operated under a permit issued pursuant to these regulations may be exempted from Registration as required by rules adopted pursuant to ORS 449.707.

20-033.20 PERMIT PROGRAMS FOR REGIONAL AIR POLLUTION AUTHORITIES. Subject to the provisions of this section 20-033.20, the Environmental Quality Commission authorizes each Regional Authority to issue air contaminant discharge permits for air contamination sources within its jurisdiction.

(1) A Regional Authority's permit program, including proposed permits and proposed revised permits, shall be submitted to the Environmental Quality Commission for review and approval prior to final adoption by the Regional Authority. Each permit issued by a Regional Authority shall by its conditions authorize the permittee to construct, install, modify or operate specified facilities, conduct specified activities, or emit, discharge or dispose of air contaminants in accordance with specified practices, limitations, or prohibitions.

(2) Each permit proposed to be issued or revised by a Regional Authority shall be submitted to the Department of Environmental Quality at least fourteen (14) days prior to the proposed issuance date. Within the fourteen (14) day period, the Department shall give written notice to the Regional Authority of any objection the Department has to the proposed permit or revised permit or its issuance. No permit shall be issued by a Regional Authority unless all objections thereto by the Department shall be resolved prior to its issuance. If the Department does not make any such objection, the proposed permit or revised permit may be issued by the Regional Authority.

(3) If there is an objection by the Department regarding a proposed or revised permit, the Department shall present its objection before the Board of the Regional Authority in question prior to the issuance of a final permit.

(4) If as a result of objection by the Department regarding a proposed or revised permit, the Regional Authority is unable to meet the time provisions of either this regulation or those contained in an existing permit, the Regional Authority shall

issue a temporary permit for a period not to exceed 90 days.

(5) The Regional Authority shall give written notice to the Department of its intention to deny an application for a permit, not to renew a permit, or to revoke or suspend any existing permit.

(6) A copy of each permit issued or revised by a Regional Authority pursuant to this section shall be promptly submitted to the Department.

[(7) The Regional Authority shall prepare and submit to the Department a summary listing of air contaminant sources currently in violation of issued permits. These reports shall be made on a quarterly basis commencing April 1, 1973.]

PROPOSED CHANGES TO
TABLE A - AIR CONTAMINANT SOURCES AND
ASSOCIATED FEE SCHEDULE

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>1.</u>	[a] Asphalt production by distillation	2951	\$ 75	\$ 50
<u>2.</u>	[b] Asphalt blowing plants	2951	100	75
<u>3.</u>	[c] Asphaltic concrete paving plants	2951	100	100
<u>4.</u>	[d] Asphalt felts and coating	2952	150	100
<u>5.</u>	[e] Calcium carbide manufacturing	2819	225	150
<u>6.</u>	[f] Alkalies and chlorine manufacturing	2812	225	175
<u>7.</u>	[g] Nitric acid manufacturing	2819	100	75
<u>8.</u>	[h] Ammonia manufacturing	2819	200	125
<u>9.</u>	[i] Secondary lead smelting	3341	225	175
<u>10.</u>	[j] Rendering plants	2094	150	100
<u>11.</u>	[k] Coffee roasting	2095	100	75
<u>12.</u>	[l] Sulfite pulp and paper production	2611 2621 2631	300	175
	[m] [Grain mill products located in Special Control Areas]	[2041] [2042]		
	[10,000 or more T/yr.]		[250]	[150]
	[less than 10,000 T/yr.]		[50]	[50]
<u>13.</u>	<u>Flour and other grain mill products in Special Control Areas</u>	<u>2041</u>		
	<u>a. 10,000 or more T/yr.</u>		<u>250</u>	<u>150</u>
	<u>b. Less than 10,000 T/yr.</u>		<u>50</u>	<u>50</u>

Table A Continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classification Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determination Fee</u>
<u>14.</u>	<u>Prepared feeds for animals and fowls in Special Control Areas.</u>	<u>2042</u>		
	a. <u>10,000 or more T/yr.</u>		\$ <u>250</u>	\$ <u>150</u>
	b. <u>Less than 10,000 T/yr.</u>		<u>50</u>	<u>50</u>
<u>15.</u>	<u>Cereal preparations in Special Control Areas.</u>	<u>2043</u>	<u>250</u>	<u>150</u>
<u>16.</u>	<u>Blended and prepared flour in Special Control Areas.</u>	<u>2045</u>		
	a. <u>10,000 or more T/yr.</u>		<u>250</u>	<u>150</u>
	b. <u>Less than 10,000 T/yr.</u>		<u>50</u>	<u>50</u>
[n]	[Grain elevators located in Special Control Areas] [20,000 or more T/yr.] [Less than 20,000 T/yr.]	[4221]	[150] [50]	[100] [50]
<u>17.</u>	<u>Grain elevators - storage only located in Special Control Areas.</u>	<u>4221</u>		
	a. <u>20,000 or more T/yr.</u>		<u>150</u>	<u>100</u>
	b. <u>Less than 20,000 T/yr.</u>		<u>50</u>	<u>50</u>
<u>18.</u>	<u>Grain elevators - primarily engaged in buying and/or marketing grain - in Special Control Areas.</u>	<u>5053</u>		
	a. <u>20,000 or more T/yr.</u>		<u>300</u>	<u>225</u>
	b. <u>Less than 20,000 T/yr.</u>		<u>50</u>	<u>50</u>
<u>19.</u>	[o] Redimix concrete	3273	75	50
<u>20.</u>	[p] Plywood manufacturing	2432	150	100
<u>21.</u>	[q] Veneer manufacturing (not elsewhere included)	2434	75	75
<u>22.</u>	[r] Particleboard manufacturing	2492	300	150
<u>23.</u>	[s] Hardboard manufacturing	2493	200	100
<u>24.</u>	[t] Charcoal manufacturing	2861	200	100
<u>25.</u>	[u] Battery separator manufacturing	2499	75	50
	[v] [Furniture and fixtures 100 or more employees]	[2511]	[125]	[100]
<u>26.</u>	<u>Battery manufacturing</u>	<u>3691</u>	<u>100</u>	<u>75</u>

Table A continued.

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>27.</u>	<u>Furniture and fixtures</u>	<u>2511</u>		
	<u>a. 100 or more employees</u>		\$ <u>125</u>	\$ <u>100</u>
	<u>b. 10 employees or more but less than 100 employees</u>		<u>75</u>	<u>50</u>
<u>28.</u>	[w] Glass manufacturing	3231	100	75
<u>29.</u>	[x] Cement manufacturing	3241	300	150
<u>30.</u>	[y] Lime manufacturing	3274	150	100
<u>31.</u>	[z] Gray iron and steel foundries	3321 3323		
	<u>a. 3,500 or more tons per year production</u>		300	150
	<u>b. Less than 3,500 tons per year production</u>		100	100
<u>32.</u>	[aa] Steel works, rolling and finishing mills	3312	300	175
	[bb] [Incinerators (not else- where included) more than 2,000 lb/hr. capacity]		[100]	[100]
<u>33.</u>	<u>Incinerators</u>			
	<u>a. Greater than 4,000 lbs/hr capacity</u>		<u>100</u>	<u>100</u>
	<u>b. 40 lb/hr to 4,000 lb/hr capacity</u>		<u>75</u>	<u>75</u>
	[cc] [Fuel burning equipment (not elsewhere included) Residual oil 5 million or more btu per hour (heat input) Wood fired 5 million or more btu per hour (heat input)]	[4961]	[100] [100]	[50] [50]

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classification Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determination Fee</u>
34.	<u>Fuel burning equipment</u>	<u>4961*</u>		
	<u>a. Residual oil</u>			
	1) <u>250 million or more btu/hr. (heat input)</u>		\$ <u>150</u>	\$ <u>100</u>
	2) <u>5 million or more but less than 250 million btu/hr. (heat input)</u>		<u>100</u>	<u>50</u>
	3) <u>Less than 5 million btu/hr. (heat input)</u>		<u>25</u>	<u>25</u>
	<u>b. Distillate oil</u>			
	1) <u>250 million or more btu/hr. (heat input)</u>		<u>150</u>	<u>100</u>
	2) <u>5 million or more but less than 250 million btu/hr. (heat input)</u>		<u>25</u>	<u>25</u>
	<u>c. Wood fired</u>			
	1) <u>250 million or more btu/hr. (heat input)</u>		<u>150</u>	<u>100</u>
	2) <u>5 million or more but less than 250 million btu/hr. (heat input)</u>		<u>100</u>	<u>50</u>
	3) <u>Less than 5 million btu/hr. (heat input)</u>		<u>25</u>	<u>25</u>
	<u>d. Coal fired</u>			
	1) <u>250 million or more btu/hr. (heat input)</u>		<u>150</u>	<u>100</u>
	2) <u>5 million or more but less than 250 million btu/hr. (heat input)</u>		<u>100</u>	<u>50</u>
	3) <u>Less than 5 million btu/hr. (heat input)</u>		<u>25</u>	<u>25</u>

NOTE: The above fees shall be increased by 20% to cover costs of multiple device installations.

*Not limited to fuel burning equipment generating steam for sale but excluding power generation (SIC 4911)

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>35.</u>	[dd] Primary smelting and refin- ing of ferrous and nonfer- rous metals not elsewhere classified	3313 3339		
	<u>a.</u> 2,000 or more tons per year production		\$ 300	\$ 175
	<u>b.</u> Less than 2,000 tons per year production		100	75
<u>36.</u>	[ee] Synthetic resin manufacturing	<u>2821</u> [2831]	100	100
<u>37.</u>	[ff] Seed cleaning located in Special Control Areas (not elsewhere included)	0719	0	0
<u>38.</u>	[gg] Kraft pulp and paper production	2611 2621 2631	300	175
<u>39.</u>	[hh] Primary aluminum production	3334	300	175
<u>40.</u>	[ii] Industrial inorganic and organic chemicals manu- facturing (not elsewhere included)	2810	250	125
<u>41.</u>	[jj] Sawmill and planing	2421		
	<u>a.</u> 25,000 or more bd.ft./shift		75	50
	<u>b.</u> Less than 25,000 bd.ft./shift		25	25
	[kk] [Mill work]	[2431]	[75]	[50]
<u>42.</u>	<u>Mill work with 10 employees or more</u>	<u>2431</u>	<u>75</u>	<u>50</u>
	[ll] [Furniture and fixtures less than 100 employees]	[2511]	[75]	[50]
<u>43.</u>	[mm] Minerals, earth and rock ground or otherwise treated [(not elsewhere included)]	3295 <u>1442</u>	100	75

