

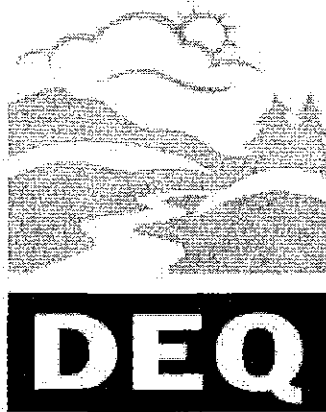
11/22/1974

OREGON

ENVIRONMENTAL QUALITY

COMMISSION MEETING

MATERIALS



State of Oregon
Department of
Environmental
Quality

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A G E N D A

ENVIRONMENTAL QUALITY COMMISSION

meeting of

November 22, 1974

Room 20 State Capitol, Salem, Oregon

9 a.m.

- A. Minutes of October 25, 1974 Commission Meeting
- B. Program Activity Report for October 1974
- C. Tax Credit Applications
- D. Presentation of Renewal Plaques to American Can Company and Publishers Paper

NORTHWEST REGION

- E. Permit Applications for CIRI (Rivergate), Charter Oil (Columbia County) and Cascade Energy (Rainier) Oil Refineries and Proposed Companion Fuels Use Policy--Status Report

AIR QUALITY

- F. Department Report on Proposed Ambient Air Standards for Lead
- G. Consideration of Proposed Rules Pertaining to Indirect (Complex) Sources
- 11:00 H. Consideration of OSPIRG/NEDC Petition Relative to Significant Deterioration
- I. Authorization for Public Hearing on Revisions to the Open Burning Regulations
- J. Authorization for Public Hearing, Requested by the Weyerhaeuser Company (Springfield) upon Issuance by the DEQ of a Modified Air Contaminant Discharge Permit

LAND QUALITY

- K. Chem-Nuclear, Inc.--Proposed Hazardous Waste Disposal License

The Commission will meet for breakfast at 7:30 in the Blue Room, State Capitol.

MINUTES OF THE SIXTY-SECOND MEETING

of the

OREGON ENVIRONMENTAL QUALITY COMMISSION

October 25, 1974

Public notice having been given to the news media, other interested persons and the Commission members as required by law, the sixty-second meeting of the Oregon Environmental Quality Commission was called to order by the Chairman at 9 a.m. on Friday, October 25, 1974, in the Second Floor Auditorium of the Public Service Building, 920 Southwest Sixth Avenue, Portland, Oregon.

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

The Department was represented by Director Kessler R. Cannon; Deputy Director Ronald L. Myles; Assistant Directors Frederick M. Bolton (Enforcement), Wayne Hanson (Air Quality), Harold L. Sawyer (Water Quality), and Kenneth H. Spies (Land Quality); Regional Administrators Verner J. Adkison (Midwest), Richard P. Reiter (Southwest), and E. Jack Weathersbee (Northwest); staff members C. Kent Ashbaker, John E. Borden, William R. Bree, Glen D. Carter, John E. Core, Dr. Robert L. Gay, Gary L. Grimes, Thomas G. P. Guilbert, John F. Kowalczyk, Judith A. Moore, Jack A. Payne, Stephen R. Sander, Ernest A. Schmidt, Shirley Shay, Mylan Synak, R. Dennis Wiancko and Patrick H. Wicks; Chief Counsel Raymond P. Underwood.

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

MINUTES OF THE SEPTEMBER 20, 1974 COMMISSION MEETING

It was MOVED by Mrs. Hallock, seconded by Mr. Somers and carried to approve the minutes of the sixty-first meeting of the Commission, held in Portland on September 20, 1974.

PROGRAM ACTIVITY REPORT FOR THE MONTH OF SEPTEMBER 1974

It was MOVED by Mr. Somers, seconded by Mrs. Hallock and carried to give

confirming approval to staff actions, as reported by Mr. Myles, regarding the 29 domestic sewage, 18 industrial waste, 43 air quality control, and one solid waste management projects:

Water Quality Control - Water Quality Division (29)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
9- 4-74	Warrenton	Addendum No. 3 - interceptor sewer	Approved
9- 4-74	Milwaukie	C. O. #3 - Milwaukie interceptor	Prov. app.
9- 4-74	McMinnville	C. O. #1 - 7th Street interceptor sewer	Prov. app.
9- 6-74	Bend	Addendum #1 - grit facilities project	Approved
9- 6-74	Sutherlin	sewer extension - health hazard	Prov. app.
9- 9-74	NTCSA	effluent polishing equipment	Prov. app.
9-10-74	Beverly Beach State Park	grading plans - sewage lagoon project	Prov. app.
9-13-74	Stayton	Wilco Road sewer	Prov. app.
9-16-74	McMinnville	Cozine Section - West-Southwest interceptor sewer	Prov. app.
9-16-74	Port of Morrow	Schedules B & C - wastewater irrigation project	Prov. app.
9-17-74	Klamath Falls	Americana Subdivision sewers	Prov. app.
9-17-74	BCVSA	Ross Lane sewer	Prov. app.
9-17-74	Springfield	57th Street sewer	Prov. app.
9-17-74	Ashland	Kimberlee Subdivision	Prov. app.
9-19-74	Bunker Hill Sanitary Dist.	C. O. #1 - P.S. contract	Approved
9-20-74	North Bend	Fir Street, Pine Street and Oak Street sewers	Prov. app.
9-23-74	BCVSA	Mayfair Market sewer	Prov. app.
9-23-74	Springfield	sewer projects SP-161 and SP-78	Prov. app.
9-23-74	Bend	Meadowview Estates, 4th Addn. sewers	Prov. app.
9-23-74	BCVSA	Bi-Mart sewer	Prov. app.
9-23-74	BCVSA	Hull Subdivision sewer - Central Point	Prov. app.
9-24-74	Veneta	5th Street sewer	Prov. app.
9-26-74	Toledo	Goddard Addn. No. 2 sewers	Prov. app.
9-26-74	Bend	Addendum #2 - grit works project	Approved
9-26-74	Bly	C. O. #1 - STP project	Approved
9-30-74	Hood River	Port of Hood River pump station	Prov. app.
9-30-74	Sublimity	sewage collection system	Prov. app.