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>44.</u>	[nn] Brass and bronze foundries	3362	\$ 75	\$ 50
<u>45.</u>	[oo] Aluminum foundries (not elsewhere included)	3361	75	50
<u>46.</u>	[pp] <u>Galvanizing and pipe coating - exclude all other activities</u>	3479	75	50
<u>47.</u>	[qq] <u>Smoke houses with 5 or more employees</u>	2013	75	50
<u>48.</u>	[rr] Herbicide manufacturing	2879	225	175
<u>49.</u>	[ss] <u>Building paper and building board mills [(not else- where included)]</u>	2661	150	100
	[tt] [Incinerators (not else- where included) 2,000 to 4,000 pounds per hour capacity)]		[75]	[75]
	[uu] Fuel burning equipment (not elsewhere included)	[4961]		
	Residual oil less than 5 million btu/hr (heat input)		[25]	[25]
	Distillate oil 5 million or more btu/hr (heat input)		[25]	[25]
	Wood fired less than 5 million btu/hr (heat input)]		[25]	[25]
<u>50.</u>	<u>Hardwood mills</u>	<u>2426</u>	<u>50</u>	<u>25</u>
<u>51.</u>	<u>Shake and shingle mills</u>	<u>2429</u>	<u>50</u>	<u>25</u>
<u>52.</u>	<u>Beet sugar manufacturing</u>	<u>2063</u>	<u>150</u>	<u>100</u>
<u>53.</u>	<u>Electroplating, polishing and anodizing with 5 or more employees</u>	<u>3471</u>	<u>75</u>	<u>50</u>

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>54.</u>	<u>Electric power generation</u>	<u>4911</u>	<u>\$ 350</u>	<u>\$ 225</u>
<u>55.</u>	<u>Gas production and/or manufacturing</u>	<u>4925</u>	<u>350</u>	<u>225</u>
<u>56.</u>	<u>Petroleum refining</u>	<u>2911</u>	<u>450</u>	<u>325</u>
<u>57.</u>	<u>Wood Preserving</u>	<u>2491</u>	<u>75</u>	<u>50</u>



State of Oregon

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

To MMK, HJB

To: E. J. Weathersbee

Date: October 3, 1973

From: JK

Subject: Fuel Burning Equipment Air Contaminant Discharge Permits and Fees

The application of permit fees to fuel burning equipment in the former CWAPA region has been extensively reviewed. Relatively accurate data on type and quantity of fuel burning devices as well as time requirements for permit writing and compliance inspections has recently been compiled making it possible to provide a realistic judgement of program time requirements.

For background information the present permit regulation as applied to fuel burning equipment and in relation to the number of sources in the former CWAPA region is as follows:

Fuel Burning Equipment	AIPID Fee	PCD Fee	CWAPA Region	
			No. Devices	No. Plant Sites
Residual oil >5 MBTU	\$ 100	\$ 50	285	150*
Wood Fired >5 MBTU	100	50	15	15
Residual oil <5 MBTU	25	25	1500	1200
Distillate oil >5 MBTU	25	25	100	80

* 40% Schools

Previous studies and estimates by Oregon Regional APA's based primarily on experience of the Los Angeles APCD indicated that the Oregon Fuel Burning equipment permit fee schedules should be applied to each and every individual fuel burning device. This conclusion was premised on satisfying the intent of House Bill 1066 of applying fees which will offset the cost of the program.

In April of 1973 CWAPA sent out fuel burning permit applications to facilities requiring permits by 1 July 1973 (Residual and wood fired devices >5 MBTU). Great remonstrance from primarily school districts occurred with major objections being:

1. A feeling that permit fees should not be applicable to government agencies especially educational institutions.

2. Money for permit fees was not contained in school district budgets. Not enough lead time was given to get such money into budget.
3. A necessity to hire someone to complete permit application forms was created. Money not now budgeted for this purpose.
4. Fees were considered excessive in comparison to \$10 State boiler inspection fee.

An extension of time for reconsideration of the fuel burning permit program was requested by many school districts. At their 27 April 1973 meeting the CWAPA board deferred fee requirements for all fuel burning equipment permits and instructed their staff to gather necessary facts to assess the true cost of such a program and to make appropriate recommendations for a reasonable and equitable fee schedule. The CWAPA board also instructed the staff to issue temporary permits to the affected sources until the program was solidified.

Assessment of the number and type of fuel burning devices in the CWAPA region has been made, sample permits drafted and several compliance inspections conducted.

A summary of the average staff time for fuel burning permit program has been compiled and is attached.

In summary this study indicates that for an average fuel burning device about ten (10) staff hours are required for the initial permit year. Seven of the ten hours are for compliance inspections and would be annual re-occurring work. Each additional fuel burning device at a plant site would add about 2 hours staff work.

Large oil and wood fired boilers would require somewhat more staff time than the average estimates. These facilities are normally required to have extensive monitoring requirements including, smoke and steam flow meters which require additional time for permit preparation and compliance inspections. Facilities such as PGE Harborton and Beaver, fuel burning devices for Northwest Natural Gas's SNG facility and CRI's Refinery require considerably more time than the average estimate.

Based on an average staff cost of \$7/hr the existing fee schedule would be approximately for a plant site having a single fuel burning device if residual oil and wood fired devices (>5 MBTU) were inspected once per year and Residual and Distillate Oil Fired devices (<5 MBTU) were inspected once every two years.

For plant sites with more than one device it would be in most cases not justifiable to charge the stated fee for each device byt a fee somewhat greater than that for a single device would be appropraite and justified.

Recommendation for Fee Assessment

There are two basic approaches which could be taken in finalizing application of the permit program to fuel burning devices, those being:

1. Administratively apply existing regulations as equitably and justifiably as possible, or
2. Modify existing regulations in the most equitable and justifiable manner. The latter approach would be the most desirable but does have the disadvantages of delaying issuance of permits until a rule change has been made and making some adjustments in fees already paid. In the long run, however, disacvantages should be outweighed.

Administrative Application of Existing Rule

Based on time estimates the existing fee schedule would be justifiably applied if one fee were changed per plant site. Literal Rule application this way, however, is highly inequitable and not commensurate with work involved for multiple device plant sites especially large facilities such as PGE Harborton (8 devices) and Beaver (6 devices), PP&L, Lincoln Station (4 devices) Pennwalt (5 devices). These large facilities would pay the same fee as a school or apartment house.

Revised Rule

An equitable and justifiable means of application of fees for fuel burning devices would be based on fees for total heat input at the plant site. In this way fees would be closely commensurate with staff cost and there would be equity between small and large facilities. A suggested modification to the present rule is presented below. Such a change would require a minimal modification to existing rules. Deletion of the (not elsewhere included) for fuel burning devices is recommended since fees for other processes which have fuel burning devices appear insufficient to cover costs of fuel burning inspections (i.e. \$50 - \$75 annual compliance determination fees for the following services: asphalt distillation and blowing plants, ammonia manufacturing, small grain mills and elevators, nitric acid mfg., primary smelting less than 2000 T/year,

sawmills, millwork and furniture manufacturing, brass, bronze, aluminum foundries, smokehouses. Deletion of the "not elsewhere included" for fuel burning devices would also have a net effect of justifiably increasing total fees - an objective which the Department now seems to have. The third class of 250 MBTU/yr was chosen since it is the lower limit of demarking between medium and large facilities.

New Regulation - Fuel Burning Equipment

Fuel Burning Equipment - Heat input/hr for plant site	Fee	
	Aipid	PCD
<u>a</u> Distillate Oil >5 MBTU <250 MBTU Residual Oil <5 MBTU	\$ 25	\$ 25
<u>b</u> Residual oil or wood fired >5 MBTU <250 MBTU	100	50
<u>c</u> Distillate or Residual oil <250 MBTU	150	100

Note: These ^{above} fees ^{shall} could be justifiably increased by 20% to cover costs of multiple device installations, ~~as another means of increasing revenue from permit fees.~~



State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

To: E. J. Weathersbee, H. M. Patterson, Mike Roach
Vern Adkison, Wayne Hanson & Ray Potts Date: 10/4/73

From: H. H. Burkitt

Subject: Proposed Modification to Air Contaminant Discharge Permit Rules

Attached is a draft copy of the proposed amendments to OAR, 340, Section 20-033.02 through 20-033.20.

Please note that the major revisions include the following:

1. Elimination of phase-in dates for issuance of permits.
2. Authorization to require permits for sources not included in Table A which would have uncontrolled emissions of 10 tons annually.
3. Authorization to access fees in the amount of \$100 for the permit Application Investigation and Permit Issuance or Denial Fee, and \$50 for the Annual Compliance Determination Fee for sources which are determined by the Department to require a permit.
4. Major reorganization of Table A including the addition of new source categories.

Your comments and suggestions are invited at the earliest practicable date. After evaluation of your comments, a meeting will be scheduled to discuss any revisions made to this attached draft.

sb

P. S. A public hearing has been scheduled for 10 a.m. on November 27, 1973, in the Auditorium of the Public Service Bldg. in Portland. It is imperative that you forward your comments to this office by no later than October 12, 1973, in order to complete a re-draft and meet on this matter.

AIR CONTAMINANT DISCHARGE PERMITS

[ED. NOTE: Unless otherwise specified, sections 20-033.02 through 20-033.20 of this chapter of the Oregon Administrative Rules Compilation were adopted by the Department of Environmental Quality July 28, 1972, and filed with the Secretary of State August 31, 1972 as DEQ 47.]

20-033.02 PURPOSE. The purpose of these regulations is to prescribe the requirements and procedures for obtaining Air Contaminant Discharge Permits pursuant to Chapter 406, Oregon Laws 1971 for stationary sources.

20-033.04 DEFINITIONS. As used in these regulations unless otherwise required by context:

(1) "Department" means Department of Environmental Quality.

(2) "Commission" means Environmental Quality Commission.

(3) "Person" means the United States Government and agencies thereof, a n y state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatever.

(4) "Permit" or "Air Contaminant Discharge Permit" means a written permit issued by the Department or Regional Authority in accordance with duly adopted procedures, which by its conditions authorizes the permittee to construct, install, modify or operate specified facilities, conduct specified activities, or emit, discharge or dispose of air contaminants in accordance with specified practices, limitations or prohibitions.

(5) "Regional Authority" means the [Columbia-Willamette Air Pollution Authority,] Mid-Willamette Valley Air Pollution Authority (or) ~~the~~ Lane Regional Air Pollution Authority.

20-033.06 NOTICE POLICY. It shall be the policy of the Department of Environmental Quality and the Regional Authorities to issue public notice as to the receipt of an application within 15 days after the application is accepted for filing.

The public notice shall allow 30 days for written comment from the public and from interested S t a t e and Federal agencies.