Water Quality Control Industrial Projects - Northwest Region (15)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
9- 5-74	Tillamook County	<u>Joe Davis</u> animal waste disposal system holding tank	Pending

Water Quality Control Industrial Projects - Northwest Region (cont)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
9-10-74	Marion County	<u>Jesse Grieser Dairy Farm</u> animal waste disposal system holding tank	Approved
9-13-74	Washington County	<u>Steven Vandehey</u> animal waste disposal system holding tank	Approved
9-13-74	Washington County	<u>Robert Vandehey</u> animal waste disposal system holding tank	Approved
9-13-74	Multnomah County	<u>Chipman Chemical</u> Rhodia Defuser	Pending
9-16-74	Yamhill County	<u>Austin Warner</u> animal waste disposal system holding tank for livestock	Pending
9-16-74	Washington County	<u>Robert Kauer, Jr.</u> animal waste disposal system holding tank	Approved
9-16-74	Tillamook County	<u>William Gates</u> animal waste disposal system holding tank	Pending
9-17-74	Tillamook County	<u>Gary Manning</u> animal waste disposal system holding tank	Pending
9-18-74	Yamhill County	<u>Dayton Feed Yard</u> lagoon for animal waste	Approved
9-18-74	Yamhill County	<u>Richard Kimball</u> animal waste disposal system holding tank	Approved
9-19-74	Marion County	<u>A & H Dairy</u> animal waste disposal system holding tank	Approved
9-23-74	Tillamook County	<u>Hugh Skarda</u> animal waste disposal system holding tank	Pending
9-23-74	Multnomah County	<u>Atlantic Richfield</u> ARCO upgrading 0.1 water separation facilities	Approved
9-24-74	Tillamook County	<u>James Trent</u> animal waste disposal system holding tank	Pending

Water Quality Control Industrial Projects - Water Quality Division (3)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
9-16-74	Coos Bay	<u>Union Oil Company of California</u> modification and new facilities	Prov. app.
9-16-74	Eugene	<u>C. A. Stechel, Woodside Stables</u> animal waste facilities	Prov. app.
9-18-74	North Bend	<u>Herman V. Lilienthal Dairy Farm</u> animal waste facilities	Prov. app.

Air Quality Control - Northwest Region (31)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
9- 4-74	Multnomah County	<u>J. Arlie Bryant, Inc.</u> portable rock crusher	Req. add. info.
9- 6-74	Washington County	<u>Pacific Building Materials</u> concrete readymix plant	Req. add. info.
9-10-74	Multnomah County	<u>C. H. Stinson, Inc.</u> portable asphalt paving plant	Special permit issued
9-11-74	Clatsop County	<u>AMAX Aluminum</u> new aluminum reduction plant	In process
9-11-74	Columbia County	<u>Charter Energy Company</u> new oil refinery	In process
9-13-74	Columbia County	<u>Multnomah Plywood</u> vener dryer control	Approved
9-13-74	Multnomah County	<u>Cargill, Inc.</u> grain handling dust control	Approved
9-16-74	Multnomah County	<u>Portland State University</u> new boiler	Approved
9-16-74	Multnomah County	<u>Oregon Steel Mills, Rivergate</u> pellet metallizing	Req. add. info.
9-17-74	Clackamas County	<u>Barton Sand and Gravel</u> rock crusher	Req. add. info.
9-17-74	Multnomah County	<u>The Oregon Humane Society</u> cremation incinerator	In process
9-18-74	Multnomah County	<u>Fry Roofing</u> fume control of storage tanks	Approved
9-18-74	Multnomah County	<u>Fry Roofing</u> Volney felt mill control wood flour	Approved
9-18-74	Clackamas County	<u>Globe Union</u> lead remelt furnace	Approved
9-19-74	Multnomah County	<u>Flintkote Company</u> filter for sand handling	Approved
9-19-74	Multnomah County	<u>Chamberlain's Pet Crematorium</u> cremation incinerator	Req. add. info.
9-20-74	Clatsop County	<u>Crown-Zellerbach, Wauna</u> scrubber for lime kiln	Approved
9-20-74	Multnomah County	<u>Cook Industries</u> grain terminal	Final permit issued
9-20-74	Multnomah County	<u>Triangle Milling</u> dust control	Req. add. info.
9-23-74	Columbia County	<u>Crown-Zellerbach, Columbia City</u> hog fuel boiler with scrubber	Approved
9-25-74	Columbia County	<u>Boise Cascade, St. Helens</u> Venturi for #1 and #2 lime kilns	Approved
9-26-74	Multnomah County	<u>B. W. Feed Company</u> bakery waste processing	Approved
9-26-74	Multnomah County	<u>ESCO</u> new powder burn-out booth	Approved
9-26-74	Columbia County	<u>Niedermeyer-Martin Company</u> pole peeling facility	Approved
9-26-74	Yamhill County	<u>Publishers Paper, Newberg</u> new digester	Req. add. info.
9-26-74	Yamhill County	<u>Publishers Paper, Newberg</u> new hog fuel boiler	Req. add. info.

Air Quality Control - Northwest Region (cont)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
9-27-74	Multnomah County	<u>East Side Plating Works</u> two bag collectors and scrubber	Approved
9-30-74	Multnomah County	<u>Western Wood Industries</u> chip bin and transfer cyclone	Approved
9-30-74	Multnomah County	<u>Schnitzer Steel Products</u> wire incinerator	Proposed permit issued
9-30-74	Multnomah County	<u>Columbia Steel Casting</u> new furnace and controls	Proposed permit issued
9-30-74	Multnomah County	<u>Pacific Carbide</u> new furnace	Proposed permit issued

Air Quality Control - Air Quality Division (12)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
9- 5-74	Multnomah County	<u>Tri-Met</u> 100-space employe parking facility	Req. add. info.
9-10-74	Washington County	<u>Tanasbourne Phase 1</u> 705-space parking facility	Cond. app.
9-12-74	Clackamas County	<u>Clairmont Mall</u> 700-space parking facility	No action required (outside EQC jurisdiction)
9-18-74	Multnomah County	<u>Good Samaritan Hospital</u> 54-space parking facility	Cond. app.
9-19-74	Multnomah County	<u>Owens-Corning Fiberglas</u> 200-space parking facility	Req. add. info.
9-19-74	Morrow County	<u>Gourmet Foods</u> installation of a potato fryer and emissions control scrubber	Cond. app.
9-19-74	Douglas County	<u>Melrose School</u> installation of a distillate oil-fired boiler	Approved
9-20-74	Multnomah County	<u>LDS Church</u> 102-space parking facility	Amended approval
9-20-74	Washington County	<u>Weigel Apartments</u> modification of existing parking facility	Amended approval
9-23-74	Lane County	<u>Plaza 12 Condominiums</u> 70-space parking facility	Cond. app.
9-23-74	Lane County	<u>Weyerhaeuser Company</u> process changes to improve No. 3 recovery furnace black liquor oxidation	Approved
9-23-74	Multnomah County	<u>I-405 Parking</u> 340-space parking facility, municipally owned	Cond. app.

Land Quality - Solid Waste Management Division (1)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
9-16-74	Lane County	<u>Creswell Landfill</u> existing domestic site; operational plan	Approved

The Commission requested monthly status reports from the program directors with detail on any action taken with respect to permit applications.

TAX CREDIT APPLICATIONS

Mr. Myles presented the Department's review of the seven tax credit applications deferred from the September 20, 1974 Commission meeting as well as the five tax credit applications submitted for this meeting. The Commission approved the issuance of tax credit certificates for the following applicants for the pollution control facilities described in the following applications and bearing the costs as listed with 80 percent or more of the cost in each case being allocated to pollution control:

<u>App. No.</u>	<u>Applicant</u>	<u>Claimed Cost</u>
T-541	American Can Company, Halsey Mill	\$ 73,501.00
T-569	Weyerhaeuser Company, Wood Products	273,755.00
T-570	Southern Oregon Plywood, Inc.	61,299.87
T-574	Gemco Wood Products, Inc.	18,225.93
T-575	Weyerhaeuser Company, Paperboard Manufacturing	15,344.00
T-576	Weyerhaeuser Company, Paperboard Manufacturing	36,071.00
T-531R	Georgia-Pacific Corporation, Toledo Division	1,059,151.00
T-577	Weyerhaeuser Company, Paperboard Manufacturing	79,382.00
T-578	Consolidated Foods Corporation, dba B. P. John Furniture	12,908.00
T-583	Edward Hines Lumber Company	28,600.12

It was the Director's recommendation to deny issuance of a tax credit certificate to Robert E. Oja, dba Oja's Super Market (T-568 with a claimed cost of \$3,150) and the Commission concurred with the recommendation.

Consideration of T-580, Weyerhaeuser Company, Paperboard Manufacturing (with a claimed cost of \$8,511.981.00) was deferred until the staff engineer who had prepared the review was available to answer questions.

PORTLAND METROPOLITAN AREA INTERIM EMISSION POLICY

Mr. Kowalczyk summarized the September 20, 1974 staff report on this subject and reviewed the October 25, 1974 staff report, adding the following words to the proposed rule, 32-020(1): "Ambient air quality standards will not be exceeded at air sampling stations and adjacent areas projected by the Department's March 1974, report on Designation of Air Quality Maintenance Areas to be in compliance with such standards. A copy of the Department's March 1974, report on Designation of Air Quality Maintenance Areas is on file in the Department's Portland office." (addition underscored)

In discussing the status of the permit applications now on file with the Department and their disposition should the temporary rule be adopted, Mr. Cannon stated that those meeting the criteria of the temporary rule would be processed.

The Chairman called for witnesses:

Mr. Walter Hitchcock, Environmental Coordinator, Port of Portland, distributed copies of a prepared statement which he read into the record. (A copy is made a part of the permanent record of the meeting.) In summary, Mr. Hitchcock's testimony stated that the Port supported the policy until a comprehensive ten-year maintenance plan was completed. The Port reiterated its belief that "economic and community benefits should be considered in the allocation decision making process." The Port requested provision for a second grain elevator with the current considerations and following adoption of the policy to act expeditiously on all pending permit applications. It was again suggested that a comprehensive air quality study be undertaken before the ten-year maintenance plan was formulated. Mr. Hitchcock said that the Port believes that continued growth could be accommodated during the time in which the study is conducted by instituting additional particulate and sulfur dioxide reduction plans and recommended that the Commission direct the Department "to formulate these emission reduction plans and to determine the anticipated improvements in air quality" and that these improvements could then be incorporated into the interim policy prior to final adoption.

Mr. Thomas C. Donaca, Counsel for Associated Oregon Industries (AOI), distributed copies of a prepared statement which he summarized. (A copy is made a part of the permanent record of the meeting.) Mr. Donaca said that AOI concurred with the Port of Portland's recommendations regarding the interim policy. His testimony contained an analysis of the projected 1975 and 1978 particulate emissions for the Portland standard metropolitan statistical area, based on 1970 and 1975 information contained in Table 2 of the staff report presented at the September 20, 1974 meeting. He said that the figures he cited "disclose clearly that it is not the controllable sources which are the problem, but it is your area sources, the automobile, the backyard burning and the field burning which you must control." He then discussed the AOI-recommended amendments to the proposed temporary rules.

Mr. Wayne Kuhn, a registered professional engineer representing the Portland Chamber of Commerce, commended the staff for preparing a "sound, forward-looking policy which incorporates, justifies tradeoffs" and referred specifically to Columbia Independent Refinery (CIRI). He stated that these tradeoffs should result in substantial gain and benefit to the Portland metropolitan area in air quality. (A copy of Mr. Kuhn's testimony was received by mail and made a part of the permanent record.)

Mr. John Mosser, a Portland attorney representing Portland Steel Mills, urged adoption of the rules so as to avoid any further delays in processing permit applications. He referred specifically to his client's permit application and said that he had recently filed with the Department a study on the tradeoffs with this plant. The study shows that the difference in producing new steel from ore rather than steel from scrap (as done by Portland Steel Mills) amounts to 24.7 trillion BTU per year. "The difference between this plant and what the company is already doing amounts to 18.7 trillion BTU per year which is four percent of the total energy use of Oregon, six percent of the total Oregon petroleum energy use, more than 11 percent of the energy necessary to power all industrial, agricultural, state and local government activities in the state, and the equivalent of enough electricity to continuously power over 180,000 average Oregon homes." He said, however, that these are the kinds of tradeoffs that cannot be localized into the Portland airshed.

Mr. Somers and Mr. Mosser discussed the process used by Portland Steel Mills and the possible relocation of the plant closer to an electrical generating source. Mr. Mosser said that an electric furnace does the initial melt but basically fossil fuels are used prior to the product's entering the rolling mill. He also said that because the plant uses primarily scrap, its location near deep water and rail and truck transportation is essential.

Mr. Mosser asked the Commission to authorize the Department to proceed with issuance of the company's permit application. Mr. Cannon said that the Department can continue to process the permit and determine whether or not it fits the temporary rule requirements. Mr. Weathersbee pointed out that unless the Commission specifically authorized the permit at this time, it could not be issued.

Mrs. Sharon Roso, representing the North Portland Citizens' Committee, distributed copies of prepared testimony (a copy has been made a part of the permanent record) which contained the priorities that came out of the North

Portland Citizens' Committee conference of October 5, 1974. Mrs. Roso stated that the Committee supported the interim policy but not the policy of tradeoffs.

Mr. Roger Ulveling, Planning Coordinator for Columbia Independent Refinery (CIRI), distributed copies of prepared testimony which he summarized. (A copy has been made a part of the permanent record.) He supported the adoption of the temporary rule and felt that CIRI could comply with it.

Mr. Somers and Mr. Ulveling discussed the type of emissions controls for CIRI. Mr. Ulveling said that the particulate emissions were submicron in size and there was no technology presently available to handle them. Regarding further controls for sulfur dioxide emissions, Mr. Ulveling said that his company was willing to investigate any economically feasible technology to reduce these emissions as well as particulate emissions. He said that in order to reduce the sulfur dioxide emissions substantially, the company revised its original proposal to use one-half percent sulfur residual fuel oil exclusively and currently planned to add distillate fuels and some refinery gas. He said, "We're trying to reach a point where it is economically possible to provide fuels to this area and still meet the standards of the state." He said his company would produce a cleaner burning fuel which if used in the area could lower the total projected sulfur dioxide emissions by 9,000 to 10,000 tons, but that it was up to the Commission whether or not a clean fuels policy was proposed.

There were no further witnesses.

Mr. Kowalczyk provided the information on what comprised the "miscellaneous other emissions" referred to in the staff report. These are emissions from ships in the Portland harbor, barges, railroads and aircraft.

Mr. Somers MOVED the adoption of the new criteria with the following amendments: In 32-005, following the word "and" and before the word "designs" insert the word general; in 32-020(1), following the word "stations" and before the word "projected" insert the words and adjacent areas between sampling stations for particulates and sulfur dioxide; and in 32-020(3), following the word "proportion" change "shall" to may. The motion was seconded by Mrs. Hallock and carried.

BROOKS-SCANLON, Bend, Oregon

Prior to presenting the staff memorandum report, Mr. Borden showed slides of the company's log-handling and storage practices in the past as well as

currently. He then read the Director's recommendations:

1. Brooks-Scanlon's request for a time extension from October 1, 1975 to October 1, 1976, should be denied.
2. Brooks-Scanlon should be instructed to proceed immediately with the approved plan for dry log handling.
3. Brooks-Scanlon should investigate the noise impacts of total dry log handling to determine what control measures may be needed.