20-033.08 PERMIT REQUIRED. (1) Air contaminant discharge p e r m i t s shall be obtained for the a i r contaminant sources, including those processes and activities directly related or associated thereto which are listed in Table A, appended hereto and incorporated therein by reference, ~~[in accordance with the rules set forth in subsections (2), (3), (4), and (5) of this section.]~~

(2) No person shall construct, install, establish, develop or operate any ~~new~~ ^{new} air contaminant source listed in Table A appended hereto or any new source which is not listed would emit if uncontrolled 10 tons or more per year of any air contaminants including but not limited to particulates, SO, NO, hydrocarbons, or any malodorous emissions without first obtaining a permit from the Department or Regional Authority.

20-033.10 MULTIPLE - SOURCE PERMIT. When a single site includes more than one of the air contaminant sources listed in Table A, a single permit may be issued including all sources located at the site. Such permits shall separately identify by subsection each air contaminant source included f r o m Table A. Applications for multiple-source permits will not be received by the Department or Regional Authority for processing without

For uniformity

prior written agreement between the permit issuing agency and the applicant concerning the overall merit of issuing a multiple-source permit for the site under consideration.

(1) When a single air contaminant source which is included in a multiple-source permit, is subject to permit modification, revocation, suspension or denial, such action by the Department or Regional Authority shall only affect that individual source without thereby affecting any other source subject to that permit.

(2) When a multiple-source permit includes air contaminant sources subject to the jurisdiction of the Department and a Regional Authority, the Department may require that it shall be the permit issuing agency. In such cases, the Department and the Regional Authority shall otherwise maintain and exercise all other aspects of their respective jurisdictions over the permittee.

20-033.12 FEES. (1) All persons required to obtain a permit shall be subject to a three-part fee consisting of a uniform non-refundable Filing Fee of \$25.00, a variable Application Investigation and Permit Issuing or Denying Fee and a variable Annual Permit Compliance Determination Fee. The amount equal to the Filing Fee and the Application Investigation and Permit Issuing or Denying Fee shall be submitted as a required part of the application. The Annual Permit Compliance Determination Fee shall be paid prior to issuance of the actual permit.

(2) The fee schedule contained in the listing of air contaminant sources listed in Table A appended hereto shall be applied to determine the variable permit fees.

(3) The Filing Fee and Application Investigation and Permit Issuing or Denying Fee shall be submitted with each application for a new permit, modified permit, or renewed permit.

(4) Modifications of existing, unexpired permits which are instituted by the Department or Regional Authority due to changing conditions or standards, receipts of additional information or any other reason pursuant to applicable statutes and 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.

(5) Applications for multiple-source permits received pursuant to Section 20-003.10 shall be subject to a single \$25.00 Filing Fee. The application Investigation and Permit Issuing or Denying Fee and Annual Permit Compliance Determination Fee for multiple-source permits shall be equal to the total amounts required by the individual sources involved, as listed in Table A.

(6) At least one Annual Permit Compliance Determination Fee shall be paid prior to final issuance of a permit. Thereafter, the Annual Permit Compliance Determination Fee shall be paid at least 30 days prior to the start of each subsequent permit year. Failure to timely remit the Annual Permit Compliance Determination Fee in accordance with the above shall be considered grounds for not issuing a permit or revoking an existing permit.

(7) If a permit is issued for a period less than one (1) year, the applicable Annual Permit Compliance Determination Fee shall be equal to the full annual fee. If a permit is issued for a period greater than 12 months, the applicable Annual Permit Compliance Determination Fee shall be prorated by multiplying the Annual Permit Compliance Determination Fee by the number of months covered by the permit and dividing by twelve (12).

(8) In no case shall a permit be issued for more than five (5) years.

(9) Upon accepting an application for filing, the Filing Fee shall be considered as non-refundable.

(10) The Application Investigation and Permit Issuing or Denying Fee need not be submitted upon notice in writing by the permit issuing agency or shall be refunded when submitted with applications for modified or renewed permits if the following conditions exist:

(a) The modified or renewed permit is essentially the same as the previous permit.

(b) The source or sources included are in compliance with all conditions of the modified or renewed permit.

(11) When an air contaminant source which is in compliance with the rules of a permit issuing agency relocates or pro-

poses to relocate its operation to a site in the jurisdiction of another permit issuing agency having comparable control requirements, application may be made and approval may be given for an exemption of the Application Investigation and Permit Issuing or Denying Fee. The permit application and the request for such fee reduction shall be accompanied by (1) a copy of the permit issued for the previous location, and (2) certification that the permittee proposes to operate with the same equipment, at the same production rate, and under similar conditions at the new or proposed location. Certification by the agency previously having jurisdiction that the source was operated in compliance with all rules and regulations will be acceptable should the previous permit not indicate such compliance.

(12) If a temporary or conditional permit is issued in accordance with adopted procedures, fees submitted with the application for an air contaminant discharge permit shall be retained and be applicable to the regular permit when it is granted or denied.

(13) ~~Fees for Sources~~ required to obtain a permit under Section 20-033.08

(2) not included in Table A shall be subject to, in addition to the Filing Fee of \$25.00, \$100.00 for the Permit Application Issuance or Denial Fee, and \$50.00 for the Annual Compliance Determination Fee.

(14) [(13)] All fees shall be made payable to the permit issuing agency and shall be deposited in the State Treasury by the Department of Environmental Quality to the credit of the Department of Environmental Quality Air Emission Permit Account which is continuously appropriated for the purpose of funding the air contaminant discharge permit program covered by these regulations.

20-033.14 PROCEDURES FOR OBTAINING PERMITS. Submission and processing of applications for permits and issuance, denial, modification, and revocation of permits shall be in accordance with duly adopted procedures of the permit issuing agency.

20-033.16 OTHER REQUIREMENTS. (1) No person shall construct, install, establish, modify or enlarge any air contaminant source listed in Table A or facilities for controlling, treating, or otherwise limiting air contaminant emissions from air contaminant sources listed in Table A without notifying the permit issuing agency as required by ORS 449.712 and rules promulgated thereunder.

(2) Prior to construction, installation, establishment, modification or enlargement of any air contaminant source listed in Table A or facilities for controlling, treating, or otherwise limiting air contaminant emissions from air contaminant sources listed in Table A, detailed plans and specifications shall be submitted to and approved in writing by the Department or Regional Authority upon request as required by ORS 449.712 and rules promulgated thereunder.

20-033.18 REGISTRATION EXEMPTION. Air contaminant sources constructed and operated under a permit issued pursuant to these regulations may be exempted from Registration as required by rules adopted pursuant to ORS 449.707.

20-033.20 PERMIT PROGRAMS FOR REGIONAL AIR POLLUTION AUTHORITIES. Subject to the provisions of this section 20-033.20, the Environmental Quality Commission authorizes each Regional Authority to issue air contaminant discharge permits for air contamination sources within its jurisdiction.

(1) A Regional Authority's permit program, including proposed permits and proposed revised permits, shall be submitted to the Environmental Quality Commission for review and approval prior to final adoption by the Regional Authority. Each permit issued by a Regional Authority shall by its conditions authorize the permittee to construct, install, modify or operate specified facilities, conduct specified activities, or emit, discharge or dispose of air contaminants in accordance with specified practices, limitations, or prohibitions.

(2) Each permit proposed to be issued or revised by a Regional Authority shall be submitted to the Department of Environmental Quality at least fourteen (14) days prior to the proposed issuance date. Within the fourteen (14) day period, the Department shall give written notice to the Regional Authority of any objection the Department has to the proposed permit or revised permit or its issuance. No permit shall be issued by a Regional Authority unless all objections thereto by

the Department shall be resolved prior to its issuance. If the Department does not make any such objection, the proposed permit or revised permit may be issued by the Regional Authority.

(3) If there is an objection by the Department regarding a proposed or revised permit, the Department shall present its objection before the Board of the Regional Authority in question prior to the issuance of a final permit.

(4) If as a result of objection by the Department regarding a proposed or revised permit, the Regional Authority is unable to meet the time provisions of either this regulation or those contained in an existing permit, the Regional Authority shall

issue a temporary permit for a period not to exceed 90 days.

(5) The Regional Authority shall give written notice to the Department of its intention to deny an application for a permit, not to renew a permit, or to revoke or suspend any existing permit.

(6) A copy of each permit issued or revised by a Regional Authority pursuant to this section shall be promptly submitted to the Department.

(7) The Regional Authority shall prepare and submit to the Department a summary listing of air contaminant sources currently in violation of issued permits. These reports shall be made on a quarterly basis commencing April 1, 1973.

PROPOSED CHANGES TO

TABLE A - AIR CONTAMINANT SOURCES AND
ASSOCIATED FEE SCHEDULE

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
1.	[a] Asphalt production by distillation	2951	\$ 75	\$ 50
2.	[b] Asphalt blowing plants	2951	100	75
3.	[c] Asphaltic concrete paving plants	2951	100	100
4.	[d] Asphalt felts and coating	2952	150	100
5.	[e] Calcium carbide manufacturing	2819	225	150
6.	[f] Alkalies and chlorine manufacturing	2812	225	175
7.	[g] Nitric acid manufacturing	2819	100	75
8.	[h] Ammonia manufacturing	2819	200	125
9.	[i] Secondary lead smelting	3341	225	175
10.	[j] Rendering plants	2094	150	100
11.	[k] Coffee roasting	2095	100	75
12.	[l] Sulfite pulp and paper production	2611 2621 2631	300	175
	[m] [Grain mill products located in Special Control Areas]	[2041] [2042]		
	[10,000 or more T/hr.]		[250]	[150]
	[less than 10,000 T/yr.]		[50]	[50]
13.	<u>Flour and other grain mill products in Special Control Areas</u>	<u>2041</u>		
	a. <u>10,000 or more T/yr.</u>		<u>250</u>	<u>150</u>
	b. <u>Less than 10,000 T/yr.</u>		<u>50</u>	<u>50</u>

Table A Continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>14.</u>	<u>Prepared feeds for animals and fowls in Special Control Areas.</u>	<u>2042</u>		
	a. <u>10,000 or more T/yr.</u>		\$ <u>250</u>	\$ <u>150</u>
	b. <u>Less than 10,000 T/yr.</u>		<u>50</u>	<u>50</u>
<u>15.</u>	<u>Cereal preparations in Special Control Areas.</u>	<u>2043</u>	<u>250</u>	<u>150</u>
<u>16.</u>	<u>Blended and prepared flour in Special Control Areas.</u>	<u>2045</u>		
	a. <u>10,000 or more T/yr.</u>		<u>250</u>	<u>150</u>
	b. <u>Less than 10,000 T/yr.</u>		<u>50</u>	<u>50</u>
[n]	[Grain elevators located in Special Control Areas] [20,000 or more T/yr.] [Less than 20,000 T/yr.]	[4221]	[150] [50]	[100] [50]
<u>17.</u>	<u>Grain elevators -storage only located in Special Control Areas.</u>	<u>4221</u>		
	a. <u>20,000 or more T/yr.</u>		<u>150</u>	<u>100</u>
	b. <u>Less than 20,000 T/yr.</u>		<u>50</u>	<u>50</u>
<u>18.</u>	<u>Grain elevators - primarily engaged in buying and/or marketing grain - in Special Control Areas.</u>	<u>5053</u>		
	a. <u>20,000 or more T/yr</u>		<u>300</u>	<u>225</u>
	b. <u>Less than 20,000 T/yr.</u>		<u>100</u>	<u>75</u>
<u>19.</u>	[o] Redimix concrete	3273	75	50
<u>20.</u>	[p] Plywood manufacturing	2432	150	100
<u>21.</u>	[q] <u>Veneer manufacturing (not elsewhere included)</u>	2434	75	75
<u>22.</u>	[r] Particleboard manufacturing	2492	300	150
<u>23.</u>	[s] Hardboard manufacturing	2493	200	100
<u>24.</u>	[t] Charcoal manufacturing	2861	200	100