Mr. Somers asked Mr. Borden about the possibility of the company's changing the channel and having a completely self-contained pond. Mr. Borden said this could be a suitable alternative. However, Mr. Ashbaker pointed out that the new EPA regulations concerning log ponds might prohibit discharging from the pond through several months of the year. He also said that a pond might not provide sufficient storage space for the company.

Speaking in behalf of the company was Mr. Michael Hollern, President. He asked for an additional year's study because of the new noise standards adopted by the Commission and because of the economic impact on the company of the proposed channel change. He also expressed concern about the downstream effects of moving the river. He said that until recently the Department staff had insisted that Brooks-Scanlon remove the logs from the Deschutes River, and had the company had some indication that they could use the river, they could have done more sooner.

Following the luncheon recess, the Chairman continued with the agenda item. Mr. James E. Bussard, President, Century West Engineering Corporation (the engineering firm retained by Brooks-Scanlon to assist them with the project), told the Commission that the Company was asking not to relocate the river and to explore alternate solutions and work out guideline requirements to meet them. He said the alternate proposal--to remove log storage and log handling from the river by developing a small infeed reservoir--could be achieved by October 1, 1975, thus eliminating the need for the requested year's extension.

Commenting on the EPA regulations, Mr. Vlastelicia said that if water from the pond is returned to the river, it must be treated to a fairly high degree in order to comply with the state as well as national requirements for the maintenance of water quality standards.

DEQ staff and representatives of the company indicated they would meet with the Oregon EPA officials to determine the requirements of the EPA regulations.

Mr. Sawyer responded to the delay in issuance of the NPDES permit for Brooks-Scanlon by stating that the only issue was what deadline to use. Mr. McPhillips suggested using the October 1, 1975 date in the compliance schedule.

It was MOVED by Mr. Somers, seconded by Mrs. Hallock and carried to deny the company's application for an extension of time and to require a progress report on the new plan proposal by January 15, 1975.

TRI-MET STATUS REPORT

Mr. Steve McCarthy, Assistant General Manager for Tri-Met, discussed the commitment made by the District 18 months ago to radically accelerate its expansion program to assist in efforts to meet clean air goals, focusing on a goal of 50 percent increase in ridership into and out of the Portland central business district by June 1, 1975. Several of these programs have changed and Mr. McCarthy summarized the changes and the District's progress in meeting its goals.

Tri-Met's ridership projection for 1974-75 calls for an increase of 12 percent, bringing the total increase since 1970-71 to 37.3 percent. The District still hopes to meet its 50 percent increase. Future plans call for 80 new buses, 715 shelters, new fare programs including a monthly transferrable \$13 pass, park and ride lots, and the transit mall.

Mr. McCarthy concluded by stating that the Tri-Met board will consider proposed tax increases designed to raise money to permit operation of the system at a level needed to meet the clean air goals, and that if the money was not available, Tri-met would not run the system at the proposed increased levels.

CHEM-NUCLEAR, INC.

It was MOVED by Mr. Somers, seconded by Mrs. Hallock and carried to dispense with the reading of the staff report on this matter since consideration of the license application would be deferred to the Commission's November 22nd meeting.

Mr. Wicks noted that a copy of the Attorney General's opinion had been distributed to the Commission and that essentially it reaffirmed the earlier opinion that the Department does have the authority to issue a license.

Even though the matter could not be decided at this meeting, the Chairman asked if there were witnesses who wished to address this agenda item.

Mr. John Mosser, a Portland attorney representing Chem-Nuclear, Inc., objected to the limitation in the proposed permit on the amount of nuclear waste to be disposed of at the proposed site. He said that in view of the 40 million cubic foot capacity of the site, the limitation of 150,000 cubic feet per year was an arbitrary figure imposed by the staff which prevented the flexibility needed by a licensee to operate the site economically (Chem-Nuclear had requested a capacity of 250,000 cubic feet per year). He added that the applicant would not be interested in further pursuing the permit if this limitation could not be changed. Mr. Mosser said the applicant hoped for a decision by November since the wastes presently on the site would either have to be buried soon or repackaged at considerable cost.

Mrs. Hallock asked Mr. Mosser if a sense of the Commission on this issue would be helpful. Dr. Crothers spoke in support of a change in the limitation since the wastes being considered for disposal at the site were low level radioactive wastes. Mrs. Hallock and Mr. Somers indicated opposition to changing the limitation. The Chairman pointed out that the matter could not be put to a vote at this meeting.

Mr. Jonathan Newman, a Portland attorney representing Nuclear Engineering, emphasized that the Richland, Washington site was adequate to handle all the radioactive wastes from Oregon, and that the DEQ staff report again stated that there is no need for a radioactive waste disposal site in Oregon. He said his client did not question the need for a toxic chemical waste disposal site in Oregon.

Mr. Cannon responded to questions by Dr. Crothers concerning limiting the amount of radioactivity in the area rather than limiting the amount of radioactive waste. He said that the limitation on radioactivity in the license and in the control and management of the site was based on the amount of radioactivity that would be emitted and impinge upon someone who would be there. He recommended that at an appropriate time the Commission take action on the permit before them.

Mr. Mosser said that Chem-Nuclear had no objection to the limitation on the amount of radioactivity, only to the amount of waste permitted to be stored.

It was MOVED by Mr. Somers, seconded by Dr. Crothers and carried that the Commission consider the next item on the agenda.

PROPOSED PUBLIC HEARING TO CONSIDER ADOPTION OF RULES PERTAINING TO SURETY BONDS FOR SEWAGE TREATMENT FACILITIES

It was MOVED by Dr. Crothers, seconded by Mrs. Hallock and carried to approve the Director's recommendation that authorization be granted to hold a public hearing at the earliest possible time to consider the adoption of proposed rules pertaining to surety bonds or other security for construction, operation and maintenance of sewage collection, treatment or disposal facilities.

RULES PERTAINING TO (a) PRIOR CONSTRUCTION PERMITS OR APPROVALS ISSUED PRIOR TO JANUARY 1, 1974, FOR CONSTRUCTION OF SUBSURFACE SEWAGE DISPOSAL SYSTEMS, AND (b) STANDARD SPECIFICATION FOR HOMOGENEOUS PERFORATED BITUMINIZED FIBER PIPE FOR SEPTIC TANK DISPOSAL FIELDS

Mr. Spies reported on the public hearing held on this date in Ontario, Oregon, by Mr. James Van Domelen, DEQ Regional Engineer (Pendleton), for the purpose of considering for permanent adoption the temporary rules previously adopted by the Commission. Four people were in attendance and two testified:

Mr. Ray Huff, Malheur County sanitarian, stated that his office had issued permits under the prior rule and had no suggested changes.

Mr. Baum, an engineer with Douglas County, said that although they had had problems with the temporary rule, he had no suggested changes.

Based on the testimony presented, it was recommended that the two temporary rules be adopted as permanent rules and that they be filed promptly with the Secretary of State and become effective 10 days after publication by that office.


It was MOVED by Mr. Somers, seconded by Mrs. Hallock and carried, that the Director's recommendation be approved, and the rules adopted as permanent rules.

OTHER BUSINESS

1. It was MOVED by Mr. Somers, seconded by Mrs. Hallock and carried that the Director be given all necessary power to seek resolution of the problems in Lincoln County.
2. The matter of the Weyerhaeuser Company tax credit application, T-580, deferred from the morning session, was again considered. Mr. Charles Clinton

of the DEQ staff explained the economic analysis for the tax credit application which is for a low-odor recovery furnace that replaced the existing recovery furnace. Because the Commission still had questions about the primary purpose of the installation, Mr. Somers MOVED that the matter be deferred until the November meeting so that the staff could respond to the questions; seconded by Mrs. Hallock and carried.

There was no further business to be brought before the Commission, and the Chairman adjourned the meeting at 3:10 p.m.


Shirley Shay, Secretary
Environmental Quality Commission

Addition to the Minutes, by motion of Dr. Crothers on November 22, 1974:

on page 8, in the testimony of Wayne Kuhn, as a last sentence, include: Mr. Kuhn stated that business would gladly absorb the cost of the low-sulfur residual fuel proposed for production by CIRI.

ENVIRONMENTAL QUALITY COMMISSION

Attendance Record

Meeting of November 22, 1974 in Salem, Oregon

Name	Organization	Address
Mrs + Mr Ronald Grant		Portland Mobile Court Pt 1 Box 244 Cornelius Ore
N. Edmeister	EPA	123 & SW Morrison Path
R. G. Uhlir	Columbia Refining	200 S.W. Market 12 th Flr
W. K. ...	Chamber Commerce	Portland, Oregon
George Wagner	American Can Co	Hobocoy, Ore
O. B. ...	American Can Co	Salem, Oregon
Bruce H. Anderson	I.C.S.C.	Eugene, Or.
PETE SCHWELL	PUNISHERS ... Co.	Portland, Ore
DOUGLAS SOWLES	AGC	2825 SW MONTGOMERY DR, PORTLAND, OREGON
Jonathan Neuman	attorney for Inclin Engineering	1408 Standard Plaza
Ron Symons	The Travelers Ins. Co.	707 S.W. Washington - ^{Portland, Oregon} Port.
G. L. Odell	G. L. Odell Co. ... Eng'rs	Portland
L. E. BIRKE	NWPPA	SEATTLE, WA.
Mar Seton	Cascade ...	Portland Oregon
T. ...	sold	Portland
New ...	O.D.O.T.	Salem
... Donnell	...	855 NW Conifer Corvallis
...	Portland
Jack Brown	Crown Zellerbach	Portland
W. Shure	Oregon Mobile Park Association	Corvallis
STORRS WATERMAN	PENINSULA ...	PORTLAND



ENVIRONMENTAL QUALITY COMMISSION

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

TOM McCALL
GOVERNOR

B. A. McPHILLIPS
Chairman, McMinnville

GRACE S. PHINNEY
Corvallis

JACKLYN L. HALLOCK
Portland

MORRIS K. CROTHERS
Salem

RONALD M. SOMERS
The Dalles

KESSLER R. CANNON
Director

MEMORANDUM

To : Environmental Quality Commission
From : Director
Subject: Agenda Item No. B, November 22, 1974 EQC Meeting
October 1974 Program Activity Report

During the month of October, staff action was taken relative to the list of project plans and specifications and/or reports which follows:

Water Quality

1. One hundred thirty-six (136) domestic sewage project plans and specifications were reviewed:

WATER QUALITY DIVISION - 76 (see attachment #1)

Approval was given to forty-two (42) change orders and addenda.

Provisional approval was given to thirty-four (34) sewer projects.

NORTHWEST REGION - 60 (see attachment #2)

Provisional approval was given to forty-three (43) sewer projects.

Seventeen (17) sewer project plans are pending.

2. Twenty-four (24) industrial projects were reviewed:

WATER QUALITY DIVISION - 2

Provisional approval was given to:

Ore-Ida Foods, Ontario
wastewater control facilities

T & H Farms, Wasco
animal waste facilities



Contains
Recycled
Materials

NORTHWEST REGION - 22 (also see attachment #3)

Approval was given to twenty-one (21) projects:

Bird & Son, Portland

study for recirculating cooling water

Austin Warner, Yamhill County

animal waste disposal system holding tank for livestock operation

Joe Davis, Tillamook County

animal waste disposal system holding tank

Gary Manning, Tillamook County

animal waste disposal system holding tank

William Gates, Tillamook County

animal waste disposal system holding tank

James Trent, Tillamook County

animal waste disposal system holding tank

Hugh Skarda, Tillamook County

animal waste disposal system holding tank

Chipman Chemical, Portland

Rhodia Defuser

Cascade Steel, Yamhill County

wastewater control facilities modification (2 plans)

Francis Wright, Columbia County

animal waste disposal system holding tank

Ernest Obermeyer, Columbia County

animal waste disposal system holding tank

Ted Wilson, Clackamas County

animal waste disposal system holding tank

Ross Winans, Columbia County

animal waste disposal system holding tank

Melvin Kelley, Columbia County

animal waste disposal system holding tank

Gary Duyck, Washington County

animal waste disposal system holding tank

Robert Vandehey, Washington County

revised animal waste disposal system

Louis Hillecke, Washington County

animal waste disposal system holding tank

Daryl Johnston, Tillamook County
animal waste disposal system holding tank

U.S. Plywood, Willamina
water pollution abatement modification

Ronald W. Bone, Columbia County
animal waste disposal system holding tank

One (1) plan is pending:

Penwalt Corp., Portland
asbestos settling ponds

Air Quality

Twenty-nine (29) air pollution control projects and parking space facility proposals were reviewed:

AIR QUALITY DIVISION - 8

Conditional approval was given to four (4) parking space facility proposals:

Presbyterian Church of Laurelhurst, Portland
68-space parking facility

Payless Distribution Center, Beaverton
156-space parking facility

Carrow's Restaurant, Springfield
67-space parking facility

Tektronix, Inc., Beaverton
modification to existing parking facilities

Additional information was requested for four (4) parking space facility proposals:

Tri-Met Employee Parking, Portland
100-space parking facility

Hyland Hills Shopping Center, Beaverton
471-space parking facility

Burger King Restaurant, Portland
57-space parking facility

Sommerwood, Multnomah County
588-space residential parking facility

NORTHWEST REGION - 21 (see also attachment #4)

Approval was given to five (5) air pollution control projects:

Western Foundry, Washington County
control of furnace, sand handling, cleaning room

Rich Manufacturing, Multnomah County
baghouse

Publishers Paper, Newberg, Yamhill County
new hog fuel boiler

J. Arlie Bryant, Inc., Multnomah County
portable rock crusher

Ross Island Sand and Gravel, Multnomah County
concrete batch plant

Information requested and received from seven (7) air pollution control projects is being evaluated:

Layton Funeral Home, Multnomah County
cremation incinerator--evaluating source test results

Columbia Independent Refinery, Multnomah County
oil refinery--evaluating tradeoff benefits

Portland Steel Mills, Multnomah County
new steel mill--proposed permit being drafted

Publishers Paper, Newberg, Yamhill County
new digester--drafting letter of approval

Oregon Steel Mills, Rivergate, Multnomah County
pellet metallizing--reviewing emission calculations