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
<u>25.</u>	[u] Battery separator manufacturing	2499	\$ 75	\$ 50
	[v] [Furniture and fixtures 100 or more employees]	[2511]	[125]	[100]
<u>26.</u>	<u>Battery manufacturing</u>	<u>3691</u>	<u>100</u>	<u>75</u>
<u>27.</u>	<u>Furniture and fixtures</u>	<u>2511</u>		
	<u>a. 100 or more employees</u>		<u>125</u>	<u>100</u>
	<u>b. 5 employees or more but less than 100 employees</u>		<u>75</u>	<u>50</u>
<u>28.</u>	[w] Glass manufacturing	3231	100	75
<u>29.</u>	[x] Cement manufacturing	3241	300	150
<u>30.</u>	[y] Lime manufacturing	3274	150	100
<u>31.</u>	[z] Gray iron and steel foundries	3321 3323		
	<u>a. 3,500 or more tons per year production</u>		300	150
	<u>b. Less than 3,500 tons per year production</u>		100	100
<u>32.</u>	[aa] Steel works, rolling and finishing mills	3312	300	175
	[bb] [Incinerators (not else- where included) more than 2,000 lb/hr. capacity]		[100]	[100]
<u>33.</u>	<u>Incinerators (not elsewhere included)</u>			
	<u>a. Greater than 4,000 lbs/hr. capacity</u>		<u>100</u>	<u>100</u>
	<u>b. 40 lb/hr to 4,000 lb/hr capacity</u>		<u>75</u>	<u>75</u>

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classification Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determination Fee</u>
	[cc] [Fuel burning equipment (not elsewhere included) Residual oil 5 million or more btu per hour (heat input) Wood fired 5 million or more btu per hour (heat input)]	[4961]	\$ [100]	\$ [50]
<u>34.</u>	<u>Fuel burning equipment</u> (not elsewhere included) a. <u>Residual oil - 5 million or more btu/hr (heat input) ^{< 250}</u> b. <u>Residual oil - less than 5 million btu/hr (heat input) ^{< 250}</u> c. <u>Distillate oil - 5 million or more btu/hr (heat input)</u> d. <u>Wood fired - 5 million or more btu/hr (heat input)</u> e. <u>Wood fired - less than 5 million btu/hr (heat input)</u>	<u>4961*</u>	<u>100</u>	<u>50</u>
<u>35.</u>	[dd] Primary smelting and refining of ferrous and nonferrous metals not elsewhere classified a. 2,000 or more tons per year production b. Less than 2,000 tons per year production	3313 3339	300 100	175 75
<u>36.</u>	[ee] Synthetic resin manufacturing	<u>2821</u> [2831]	100	100
<u>37.</u>	[ff] Seed cleaning located in Special Control Areas (not elsewhere included)	0719	0	0
<u>38.</u>	[gg] Kraft pulp and paper production	2611 2621 2631	300	175

*Not limited to fuel burning equipment generating steam for sale.

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
39.	[hh] Primary aluminum production	3334	300	175
40.	[ii] Industrial inorganic and organic chemicals manufacturing (not elsewhere included)	2810	250	125
41.	[jj] Sawmill and planing	2421		
	a. 25,000 or more bd.ft/shift		75	50
	b. Less than 25,000 bd.ft/shift		25	25
	[kk] [Mill work]	[2431]	[75]	[50]
42.	<u>Mill work with 15 employees or more</u>	<u>2431</u>	<u>75</u>	<u>50</u>
	[ll] [Furniture and fixtures less than 100 employees]	[2511]	[75]	[50]
43.	[mm] Minerals, earth and rock ground or otherwise treated for sale (not elsewhere included)	3295 <u>1442</u>	100	75
44.	[nn] Brass and bronze foundries	3362	75	50
45.	[oo] Aluminum foundries (not elsewhere included)	3361	75	50
46.	[pp] Galvanizing	3479	75	50
47.	[qq] <u>Smoke houses with 5 or more employees</u>	2013	75	50
48.	[rr] Herbicide manufacturing	2879	225	175
49.	[ss] <u>Building paper and building board mills</u>	2661	150	100

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classifica- tion Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determina- tion Fee</u>
[tt]	[Incinerators (not else- where included) 2,000 to 4,000 pounds per hour capacity)]		[75]	[75]
[uu]	[Fuel burning equipment (not elsewhere included) Residual oil less than 5 million btu/hr (heat input) Distillate oil 5 million or more btu/hr (heat input) Wood fired less than 5 million btu/hr (heat input)]	[4961]	[25] [25] [25]	[25] [25] [25]
<u>50.</u>	<u>Hardwood mills with 5 or more employees</u>	<u>2426</u>	<u>50</u>	<u>25</u>
<u>51.</u>	<u>Shake and shingle mills with 5 or more employees</u>	<u>2429</u>	<u>50</u>	<u>25</u>
<u>52.</u>	<u>Beet sugar manufacturing</u>	<u>2063</u>	<u>150</u>	<u>100</u>
<u>53.</u>	<u>Electroplating, polishing and anodizing with 5 or more employees</u>	<u>3471</u>	<u>75</u>	<u>50</u>
<u>54.</u>	<u>Electric power generation</u>	<u>4911</u>	<u>350</u>	<u>225</u>
<u>55.</u>	<u>Gas production and/or manufacturing</u>	<u>4925</u>	<u>350</u>	<u>225</u>
<u>56.</u>	<u>Petroleum refining</u>	<u>2911</u>	<u>450</u>	<u>325</u>

APPLICATION FOR AIR CONTAMINANT DISCHARGE PERMIT

NOTE: Prepare 4 copies, each to include all SCHEDULES and REQUIRED INFORMATION
 Retain 1 copy and forward 3 copies to this Department:

Department of Environmental Quality
 1234 S. W. Morrison Street
 Portland, Oregon 97205

Attention: Air Contaminant Discharge Permit Program Phone: (503) 229-5267

The applicant named below hereby submits this completed application and requests that the air contaminant source(s) described in Item 3 below be issued an Air Contaminant Discharge Permit:

<p>1. Official Applicant Identification:</p> <p>Firm Name _____</p> <p>Division _____</p> <p>Mailing Address _____</p> <p>City _____ State _____ Zip _____</p> <p>Phone Area Code ____ / _____</p>	<p>2. Source Site Description:</p> <p>Business Name _____</p> <p>Plant Site Address _____</p> <p>City _____ State _____ Zip _____</p> <p>Phone _____</p>
---	---

3. Air Contaminant Source(s) and fees as listed in Table A of OAR, Chapter 340, Section 20-033.02 through 20-033.20, for your facility are shown below. Complete and attach the information as required by Schedules I, and II of this application for each air contaminant source.

	S.I.C. Number	AIPID Fee*	PCD Fee**
a. _____	_____	\$ _____	\$ _____
b. _____	_____	\$ _____	\$ _____
c. _____	_____	\$ _____	\$ _____
Totals		\$ _____	\$ _____

Submit a check with this application in the amount of \$ _____ payable to this Department for one filing fee (\$25.00) and the total of AIPID fee's. The first total PCD fee in the amount of \$ _____ must be paid prior to final issuance of a permit and may be included with this application.

Amount of Enclosed Check \$ _____

4. Certification: I hereby apply for permission to discharge air contaminants in the State of Oregon as stated or described in this application and certify that the information contained in this application, and the schedules and exhibits appended hereto are to the best of my knowledge and belief true and correct.

 (Signature of owner or legally authorized representative)

 (Title)

 (Date)

* Application, Investigation and Permit Issuing or Denying Fee
 ** Permit Compliance Determination Fee

APPLICATION FOR AIR CONTAMINANT DISCHARGE PERMIT (Cont.)

5. Person Authorized to Receive Permit:

Name _____

Title _____ Phone Area Code ____ / _____

Address _____

City _____ State _____ Zip _____

6. Person to Contact (at plant site) for Additional Details:

Name _____

Title _____ Phone Area Code ____ / _____

Address _____

City _____ State _____ Zip _____

7. Status of Applicant (Check as appropriate)

_____ Lessee _____ Government Agency _____

_____ Individual Owner _____ Partnership _____ Corporation

8. Name and Address of the Individual Owner, Partner or Corporation's Registered Agent:

Name _____

Title _____ Phone Area Code ____ / _____

Address _____

City _____ State _____ Zip _____

SCHEDULE I - DESCRIPTION OF AIR CONTAMINANT SOURCE

The information required in this schedule must be furnished for each air contaminant source listed in Item 3, page 1 of the application.

Air Contaminant Source
(as listed in Item 3 of application)

S.I.C.

1. General Production Information

State the production rate in the units delineated in the applicable section of the OAR rules or in units generally used by the industry for each air contaminant source process or any component thereof for which a specific emission standard has been adopted.

- a. Maximum hourly production rate _____
- b. Normal hourly production rate _____
- c. Primary operating schedule (indicate by hours per day, days per week and weeks per year. If seasonal, indicate normal season.) _____

d. Products produced:

<u>Description</u>	<u>Annual Production</u> (Tons, Bd. Ft., Sq. Ft., etc.)

e. List below the major raw material(s) including fuels utilized (use additional sheet if necessary)

<u>Raw Material and Fuels</u>	<u>Amount Utilized Annually</u>

SCHEDULE I - DESCRIPTION OF AIR CONTAMINANT SOURCE (Continued)

2. Process Flow Diagram

a. Attach a process flow diagram showing relationship of process equipment. Indicate where raw materials identified in 1e enter the process, where liquid waste, solid waste and air contaminants exit and where finished products are obtained. Identify each air contaminant discharge point and air pollution control device with a unique descriptive item name and code letter.

b. Description of Air Pollution Control Device(s)

<u>Code Letter</u>	<u>Nomenclature of Air Pollution Control Device</u>	<u>Equip. Mfg. Name</u>	<u>Specifications or Model No.</u>	<u>Design Eff. (%)</u>	<u>Date Installed</u>	<u>Amt. of air Contaminants Collected/year</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

SCHEDULE I - DESCRIPTION OF AIR CONTAMINANT SOURCE (Continued)

3. Plot Plan for the Air Contaminant Source Listed in Item 3, page 1 of application.

Attach a site plot plan showing the physical location on the plant site of process equipment, air pollution control device(s) and air contaminant discharge point(s). Use the same code letters employed in this Schedule, Parts 2b and 2c. The plot plan must show the distance, location and height of the nearest inhabited residential and/or commercial property, site access and nearest public road. More than one plot plan may be used when different scales are necessary or when a single plot plan becomes unduly complex. All plot plans must include a North indicator.