Teeples & Thatcher, Inc., Multnomah County
sawdust cyclones--reviewing request to temporarily use existing cyclone while installing bag filter to exhaust inside building

Chamberlain's Pet Crematorium, Multnomah County
cremation incinerator--proposed permit being drafted

Additional information was requested for two (2) air pollution control projects:

Oregon Steel Mills, Front Street, Multnomah County
baghouse with canopy

Charter Energy Company, Columbia County
new oil refinery

Seven (7) air pollution control projects are being processed:

Rhodia-Chipman Division, Multnomah County
dichlorophenol distillation expansion

Ross Island Sand and Gravel, Multnomah County
concrete batch plant

Oregon Portland Cement, Clackamas County (3 notices of construction)
paving of vehicular traffic areas

ESCO - Plant #3, Multnomah County
new 4-ton induction furnace

Medford Corporation, Multnomah County
green wood chip storage and distribution center

Land Quality

Ten (10) project plans were reviewed:

SOLID WASTE MANAGEMENT DIVISION - 7

Approval was given to five (5) project plans:

Woodburn Landfill, Marion County
existing site, closure plan

Camas Valley Transfer Station, Douglas County
new transfer station, construction and operational plans

Hempstead Sludge Lagoon, Coos County
existing domestic site, construction plan

Agness Transfer Station, Curry County
new transfer station, construction plans

Albany Landfill, Linn County
existing domestic site, closure plan

Provisional approval was given to two (2) project plans:

Coffin Butte Landfill, Benton County
existing domestic site, operational plans

Joe Ney Disposal Site, Coos County
existing domestic site, operational plan

NORTHWEST REGION - 3

Approval was given to three (3) project plans:

Woodburn Sanitary Landfill, Marion County
operational plan, new garbage landfill

Resource Recovery ByProducts
operational plan, new transfer station

Crown Zellerbach - Lewis and Clark Log Sorting Yard, Clatsop County
operational plan, expansion of existing wood waste landfill.

Director's Recommendation

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



KESSLER R. CANNON
Director

ss

attachments - 4

11/13/74

DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHWEST REGION OFFICE - Technical Services
Water Quality Division - Project/Plan Review

During the month of October 1974, the following sanitary sewer 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.

See attached sheets for disposition of each project.

Summary of projects

26 sanitary sewer plans received
22 sanitary sewer plans approved
9 sanitary sewer plans pending*

* Pending refers to scheduling for staff review relative to disposition of projects unless noted on attached sheets as "under study".

No.	I N F O R M A T I O N R E C E I V E D					D E Q S t a f f D i s p o s i t i o n		
	Received Date	Location	Project	Engineer	Infor- mation	Approval Date	Action	By
362	9-25-74	USA (Sunset)	Extension to 114th Street L.I.D., Edwin J. Peterson property, sanitary sewers	Hilton Engineering Co.	2 plans	9-27-74	Prov. Approval	AHJ
363	9-16-74	Timberline Lodge Clackamas Co.	Timberline Lodge Sewage Effluent Seepage Bed	U.S.Department of Agriculture	2 plans	9-19-74	Prov. Approval	CHG
364	9-26-74	Tualatin	Shawnee Plains sanitary sewers	Compass Corp.	2 plans	10-3-74	Prov. Approval	AHJ
365	9-22-74	West Linn	Portland Ave. L.I.D. sanitary sewers	John W. Cunningham & Associates	2 plans	10-3-74	Prov. Approval	AHJ
366	9-26-74	Tualatin	Western Metro Sewer Extension (West of 65th Ave)	CH ₂ MHill	1 plan	10-3-74	Prov. Approval	AHJ
367	9-11-74	Portland	P 8172.0 Tryon Creek infiltration/inflow analysis	City of Portland	2 plans	--	Pending (under study)	REG/PD
368	10-1-74	Gresham	Casa-De-Lass sanitary sewers	Moffatt Nichol & Bonney, Inc.	2 plans	10-3-74	Prov. Approval	AHJ
369	9-30-74	Troutdale	Sanitary force main connection to a City Manhole	Sleavin-Kors	2 plans	10-3-74	Prov. Approval	AHJ
370	10-2-74	Lake Oswego (Tryon)	Revised Forest Glen subdivision sanitary sewers	Murray-McCormick Environmental Group	2 plans	10-4-74	Prov. Approval	AHJ
371	10-1-74	Tualatin	Conrad Veneer property sanitary sewer	Dorner & Tunks, Inc.	3 plans	10-8-74	Prov. Approval	AHJ

INFORMATION RECEIVED						DEQ Staff Disposition		
No.	Received Date	Location	Project	Engineer	Information	Approval Date	Action	By
155	10-3-74	Salem (Willow) E. Salem Sewer & Drainage District 1	Mackel Construction Company Shopping Center sanitary sewer at Silverton & Lancaster Drive	--	2 plans	10-18-74	Prov. Approval	AHJ
372	10-10-74	CCSD#1 (Gladstone)	Monte Carlo Heights subdivision sanitary sewer	Martin Engineering Company	3 plans	10-14-74	Prov. Approval	AHJ
373	10-9-74	Turner	A Sewerage Plan Report for Turner	Clark & Groff	3 plans		Pending (under study)	RHF/ PDC
374	10-10-74	Salem (Willow)	Central Services Center near Interstate 5 & State Street sanitary sewers	Carkin and Sherman AIA and Westech Engineering	1 plan		Pending 10-16-74 rec'd revision with no profile (Requested profile sheet)	AHJ
375	10-15-74	Canby	North Juniper Street and N.E. First Avenue sanitary sewers	Zarosinski - Tatone Engineering Inc.	2 plans	10-18-74	Prov. Approval	AHJ
376	10-15-74	St. Helens	Kaiser Gypsum Co., Inc. Sanitary Sewage Disposal Modifications	Whitely, Jacobsen and Associates	3 plans	10-24-74	Prov. Approval	AHJ/ LDP
377	10-16-74	Gresham	Gresham Clinic sanitary sewers	Wilsey & Ham	2 plans	10-22-74	Prov. Approval	AHJ
378	10-17-74	Gresham	Camelot Plat 3 subdivision sanitary sewers	Carl E. Green & Associates	2 plans	10-22-74	Prov. Approval	AHJ
379	10-17-74	USA (Aloha)	Tanasbrook Development Neighborhood "C", sanitary sewer line C-1 revision, sanitary sewer line C-2	Alpha Engineering	2 plans	10-22-74	Prov. Approval	AHJ