SCHEDULE II - SUPPLEMENTAL PLANT SITE INFORMATION

(Only one Schedule II is required for entire plant site)

1. Refuse Disposal Methods:

Waste Material	Source (Relate to Process Flow Diagram)	Quantity	Disposal Method	Disposal Site

2. Other air contaminant source(s):

Are other air contaminant source(s) located at plant site for which a permit is not being applied for at this time?

No _____ Yes _____ If yes, list below and briefly describe.

Air Contaminant Source

Air Contaminant Discharge Permit No. (if issued)

Preliminary Review of Permit Regulation
Modification - Oct. 10, 1973

- 20-033.04 (5) change "and" to "or the"
- 20-033.08 (2) Delete "new"
- 20-033.08 (3) Any source listed in Table A may apply to the Department or Regional Authority for a special Non-Emission Air Contaminant Discharge Permit if operating a facility with no air contaminant discharge.

ADD

~~points:~~

The determination of applicability of this permit shall be made by the Department or Regional Authority *having jurisdiction.*

non emission

20-033.12

ADD

If issued a special Non-Emission Air Contaminant Discharge Permit the Application Investigation and Permit Issuing or Denying Fee and Annual Permit Compliance Determination fees ~~shall~~ ^{may} be waived by the Department or Regional Authority.

provided by 20-033.12 and table A

Renumber previous 13 and 14.

Fee Table

- #27 Change lower limit to 10 employees
- #34 Fuel Burning Equipment not elsewhere included which utilize the following as a primary fuel.
e. But greater than 0.2×10^6 BTU/HR.
- #42 Change lower limit to 10 employees
- #43 Delete "For Sale"
- #50, 51, 53 Delete employee reference

*Tues Morning
May 1 1973
11:41/2/73*

(Tentative)

AGENDA

Environmental Quality Commission Meeting

April 30, 1973

Council Chambers, Civic Center

555 Liberty S.E.

Salem, Oregon

1:30 P.M.

- AM*
- South*
- Dojo Breakfast*
- A. Minutes of April 2, 1973 EQC Meeting
 - B. Project Plans for March 1973
 - C. Lloyd Corp. Parking Facility, Portland
 - D. Alder Manufacturing Co., Myrtle Point - Request for Variance to operate Wigwam Waste Burner
 - E. Stayton Sanitary Service, Stayton - EQC Confirmation of MWVAPA Variance

2:00 P.M.

How Sensitive

F. PUBLIC HEARING to consider adoption of amendments to OAR Chapter 340, Div. 4, Sub-Div. 1 Standards of Quality for Public Waters of Oregon and Disposal Therein of Sewage and Industrial Wastes

G. PUBLIC HEARING to consider issuance of Air Contaminant Discharge Permits to:

- a) Redmond Tallow Co., Redmond
- b) Southern Oregon Tallow Co., Eagle Point
- c) Klamath Tallow Co., Klamath Falls
- d) Ontario Rendering Co., Ontario
- e) Bioproducts Inc., Warrenton
- f) Deschutes Readymix Sand & Gravel Co., Asphalt Div., Bend

H/1/2/73

H. Continuation of PUBLIC HEARING from April 2, 1973 meeting to consider issuance of Air Contaminant Discharge Permits to:

- a) Publishers Paper Co., Newberg Division
- b) Publishers Paper Co., Oregon City Division

I. Unified Sewerage Agency, Washington County - Sewerage Facilities Construction Program

J. Sewerage Works Construction Priorities List Revisions

K. Tax Credits

7:30 P.M.

L. Continuation of PUBLIC HEARING from April 2, 1973 Meeting to consider issuance of Air Contaminant Discharge Permit to:

- a) Boise Cascade Corp., Salem

STATE OF OREGON
ROUTE SLIP

Date 12 JUN 1973
TO: HMP

FROM: HB

- CHECK
- | | |
|---|---|
| <input type="checkbox"/> Approval | <input type="checkbox"/> Investigate |
| <input type="checkbox"/> Necessary Action | <input checked="" 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 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:

*ESW has suggested
AQC & WQC follow the
attached permit procedures.*

Permit Issuing Procedure

12 JUN 1973

- ① Receive Applic'n - (temp. for Air
Notice of Receipt of Applic'n)
- ② Prepare Proposed Permit, Fact Sheet & Notice
↓
14 days for applicant comment
- ③ Issue Public Notice - Intent to issue
proposed permit.
↓
30 days
- ④ Opportunity for Hearing - Water
Public Hearing - Air } Issue

(60 day limit on air - otherwise temp. permit is automatic until applic'n is acted upon. This is no problem - just protection against prosecution for not issuing a permit.

Permit Issuing Procedure

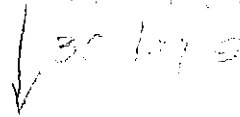
1. Receive Application (determine exempt, etc)
2. Evaluate, prepare proposed permit, fact sheet & determine if compliance schedule necessary ^{if compl.} ~~is needed~~.

No Compliance Schedule

14 day Notice



Issue Public Notice
in next 2 weeks



3.

Opportunity for Hearing

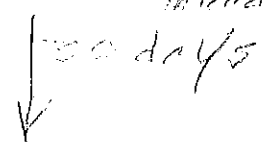


Issue permit

Compliance Schedule

14 day Notice

Issue Public Notice
in time to issue



Public Hearing



Issue

4.

AIR CONTAMINANT DISCHARGE PERMITS

[ED. NOTE: Unless otherwise specified, sections 20-033.02 through 20-033.20 of this chapter of the Oregon Administrative Rules Compilation were adopted by the Department of Environmental Quality July 28, 1972, and filed with the Secretary of State August 31, 1972 as DEQ 47.]

20-033.02 PURPOSE. The purpose of these regulations is to prescribe the requirements and procedures for obtaining Air Contaminant Discharge Permits pursuant to Chapter 406, Oregon Laws 1971 for stationary sources.

20-033.04 DEFINITIONS. As used in these regulations unless otherwise required by context:

(1) "Department" means Department of Environmental Quality.

(2) "Commission" means Environmental Quality Commission.

(3) "Person" means the United States Government and agencies thereof, a n y state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatever.

(4) "Permit" or "Air Contaminant Discharge Permit" means a written permit issued by the Department or Regional Authority in accordance with duly adopted procedures, which by its conditions authorizes the permittee to construct, install, modify or operate specified facilities, conduct specified activities, or emit, discharge or dispose of air contaminants in accordance with specified practices, limitations or prohibitions.

(5) "Regional Authority" means the ~~Columbia-Willamette Air Pollution Authority~~, Mid-Willamette Valley Air Pollution Authority, or Lane Regional Air Pollution Authority.

20-033.06 NOTICE POLICY. It shall be the policy of the Department of Environmental Quality and the Regional Authorities to issue public notice as to the receipt of an application within 15 days after the application is accepted for filing.

The public notice shall allow 30 days for written comment from the public and from interested State and Federal agencies.

20-033.08 PERMIT REQUIRED. (1) Air contaminant discharge permits shall be obtained for the air contaminant sources, including those processes and activities directly related or associated thereto which are listed in Table A, appended hereto, ~~and incorporated therein by reference, in accordance with the schedules set forth in subsections (2), (3), (4), and (5) of this section.~~

(2) No person shall construct, install, establish develop or operate any new air contaminant source listed in Table A appended hereto without first obtaining a permit from the Department or Regional Authority.

~~(3) After January 1, 1973, no person shall operate any air contaminant source (a) through (l) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.~~

~~(4) After July 1, 1973, no person shall operate any air contaminant source (m) through (hh) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.~~

~~(5) After January 1, 1974, no person shall operate any air contaminant source (ii) through (uu) as listed in Table A appended hereto, or discharge, emit or allow any air contaminant from said source except as may be authorized by a currently valid permit from the Department or Regional Authority.~~

20-033.10 MULTIPLE - SOURCE PERMIT. When a single site includes more than one of the air contaminant sources listed in Table A, a single permit may be issued including all sources located at the site. Such permits shall separately identify by subsection each air contaminant source included from Table A. Applications for multiple-source permits will not be received by the Department or Regional Authority for processing without

prior written agreement between the permit issuing agency and the applicant concerning the overall merit of issuing a multiple-source permit for the site under consideration.

(1) When a single air contaminant source which is included in a multiple-source permit, is subject to permit modification, revocation, suspension or denial, such action by the Department or Regional Authority shall only affect that individual source without thereby affecting any other source subject to that permit.

(2) When a multiple-source permit includes air contaminant sources subject to the jurisdiction of the Department and a Regional Authority, the Department may require that it shall be the permit issuing agency. In such cases, the Department and the Regional Authority shall otherwise maintain and exercise all other aspects of their respective jurisdictions over the permittee.

20-033.12 FEES. (1) All persons required to obtain a permit shall be subject to a three-part fee consisting of a uniform non-refundable Filing Fee of \$25.00, a variable Application Investigation and Permit Issuing or Denying Fee and a variable Annual Permit Compliance Determination Fee. The amount equal to the Filing Fee and the Application Investigation and Permit Issuing or Denying Fee shall be submitted as a required part of the application. The Annual Permit Compliance Determination Fee shall be paid prior to issuance of the actual permit.

(2) The fee schedule contained in the listing of air contaminant sources listed in Table A appended hereto shall be applied to determine the variable permit fees.

(3) The Filing Fee and Application Investigation and Permit Issuing or Denying Fee shall be submitted with each application for a new permit, modified permit, or renewed permit.

(4) Modifications of existing, unexpired permits which are instituted by the Department or Regional Authority due to changing conditions or standards, receipts of additional information or any other reason pursuant to applicable statutes and 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.

(5) Applications for multiple-source permits received pursuant to Section 20-003.10 shall be subject to a single \$25.00 Filing Fee. The application Investigation and Permit Issuing or Denying Fee and Annual Permit Compliance Determination Fee for multiple-source permits shall be equal to the total amounts required by the individual sources involved, as listed in Table A.

(6) At least one Annual Permit Compliance Determination Fee shall be paid prior to final issuance of a permit. Thereafter, the Annual Permit Compliance Determination Fee shall be paid at least 30 days prior to the start of each subsequent permit year. Failure to timely remit the Annual Permit Compliance Determination Fee in accordance with the above shall be considered grounds for not issuing a permit or revoking an existing permit.