I N F O R M A T I O N R E C E I V E D

D E Q S t a f f D i s p o s i t i o n

o.	Received Date	Location	Project	Engineer	Infor- mation	Approval Date	Action	By
380	--	Independence	Independence Airpark final phase of 84 lots sanitary sewers	W. I. Peterson Engineering	--	10-22-74	Prov. Approval	AHJ
381	10-18-74	West Linn	Hidden Springs Ranch No. 2 sanitary sewers	Wilsey & Ham	2 plans	10-23-74	Prov. Approval	AHJ
382	10-21-74	USA (Durham)	Preliminary Plans for Cedar Hills Trunk Sewer	Stevens, Thompson & Runyan	2 plans	10-25-74	Prov. Approval	AHJ
383	10-23-74	Twin Rocks Sanitary District in Tillamook Co.	Stark Street sanitary sewer extension, lots, E-5, and E-5-1	W. F. Perley and Associates	2 plans	10-25-74	Prov. Approval	AHJ
384	10-24-74	USA (Somerset West)	Somerset West Commercial Center sanitary sewer	R.A.Wright Engineering	2 plans	10-28-74	Prov. Approval	AHJ
385	10-25-74	Portland S.W.	S.W. Fairvale Court north of S.W. Pendleton Street sanitary sewer	City of Portland	1 plan	10-29-74	Prov. Approval	AHJ
386	--	Portland N.	Gertz-Schmeer sewerage system including lift stations, wastewater pump station and sanitary sewers	City of Portland	2 plans	10-14-74	Prov. Approval	WQ-by CPH
387	10-31-74	Tualatin	Revised Shawnee Plains sanitary sewers	Compass Corp.	2 plans		Pending	
388	10-31-74	Portland	S.E. Harney Street sanitary sewers	City of Portland	1 plan		Pending	
389	10-31-74	USA (Aloha)	Ray Sullivan sanitary sewer extension	H.A. Mohr Engineers	2 plans		Pending	

I N F O R M A T I O N R E C E I V E D

DEQ Staff Disposition

No.	Received Date	Location	Project	Engineer	Information	Approval Date	Action	By
390	10-31-74	USA (Beaverton)	Carolwood I sanitary sewers	Wilsey & Ham	2 plans		Pending	
391	10-31-74	USA (Aloha)	CO-JO No. 2 sanitary sewers	Harris-McMonagle	2 plans		Pending	
392	10-31-74	USA (Aloha)	Hyland Hills Center - Phase I Construction sanitary sewers	Robert E. Meyer Consulting Engineer	2 plans		Pending	
393	-	USA (Forest Grove)	Forest Grove STP Change Order No. 2	CH ₂ M/Hill 2	-	10-28-74	Prov. Approval	WQ-by CPH

DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHWEST REGION OFFICE - Technical Services

Water Quality Division - Project/Plan Review

During the month of October 1974, the following industrial 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.

Specific projects were received prior to October 1974, however projects 89-1 through 101-1 are included for the month of October because some were not included in earlier months. See attached sheets for dates and disposition of each project.

Summary of Projects:

13	Industrial plans/tax credits received
20	Industrial plans/tax credits approved
5	Industrial plans/tax credits pending (total from previous months)

I N F O R M A T I O N R E C E I V E D

DEQ Staff Disposition

No.	Received Date	Location	Project	Engineer	Information	Approval Date	Action	By
57-I	7-17-74	Salem	Boise Cascade Digester 8 and Counter Current Washer	Boise Cascade	1 plan	8-15-74	Approved	RJN
58-I	8-1-74	Tillamook Co.	Animal Waste Disposal System Holding Tank for Joe Donaldson	U.S.Department of Agriculture	1 plan	8-12-74	Approved	RHF
59-I	8-5-74	Tillamook Co.	Animal Waste Disposal System Holding Tank for Glen Metcalfe	U.S.Department of Agriculture	1 plan	8-12-74	Approved	RHF
60-I	8-5-74	Tillamook Co.	Animal Waste Disposal System Holding Tank for Harvey Wyss	U.S.Department of Agriculture	1 plan	8-12-74	Approved	RHF
61-I	8-5-74	Tillamook Co.	Animal Waste Disposal System Holding Tank for Ray Measur	U.S.Department of Agriculture	1 plan	8-12-74	Approved	RHF
62-I	8-5-74	Tillamook Co.	Animal Waste Disposal System Holding Tank for Ron Zuercher	U.S.Department of Agriculture	1 plan	8-12-74	Approved	RHF
63-I	8-5-74	Stayton	Stayton Canning Co. Tax Credit T-566, "Spray Irrigation System".	Clark and Groff	1 plan		pending	RJN
64-I	8-5-74	Stayton	Stayton Canning Co. Tax Credit T-567, "Wastewater Screening System".	Clark & Groff	1 plan		pending	RJN
65-I	7-12-74	Portland	Stauffer Chemical Co. Tax Credit T-552, "Lined Pond with Pump".	Stauffer Chemical Co. Engineering Department	1 plan		pending	REG

NORTHWEST REGION - WQ - Industrial Plan Disposition

Sheet: 8-I

I N F O R M A T I O N R E C E I V E D

DEQ Staff Disposition

No.	Received Date	Location	Project	Engineer	Information	Approval Date	Action	By
66-I	8 74	Yamhill Co.	Millers Wholesale Meat Lagoon System	Environmental Associates	1 plan	8-15-74	Approved	RHF
67-I	7-16-74	Polk Co.	Willamette Industries Log Pond Modifications	Willamette Industries	1 plan	8-15-74	Approved	RHF
70-I	8- -74	St. Helens	Kaiser Gypsum Preliminary study of sanitary sewer pressure line	Whiteley/Jacobsen & Associates	1 plan	8-12-74	Approved	LDP
71-I	8- -74	Portland	Zidell Oil Water Separator	Bryan Johnson	1 plan		Pending (under study)	LDP
72-I	8-8-74	Portland	Bird & Son Study for Recirculating Cooling Water	UMA		10-17-74	Approved	LDP
73-I	9-4-74	Marion County	Animal Waste Disposal System Holding Tank for Jesse Grieser Dairy Farm	U.S.Department of Agriculture	1 plan	9-10-74	Approved	RHF
75-I	9-11-74	Yamhill County	Dayton Feed Yard Lagoon for Animal Waste	U.S.Department of Agriculture	1 plan	9-18-74	Approved	RHF
76-I	9-9-74	Yamhill County	Animal Waste Disposal System Holding Tank for Richard Kimball	U.S.Department of Agriculture	1 plan	9-18-74	Approved	RHF

NORTHWEST REGION - WQ - Industrial Plan Disposition

Sheet: 9-1

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Engineer	Information	Approval Date	Action	
77-1	9-16-74	Yamhill County	Animal Waste Disposal System Holding Tank for Austin Warner Livestock operation	U.S.Department of Agriculture	1 plan	10-1-74	Approved	RH
78-1	9-10-74	Marion County	Animal Waste Disposal System Holding Tank for A & H Dairy	U.S.Department of Agriculture	1 plan	9-19-74	Approved	RH
-79-1	8-12-74	Washington County	Animal Waste Disposal System Holding Tank for Robert Kauer, Jr.	U.S.Department of Agriculture	1 plan	9-16-74	Approved	SC
-80-1	8-21-74	Washington County	Animal Waste Disposal System Holding Tank for Steven Vandehey	U.S.Department of Agriculture	1 plan	9-13-74	Approved	SC
81-1	9-6-74	Washington County	Animal Waste Disposal System Holding Tank for Robert Vandehey	U.S.Department of Agriculture	1 plan	9-13-74	Approved	SC
-82-1	9-5-74	Tillamook County	Animal Waste Disposal System Holding Tank for Joe Davis	U.S.Department of Agriculture	1 plan	10-1-74	Approved	RHF
83-1	9-18-74	Tillamook County	Animal Waste Disposal System Holding Tank for Gary Manning	U.S.Department of Agriculture	1 plan	10-2-74	Approved	RHF
-84-1	9-23-74	Tillamook County	Animal Waste Disposal System Holding Tank for William Gates	U.S.Department of Agriculture	1 plan	10-3-74	Approved	RHF
85-1	9-24-74	Tillamook County	Animal Waste Disposal System Holding Tank for James Trent	U.S.Department of Agriculture	1 plan	10-7-74	Approved	RHF
86-1	9-23-74	Tillamook County	Animal Waste Disposal System Holding Tank for Hugh Skarda	U.S.Department of Agriculture	1 plan	10-7-74	Approved	RH