(7) If a permit is issued for a period less than one (1) year, the applicable Annual Permit Compliance Determination Fee shall be equal to the full annual fee. If a permit is issued for a period greater than 12 months, the applicable Annual Permit Compliance Determination Fee shall be prorated by multiplying the Annual Permit Compliance Determination Fee by the number of months covered by the permit and dividing by twelve (12).

(8) In no case shall a permit be issued for more than five (5) years.

(9) Upon accepting an application for filing, the Filing Fee shall be considered as non-refundable.

(10) The Application Investigation and Permit Issuing or Denying Fee need not be submitted upon notice in writing by the permit issuing agency or shall be refunded when submitted with applications for modified or renewed permits if the following conditions exist:

(a) The modified or renewed permit is essentially the same as the previous permit.

(b) The source or sources included are in compliance with all conditions of the modified or renewed permit.

(11) When an air contaminant source which is in compliance with the rules of a permit issuing agency relocates or pro-

poses to relocate its operation to a site in the jurisdiction of another permit issuing agency having comparable control requirements, application may be made and approval may be given for an exemption of the Application Investigation and Permit Issuing or Denying Fee. The permit application and the request for such fee reduction shall be accompanied by (1) a copy of the permit issued for the previous location, and (2) certification that the permittee proposes to operate with the same equipment, at the same production rate, and under similar conditions at the new or proposed location. Certification by the agency previously having jurisdiction that the source was operated in compliance with all rules and regulations will be acceptable should the previous permit not indicate such compliance.

(12) If a temporary or conditional permit is issued in accordance with adopted procedures, fees submitted with the application for an air contaminant discharge permit shall be retained and be applicable to the regular permit when it is granted or denied.

(14) (15) All fees shall be made payable to the permit issuing agency and shall be deposited in the State Treasury by the Department of Environmental Quality to the credit of the Department of Environmental Quality Air Emission Permit Account which is continuously appropriated for the purpose of funding the air contaminant discharge permit program covered by these regulations.

20-033.14 PROCEDURES FOR OBTAINING PERMITS. Submission and processing of applications for permits and issuance, denial, modification, and revocation of permits shall be in accordance with duly adopted procedures of the permit issuing agency.

20-033.16 OTHER REQUIREMENTS. (1) No person shall construct, install, establish, modify or enlarge any air contaminant source listed in Table A or facilities for controlling, treating, or otherwise limiting air contaminant emissions from air contaminant sources listed in Table A without notifying the permit issuing agency as required by ORS 449.712 and rules

promulgated thereunder.

(2) Prior to construction, installation, establishment, modification or enlargement of any air contaminant source listed in Table A or facilities for controlling, treating, or otherwise limiting air contaminant emissions from air contaminant sources listed in Table A, detailed plans and specifications shall be submitted to and approved in writing by the Department or Regional Authority upon request as required by ORS 449.712 and rules promulgated thereunder.

20-033.18 REGISTRATION EXEMPTION. Air contaminant sources constructed and operated under a permit issued pursuant to these regulations may be exempted from Registration as required by rules adopted pursuant to ORS 449.707.

20-033.20 PERMIT PROGRAMS FOR REGIONAL AIR POLLUTION AUTHORITIES. Subject to the provisions of this section 20-033.20, the Environmental Quality Commission authorizes each Regional Authority to issue air contaminant discharge permits for air contamination sources within its jurisdiction.

(1) A Regional Authority's permit program, including proposed permits and proposed revised permits, shall be submitted to the Environmental Quality Commission for review and approval prior to final adoption by the Regional Authority. Each permit issued by a Regional Authority shall by its conditions authorize the permittee to construct, install, modify or operate specified facilities, conduct specified activities, or emit, discharge or dispose of air contaminants in accordance with specified practices, limitations, or prohibitions.

(2) Each permit proposed to be issued or revised by a Regional Authority shall be submitted to the Department of Environmental Quality at least fourteen (14) days prior to the proposed issuance date. Within the fourteen (14) day period, the Department shall give written notice to the Regional Authority of any objection the Department has to the proposed permit or revised permit or its issuance. No permit shall be issued by a Regional Authority unless all objections thereto by

4

the Department shall be resolved prior to its issuance. If the Department does not make any such objection, the proposed permit or revised permit may be issued by the Regional Authority.

(3) If there is an objection by the Department regarding a proposed or revised permit, the Department shall present its objection before the Board of the Regional Authority in question prior to the issuance of a final permit.

(4) If as a result of objection by the Department regarding a proposed or revised permit, the Regional Authority is unable to meet the time provisions of either this regulation or those contained in an existing permit, the Regional Authority shall

issue a temporary permit for a period not to exceed 90 days.

(5) The Regional Authority shall give written notice to the Department of its intention to deny an application for a permit, not to renew a permit, or to revoke or suspend any existing permit.

(6) A copy of each permit issued or revised by a Regional Authority pursuant to this section shall be promptly submitted to the Department.

(7) The Regional Authority shall prepare and submit to the Department a summary listing of air contaminant sources currently in violation of issued permits. These reports shall be made on a quarterly basis commencing April 1, 1973.

20-033.08

(new)

(3) The Department may require a source not specifically listed in Table A to ~~first~~ obtain an Air Contaminant Discharge Permit if it is determined that the nature and/or quantities of emissions are such to warrant specific operating conditions.

20-033.12 Fees

Handwritten scribbles and marks on the left margin.

(13) The Department may establish ~~and~~ or modify the fee schedule contained in Table A appended hereto if it is determined that ~~the established fee is not commensurate with the work involved~~ no fee had been set or that the set fee was not commensurate with the work involved to prepare and issue the permit. In all cases the fee must reflect the time and effort involved.

TABLE A - AIR CONTAMINANT SOURCES AND
ASSOCIATED FEE SCHEDULE

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classification Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determination Fee</u>
1. (a)	Asphalt Production by distillation	2951	\$ 75	\$ 50
2. (b)	Asphalt blowing plants	2951	100	75
3. (c)	Asphaltic concrete paving plants	2951	100	100
4. (d)	Asphalt felts and coating	2952	150	100
5. (e)	Calcium carbide manufacturing	2819	225	150
6. (f)	Alkalies and chlorine manufacturing	2812	225	175
7. (g)	Nitric acid manufacturing	2819	100	75
8. (h)	Ammonia manufacturing	2819	200	125
9. (i)	Secondary lead smelting	3341	225	175
10. (j)	Rendering plants	2094	150	100
11. (k)	Coffee roasting	2095	100	75
12. (l)	Sulfite pulp and paper production	2611 2621 2631	300	175
13. (m)	See next page. Grain mill products located in Special Control Areas	2041 2042	250 50	150 50
	10,000 or more T/yr.		250	150
	less than 10,000 T/yr.		50	50

13. Flour and Other Grain 2041

Mill Products in Special Control Areas

a.	10,000 or more T/yr.	250	150
b.	b. less than 10,000 T/yr.	50	50

14. Prepared Feeds for Animals 2042

and Fowls in Special Control Areas

a.	10,000 or more T/yr.	250	150
b.	less than 10,000 T/yr.	50	50

15. Cereal Preparations in 2043 250 150
Special Control Areas.

16. Blended and Prepared Flour 2045

in Special Control Areas.

a.	10,000 or more T/yr.	250	150
b.	less than 10,000 T/yr.	50	50

17. Grain Elevators - Storage Only 4221
located in Special Control Areas

- a. 20,000 or more T/yr. 150 100
- b. less than 20,000 T/yr. 50 50

18. Grain Elevators - Primarily 5053
Engaged in buying and/or
marketing grain - in Special
Control Areas

(new)

- a. 20,000 or more T/yr. 300 225
- b. less than 20,000 T/yr. 100 75

27. ~~26.~~ Furniture and Fixtures 2511

- a. 100 or more employees 125 100
- b. 5 employees ^{or more} but less than 100 employees 75 50

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classification Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determination Fee</u>
17.	(n) Grain elevators located in Special Control Areas 20,000 or more T/yr. Less than 20,000 T/yr.	4221[#]	\$ 150	\$ 100
18.	NEW - see p-3		50	50
19.	(p) Redimix concrete	3273	75	50
20.	(p) Plywood manufacturing	2432	150	100
21.	(q) Veneer manufacturing (not elsewhere included)	2434	75	75
22.	(r) Particleboard manufacturing	2492	300	150
23.	(s) Hardboard manufacturing	2493	200	100
24.	(t) Charcoal manufacturing	2861	200	100
25.	(u) Battery separator manufacturing	2499	75	50
26.	new. See p-5			
27.	(v) Furniture and fixtures 100 or more employees.	2511	125	100
28.	(w) Glass manufacturing	3231	100	75
29.	(x) Cement manufacturing	3241	300	150
30.	(y) Lime manufacturing	3274	150	100
31.	(z) Gray iron and steel foundries	3321 3323		
	a. 3,500 or more tons per year production		300	150
	b. Less than 3,500 tons per year production		100	100
32.	(aa) Steel works, rolling and finishing mills	3312	300	175
33.	See p-5 (bb) Incinerators (not elsewhere included) more than 2,000 lb/hr. capacity		100	100

(r) 26. Battery Manufacturing 3691 $\frac{100}{250}$ 75
175

33. Incinerators (not elsewhere included)

- a. Greater than 2,000 lb/hr. capacity 100 100
- b. 40^{lb/hr} - 2,000 lb/hr. capacity 75 75

34. Fuel Burning Equipment 4961*
(not elsewhere included)

~~a. Residential oil~~

- a. Residual Oil - 5 million or more btu/hr (heat input) 100 50
- d. f. Wood Fired - 5 million or more btu/hr (heat input) 100 50
- b. f. Residual Oil - less than 5 million btu/hr (heat input) 25 25
- c. d. Distillate Oil - 5 million or more btu/hr (heat input) 25 25
- e. f. Wood Fired - less than 5 million btu/hr (heat input) 25 25

* Not limited to fuel burning equipment generating steam for sale

Table A continued

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classification Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determination Fee</u>
34.	(cc) Fuel burning equipment (not elsewhere included) Residual oil 5 million or more btu per hour (heat input) Wood fired 5 million or more btu per hour (heat input)	2981 *	\$ 100 100	\$ 50 50
35.	(dd) Primary smelting and refining of ferrous and nonferrous metals not elsewhere classified a. 2,000 or more tons per year production b. Less than 2,000 tons per year production	3313 3339	300 100	175 75
36.	(ee) Synthetic resin manufacturing	2821 2831	100	100
37.	(ff) Seed cleaning located in Special Control Areas (not elsewhere included)	0719	0	0
38.	(gg) Kraft pulp and paper production	2611 2621 2631	300	175
39.	(hh) Primary aluminum production	3334	300	175
40.	(ii) Industrial inorganic and organic chemicals manufacturing (not elsewhere included)	2810	250	125
41.	(jj) Sawmill and planing a. 25,000 or more bd.ft/shift b. Less than 25,000 bd.ft/shift	2421	75 25	50 25
42.	(kk) Mill work	2431	75	50

see p-7
* Not limited to fuel burning equipment generating steam for sale.
12-15-72

Table A

	<u>Air Contaminant Source</u>	<u>Standard Industrial Classification Number</u>	<u>Application Investigation and Permit Issuing or Denying Fee</u>	<u>Annual Permit Compliance Determination Fee</u>
<u>P-3</u>	(ii) Furniture and fixtures less than 100 employees	2511	\$ 75	\$ 50
43.	(mi) Minerals, earth, and rock ground or otherwise treated for sale (not elsewhere included)	3295 and 1442	100	75
44.	(ni) Brass and bronze foundries	3362	75	50
45.	(oo) Aluminum foundries (not elsewhere included)	3361	75	50
46.	(pp) Galvanizing	3479	75	50
47.	(qq) Smoke houses with 5 or more employees	2013	75	50
48.	(rr) Herbicide manufacturing	2879	225	175
49.	(ss) Building Board Mills (not elsewhere included)	2661 2661	150	100
	(tt) Incinerators (not elsewhere included) 2,000 to 4,000 (less than) pounds per hour capacity to 2,000		75	75
	(uu) Fuel burning equipment (not elsewhere included)	4961*		
	Residual oil less than 5 million btu/hr (heat input)		25	25
	Distillate oil 5 million or more btu/hr (heat input)		25	25
	Wood fired less than 5 million btu/hr (heat input)		25	25

* Not limited to fuel burning equipment generating steam for sale.

	42. Mill work - ^{with} 5 employees or more	2431	75	50
43.				
(new)	50. Hardwood Mills with 5 or more employees	2426	50	25
	51. Shaker and Shingle Mills with 5 or more employees	2429	50	25
	52. Beet Sugar Manufacturing	2063	150 350	100 225
	53. Electroplating, Polishing and Anodizing with 5 or more employees.	3471	75	50
	54. Electric Power Generation	4911	350	225
	55. ^{and/or} Manufacturing Gas Production	4925	350	225
	56. Petroleum Refining	2911	450	325



State of Oregon

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

To: E. J. Weathersbee

Date: May 8, 1973

From: H. M. Patterson

Subject: Permit Program -
Attached letter from LRAPA

It is assumed this letter is in response to our letter of April 26 directed to each regional air pollution authority relative to conducting the permit program in a uniform manner and charges made by each for air contaminant discharge permits.

In that letter it was suggested that several fees are charged to a plant site wherein that plant site has several sources listed in Table A of the fee schedule.

It is therefore concluded that they want a meeting to discuss this matter.

cc: HMB



State of Oregon

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

To: HMP

Date: April 3, 1973

From: EJW

Subject: DEQ/Regional Coordinating Committee Agenda Items

Mr. O'Scannlain has requested suggested agenda items for an initial meeting of the reconstituted Coordinating Committee.

I believe they set the initial meeting date for April 15; therefore, an agenda needs to be prepared and sent out as soon as possible.

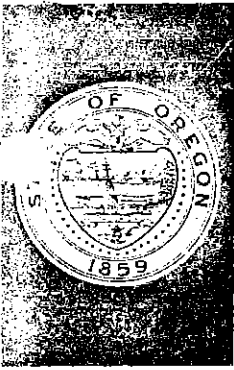
Please send a list of suggested topics to me and I will possibly add a suggestion or two and send on to DFO'S for final selection.

EJW

*Lane
Procedures for adoption of
rules & regulations*

Permit Revision

Emission Inventory



DEPARTMENT OF ENVIRONMENTAL QUALITY

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

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

ENVIRONMENTAL QUALITY
COMMISSION

B. A. McPHILLIPS
Chairman, McMinnville

EDWARD C. HARMS, JR.
Springfield

STORRS S. WATERMAN
Portland

GEORGE A. McMATH
Portland

ARNOLD M. COGAN
Portland

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item I, for April 2, 1973, Meeting
Proposed Air Contaminant Discharge Permits Public Hearing

The Department issued public notice on February 28, 1973, that consideration would be given at this hearing to issuance of Air Contaminant Discharge Permits for eight (8) industrial air contamination sources as follows:

1. Umpqua Excavation and Paving, a stationary asphalt plant located at 1940 N. E. Newton Creek, Roseburg, Oregon.
2. J. C. Compton Company, a portable asphalt plant which could operate in any county under DEQ jurisdiction.
3. Road and Driveway Company, a stationary asphalt plant located in Newport, Oregon.
4. Amalgamated Sugar Company, a sugar refining mill located in Nyssa, Oregon.

5. Publishers Paper Company, a sulfite pulp and paper mill located in Newberg, Oregon.
6. Publishers Paper Company, a sulfite pulp and paper mill located in Oregon City, Oregon.
7. Menasha Corporation, a natural sulfite pulp and corrugated medium mill located in North Bend, Oregon.
8. Boise Cascade Corporation, a sulfite pulp and paper mill located in Salem, Oregon.

Written public comment was received relative to the proposed permits for Umpqua Excavation and Paving, J. C. Compton Company, Menasha Corporation and Boise Cascade Corporation. No public comment was received relative to the proposed permits for Amalgamated Sugar Company, Road and Driveway Company, Publishers Paper Company, Newberg and Publishers Paper Company, Oregon City.

Comments were received from all companies except Menasha Corporation.

Of particular note are the general comments submitted by the Asphalt Paving Association of Oregon, a copy of which is attached and made a part of the record of this hearing. In this letter

Mr. Mike Huddleston, Manager of the association, infers that zoning conditions are a part of the proposed asphalt plant permits. There are no zoning conditions in any of the proposed permits including the three (3) proposed asphalt plant permits. Also inferred in this letter are conditions relating to noise and dusts off the property. Again, no conditions are contained in the proposed permits relative to noise control. There is a requirement under Monitoring and Reporting to submit monthly reports on forms furnished by the Department delineating certain operating parameters which provides the Department with a "measuring stick" of the cleanliness of the operation. Mr. Huddleston has raised the question as to the Department's authority relative to dust suppression measures so as to control fugitive dust emissions. The Department is requiring that all areas under the control of the operator be maintained such that fugitive type dust emissions are controlled at all times. Dust suppression measures on public access roads are not included as a permit condition. Under paragraph #5 the Association has indicated that the Department is discriminating against some operators of asphalt plants in that it will require an outside consultant to perform emission source sampling to verify compliance with the rules while at the same time the Department's sampling team has conducted tests on other asphalt plants. The Department has sampled only those plants which were included in a special study to examine the performance characteristics of various types of plants and equipment during the

1971 season, and during the 1972 season only (2) plants were resampled to determine the continuing capability of maintaining compliance. And finally, in paragraph #6 the Asphalt Paving Association is concerned that the monitoring requirements are excessive. Since the location of these plants is most critical in relation to people, the Department has no other means of measuring the control of emissions other than through a monitoring and reporting program which is a part of these proposed permits. The permits do provide that by written approval from the Department, changes in monthly reporting can be made as may be indicated from actual operating experience.

All comments received by the Department were considered and changes are recommended in the proposed permits, where considered warranted. In summary the following actions are recommended:

1. Umpqua Excavation and Paving, Roseburg: Comments were received from one resident living on Newton Creek Road approximately four (4) blocks from the asphalt plant who expressed concern for the dust emissions as well as the heavy truck traffic. Suggested restrictions from this individual include limiting hours of operation of the plant, prohibiting the use of jake brakes, and prohibiting operation during periods when the wind is from the east. The Douglas County Planning Department informed the Department of Environmental Quality that the county is currently considering zon-

ing (R-2) for this area. If approved this operation would become a non-conforming use and could be operated indefinitely at this site provided no expansion or discontinuity of more than a one (1) year period occurs. No special permit conditions were requested by the county. The company submitted comments regarding zoning and truck traffic discussed in the background report. The company requested that the dust suppression methods be limited only to plant property and not to any public roads. Comments relating to monitoring and reporting were considered when preparing the permit and are reflected in the proposed permit.

Recommendation

The Director recommends that the proposed Air Contaminant Discharge Permit, No. 10-0006, for Umpqua Excavation and Paving be issued with the following additional condition under Prohibited Activities:

"Discharges of air contaminants from sources not covered by *subg* this permit are prohibited." *Compliance Date: 1st*
December 1978 *Subg*
October 1

2. J. C. Compton Company, a portable asphalt plant: The Southeast Oregon Council of Governments requested information regarding the total annual quantity of air contaminants discharged and what this percentage would mean to their environment. This request was answered by letter dated February 20, 1973. No special permit conditions were requested by the county.

The company submitted comments regarding zoning and truck traffic discussed in the background report. The company requested that the dust suppression methods be limited only to plant property and not to any public roads. Comments relating to monitoring and reporting were considered when preparing the permit and are reflected in the proposed permit.

Recommendation

The Director recommends that the proposed Air Contaminant Discharge Permit, No. 37-0044, for J. C. Compton Company be issued with the following additional condition under Prohibited Activities:

(c) visible emissions only

"Discharges of air contaminants from sources not covered by this permit are prohibited."

3. Road and Driveway Company, Newport: No public comments have been received by the Department. The company submitted comments relative to monitoring and reporting. The company does not wish to be required to submit monthly reports and objects to the nozzle inspection more than once a year. No changes were made as a result of these requests because the staff feels that the requests are reasonable and necessary at the outset of the permit program.

Recommendation

The Director recommends that the proposed Air Contaminant Discharge Permit, No. 21-0001, for Road and Driveway Company be issued

with the following additional condition under Prohibited Activities:

"Discharges of air contaminants from sources not covered by this permit are prohibited."

4. Amalgamated Sugar Company, Nyssa: No public comments were received. The company submitted comments to clarify certain conditions relating to the operation of the lime kilns. As a result, the Department proposes to make the following changes:

- a. The company has advised that the exhaust gases from these two (2) lime kilns are scrubbed, compressed and utilized to carbonate the impure sugar juice and no discharge is made to the atmosphere. There is, however, a small exhaust fan on top of each kiln which operates to control the oxygen level in the kiln during the recharging cycle. These fans draw off the air admitted during this charging cycle and may, on occasion, emit a puff of visible emissions. As a consequence, the Department proposes to eliminate condition number 4.a.
- b. The company also requested that the compliance dates for installation of the second baghouse collector be extended to coincide with the start of the 1974 campaign (usually mid-October). The Department did not

propose to extend this date since it will assure completion of the installation prior to the operating season.

Recommendation

The Director recommends that the proposed Air Contaminant Discharge Permit, No. 23-0002, for Amalgamated Sugar Company be issued with the above noted change and the following additional condition under Prohibited Activities:

"Discharges of air contaminants from sources not covered by this permit are prohibited."

5. Publishers Paper Company, Newberg: No public comments were received as a result of the Public Notice. This permit was prepared incorporating the requirements of the Mid-Willamette Valley Air Pollution Authority relating to operation of the steam boilers. The Mid-Willamette Valley Air Pollution Authority has also reviewed the proposed permit and no comments have been received. The company has responded, and requested certain changes. The Company pointed out that the maximum capacity is 250 tons of pulp per day, instead of 230 tons per day. It is recommended that this change be incorporated in the final permit. Other suggested changes are presented below:

- a. The Company objected to the short duration, on grounds that they should be able to expect some reasonable life

for installed controls. This objection appears to be based on a misconception of purposes of the permit, and the Department would not recommend changing the expiration date.

- b. The Company commented that the time from submitting a report on steam-generating boiler particulate tests to submitting a compliance proposal is short, amounting to four (4) months. However, the final compliance date is only five (5) months after submission of a proposal (February 1, 1973). It should be pointed out that the permit does not prevent the Company's performing the tests and developing such compliance programs as prove necessary well ahead of the deadlines.

- c. The Company commented that restricting recovery furnace particulate emissions to three (3) pounds per ton of pulp is unjustifiably restrictive. They generally can operate within 3 lb/ton, but occasionally their tests indicate an emission between 3 and 4 lb/ton. Applying the general requirement, that all production and control equipment be operated such that emissions would be minimized, would prevent the Company's deliberately allowing emissions to rise to the legal maximum of 4 lb/ton. The staff concludes that the purposes originally intended could be served by

changing the pertinent conditions of the permit to read as follows:

"5. The recovery furnace particulate emissions shall not exceed three (3) pounds per adt as an annual average and 750 pounds per day as an annual average, and at no time shall exceed four (4) pounds per adt."

Recommendation

The Director recommends that the proposed Air Contaminant Discharge Permit, No. 36-6142, for Publishers Paper Company, Newberg Division be issued with the above noted change and the following additional condition under Prohibited Activities:

"Discharges of air contaminants from sources not covered by this permit are prohibited."

6. Publishers Paper Company, Oregon City: No public comments have been received as a result of the Public Notice. The permit was prepared incorporating the requirements of the Columbia Willamette Air Pollution Authority relating to the operation of the steam boilers. The Columbia Willamette Air Pollution Authority has reviewed this permit and no comments have been submitted. The Company has responded, and requested certain changes. Suggested changes are presented below:

- a. The Company objected to the short duration, on grounds that they should be able to expect some reasonable life for in-

stalled controls. This objection appears to be based on a misconception of the purpose of the permit, and the Department would not recommend changing the expiration date.

- b. The Company commented that the time from submitting a report on steam-generating boiler particulate tests to submitting a compliance proposal for short, amounting to four (4) months. However, the final compliance date is only five (5) months after submission of a proposal (February 1, 1973). It should be pointed out that the permit does not prevent the Company's performing the tests and developing such compliance programs as prove necessary well ahead of the deadlines.
- c. The Company commented that restricting recovery furnace particulate emissions to three (3) pounds per ton of pulp is unjustifiably restrictive. They generally can operate within 3 lb/ton, but occasionally their tests indicate an emission between 3 and 4 lb/ton. Applying the general requirement that all production and control equipment be operated such that emissions would be minimized would prevent the Company's deliberately allowing emissions to rise to the legal maximum of 4 lb/ton. The staff concludes that the purposes originally intended could be served by changing the pertinent conditions of the permits to read as follows:

"5. The recovery furnace particulate emissions shall not exceed three (3) pounds per adt as an annual average and 690 pounds per day as an annual average, and at no time shall exceed four (4) pounds per adt."

Recommendation

The Director recommends that the proposed Air Contaminant Discharge Permit, No. 03-1850, for Publishers Paper Company, Oregon City Division be issued with the above noted change and the following additional condition under Prohibited Activities:

"Discharges of air contaminants from sources not covered by this permit are prohibited."

7. Menasha Corporation, North Bend: One (1) comment was received from the University of Oregon, Institute of Marine Biology, expressing concern for odors from the mill. Submitted with the letter of comment was a survey report conducted by two (2) undergraduate students during the summer of 1972. No significant information is contained in this survey. The company did not submit any comments.

Recommendation

The Director recommends that the proposed Air Contaminant Discharge Permit, No. 06-0015, for Menasha Corporation be issued with the following additional condition under Prohibited Activities:

"Discharges of air contaminants from sources not covered by this permit are prohibited."

8. Boise Cascade Corporation, Salem: A petition with 75 signatures was received from the Marion County Children's Services Division which "would seriously object to the state granting permission to Boise Cascade to discharge air pollutants from its Salem plant." The petition went on to say that the undersigned "endorse your goals for clean water and air, and would see granting of this type permit a step in the wrong direction." It should be pointed out that the purpose of the permit program is to draw all of the emission and operating requirements together and issue a single permit which allows the state to conduct a more rigorous control program than might be practicable otherwise. The Department will advise the Marion County Children's Services Division of these goals. The proposed permit is a Multiple Source Permit and was prepared by the Mid-Willamette Valley Air Pollution Authority and the Department, and contains restrictions and limitations applicable to both the Department and Regional Authority. Comments from the company were received by letter dated March 15, 1973. The company has requested until July 1, 1974, to demonstrate compliance of the digester pump-out system. The company is committed to a program to complete this installation prior to December 31, 1973, and will know whether SO₂ emissions from the system have been eliminated at the time of start-up. It is felt that a run-in period will be necessary to verify stability of all newly installed equipment. Because of this the Department has recommended a change in conditions #1, #3 and #9 of the proposed permit. The company has

indicated that a production capacity of 330 adt per day will be achievable after completion of the control program. The company also stated that this control system was designed to meet a 500 ppm emission concentration at the 330 adt per day production capacity. The permit application and, to date, the emission data and production capacity, as reported to the Department, does not indicate that production has reached a level of 330 adt per day. Further, the Department has not approved any production increases for this mill since 1969 and would not recommend any plant production increases until compliance with all applicable regulations is demonstrated. Therefore, the changes recommended by the Department appear below under conditions #1 and #2. The company has stated that since all SO₂ emission points will be collected and discharged through a single stack the proposed limit of eighteen (18) pounds of SO₂ per adt is more restrictive than the allowable under OAR, 340, Section 25-355(2), which would allow twenty (20) pounds of SO₂ per adt on a mill site basis. The Department is of the opinion that other small point sources may have some emissions of SO₂ including the steam power boilers when firing residual fuel oil during natural gas curtailments. The company has further suggested that the pump-out system be allowed an SO₂ emission of 0.2 pounds per minute per ton in accordance with OAR, 340, Section 25-355(2)(a).

The Department considers that the eighteen (18) pounds of SO₂ per adt is achievable and reasonable in light of the other

sources. Further, no emissions of SO₂ should result in a closed digester pump-out system. The company submitted a compliance program for controlling particulate emissions from the recovery furnace from the current reported level of 5.5 pounds per adt to less than 4.0 pounds per adt if furnace optimization does not bring about this reduction. Since this is a small amount (1.5 pounds per adt), improvement within the current facility has a reasonable chance of success. The Department therefore proposes that conditions #5 and #10 be modified to reflect compliance with OAR, 340, Section 25-365, in that compliance of the recovery system particulate emissions must be achieved with the other sources by no later than July 1, 1974. If furnace optimization fails to provide the necessary reduction then a formal compliance schedule would be required, a new permit prepared accordingly and Public Hearings held on this matter prior to approval and submission to EPA. Condition #4 should be deleted because of duplication since the opening conditional statement and conditions #2 and #6 adequately require SO₂ emissions from all sources to be controlled.

As a consequence to the above discussion it is recommended that the Boise Cascade Corporation permit be modified as follows:

1. After July 1, 1974, sulfur dioxide (SO₂) emissions from the sulfite pulp mill (including the recovery system) shall not exceed twenty (20) pounds per unbleached, air-dried ton (adt) of pulp produced, five thousand (5,000) pounds of SO₂ per day as a monthly average, and six thousand two hundred (6,200) pounds per day as a maximum daily emission. *A shall not exceed 20 adt*

as a monthly average

2. No change.
 - a. No change.
 - b. No change.
 - c. Eighteen (18) pounds per ton and 4,500 pounds per day as a monthly average.
 - d. Eighteen (18) pounds per ton and 5,580 pounds per day.
3. Blow pit vent SO₂ emissions shall be kept to the lowest practicable levels at all times.
4. Eliminate.
5. As soon as practicable but not later than July 1, 1974, the recovery ^{System} furnace particulate emissions shall not exceed the following:
 - a. Four (4) pounds per adt of pulp produced.
 - 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.
6. Emissions from the steam-generating boilers, fired by natural gas and alternatively residual fuel oil, shall not exceed:
 - a. Two-tenths (0.2) grain per standard cubic foot, at twelve percent (12%) carbon dioxide (CO₂) or at fifty percent (50%) excess air.

- b. An opacity equal to or greater than twenty percent (20%) for an aggregated time of more than three (3) minutes in any one (1) hour.
- c. One thousand (1,000) ppm of sulfur dioxide (SO₂).

Compliance Demonstration Schedule

9. Installation of blow pit vent SO₂ emission controls, as approved by the Department of Environmental Quality, shall continue according to the following schedule:

- a. Purchase orders for remaining components and for all site preparation and erection work as issued, shall be confirmed in writing by no later than April 15, 1973.
- b. Construction shall be completed by no later than December 31, 1973.
- c. In the event that the company is unable to demonstrate compliance by December 31, 1973, the company shall submit reports to the Department on not less than a monthly basis relative to the problems encountered and the procedures and time schedules implemented to solve those problems.
- d. Compliance shall be demonstrated as soon as possible after the installation is completed, but in no case later than July 1, 1974.

e. The permittee shall notify the Department of Environmental Quality in writing within fourteen (14) days of the completion of each of these conditions, and further, shall submit an interim progress report by not later than August 1, 1973, describing the construction status for installing the components of the blow-pit vent control system.

10. The mechanism and location of particulate formation in the recovery system, and the minimizing of emissions possible through operating-parameter optimization shall be determined and reported by no later than July 1, 1973.
~~August 1, 1973~~

Part B Torula Yeast Manufacturing

The process weight should be changed to 14,500 pounds per hour.

Recommendation

The Director recommends that the proposed Air Contaminant Discharge Permit, No. 24-4171, for Boise Cascade Corporation, Salem Paper Group, be issued with the above noted changes and the following additional condition under Prohibited Activities:

"Discharges of air contaminants from sources not covered by this permit are prohibited."

DIARMUID F. O'SCANLAIN

MHB:c
3/27/73