I N F O R M A T I O N R E C E I V E D

DEQ Staff Disposition

	Received Date	Location	Project	Engineer	Information	Approval Date	Action	By
37-1	9-13-74	Portland	Chipman Chemical Rhodia Defuser	Zarosinski Tatone Engineering, Inc.	1 plan	10-17-74	Approved	LDP
38-1	8-26-74	Portland	ARCO Upgrading O.I water separation facilities	ARCO Engineering	1 plan	9-23-74	Approved	LDP
39-1	9-9-74	Yamhill County	Cascade Steel wastewater control facilities modification	CH ₂ M/Hill	2 plans	10-3-74	Approved	RHF
30-1	9-26-74	Columbia County	Animal Waste Disposal System Holding Tank for Francis Wright	U.S.Department of Agriculture	1 plan	10-4-74	Approved	LDP
31-1	9-26-74	Columbia County	Animal Waste Disposal System Holding Tank for Ernest Obermeyer	U.S.Department of Agriculture	1 plan	10-3-74	Approved	LDP
32-1	9-6-74	Clackamas County	Animal Waste Disposal System Holding Tank for Ted Wilson	U.S.Department of Agriculture	1 plan	10-4-74	Approved	LDP
33-1	9-26-74	Columbia County	Animal Waste Disposal System Holding Tank for Ross Winans	U.S.Department of Agriculture	1 plan	10-4-74	Approved	LDP
34-1	9-26-74	Columbia County	Animal Waste Disposal System Holding Tank for Melvin Kelley	U.S.Department of Agriculture	1 plan	10-4-74	Approved	LDP
35-1	7-10-74	Washington County	Animal Waste Disposal System Holding Tank for Gary Duyck	--	--	10-8-74	Approved	SCC

I N F O R M A T I O N R E C E I V E D

DEQ Staff Disposition

No.	Received Date	Location	Project	Engineer	Information	Approval Date	Action	By
96-1	9-20-74	Washington County	Revised Animal Waste Disposal System for Robert Vandehey	--	--	10-8-74	Approved	SCC
97-1	6-14-74	Washington County	Animal Waste Disposal System Holding Tank for Louis Hillecke	--	--	10-8-74	Approved	SCC
98-1	10-10-74	Tillamook County	Animal Waste Disposal System Holding Tank for Daryl Johnston	U.S. Department of Agriculture	--	10-29-74	Approved	RHF
99-1	10-7-74	Portland	Asbestos Settling Ponds for Pennwalt Corp.	Pennwalt Corp.	1 plan		Pending	WDL
100-1	9-17-74	Willamina	U.S. Plywood, Water Pollution Abatement Modification	Bryan Johnson & Associates	1 plan	10-23-74	Approved	RHF
101-1	9-26-74	Columbia County	Animal Waste Disposal System Holding Tank for Ronald W. Bone	U. S. Department of Agriculture	1 plan	10-21-74	Approved	LDP/REG

MEMORANDUM

To: Shirley Shay

November 12, 1974

From: John Kowalczyk

Subject: Supplement to October 1974 Activity Report to EQC

Northwest Region Permit Work Output-Backlog

October 1974

	<u>Sources Req'd Permits</u>	<u>Appl. Rec'd (mo.)</u>	<u>Permits Drafted (mo.)</u>	<u>Permits Issued (mo.)</u>	<u>Appl. Pending</u>		<u>Sources Under Regular Permit</u>
					<u>Permits To be Drafted</u>	<u>Permits Drafted</u>	
<u>Air Permits</u>							
Process	294	5	1	25	138	6	114
Fuel Burning	630	3	114	0	3	619	8
<u>Water Permits*</u>							
Industrial	158	5	17	3	20	98	40
Domestic	123	0	3	10	5	42	76
<u>Solid Waste Permits</u>							
General Refuse	27	0	1	4	5	1	21
Demolition	10	1	0	0	3	0	7
Industrial	13	0	0	0	3	0	10

*NPDES

P = Permit
 NC = Notice of Construction

DEPARTMENT OF ENVIRONMENTAL QUALITY
 NORTHWEST REGION - AQ-Plan Disposition

I N F O R M A T I O N R E C E I V E D							DEQ Staff Disposition		
No.	Date Received	Location	Project	Review Engineer	Information Req'd	Information Rec'd	Approval Date	Action	By
P144	11/9/73	Clatsop	AMAX Aluminum - <u>New</u> Aluminum Reduction Plant	JFK	12/26/73	9/11/74		Processing - Developing list of additional information needed	
P145	11/21/73	Multnomah	Union Carbide - #1 furnace Product change	JAP	7/15/74	8/14/74		Proposed permit being drafted	
P146	11/23/73	Multnomah	Schnitzer Steel Products Wire Incinerator	JAP	6/28/74	8/7/74	9/30/74	Issued proposed permit 9/30/74	
P259	1/30/74	Multnomah	Columbia Steel Casting New Furnace and Controls	JAP	2/6/74	6/13/74	9/30/74	Issued proposed permit 9/30/74	
NC504	2/5/74	Multnomah	Western Farmers - Dust Control of Truck Receiving	JAP	3/21/74			Awaiting information on Air Flows (delinquent in meeting Compliance Schedule). Notified 10/29/74, information to be supplied in November.	
P267	2/28/74	Multnomah	Layton Funeral Home Cremation Incinerator	JAP	5/14/74	10/29/74		Evaluating Source Test Results	
NC513	3/26/74	Clackamas	Milwaukie Plywood Veneer Dryer Control	JAP	6/17/74			Awaiting Revised Proposal (delinquent in meeting Compliance Schedule). Meeting held 10/24/74, new compliance schedule being negotiated.	
P275-7	4/2/74	Multnomah	Columbia Independent Refinery Oil Refinery	JAP	4/30/74	10/28/74		Evaluating tradeoff benefits	
B282	4/15/74	Multnomah	Pacific Carbide New Furnace	JAP	5/17/74		9/30/74	Issued Proposed Permit 9/30/74	

DEPARTMENT OF ENVIRONMENTAL QUALITY
 NORTHWEST REGION - AQ-Plan Disposition

I N F O R M A T I O N R E C E I V E D							DEQ Staff Disposition		
No.	Date Received	Location	Project	Review Engineer	Information Req'd	Rec'd	Approval Date	Action	By
NC520	5/7/74	Multnomah	Resource Recovery Byproducts Paper Classifier	JAP	5/29/74			Awaiting information on controls (meeting held 10/24/74, compliance schedule negotiated, plans due November 1, 1974).	
P294	5/31/74	Columbia	Cascade Energy, Inc. Oil Refinery	JAP	7/16/74			Awaiting emission information and EIA	
NC542	6/12/74	Multnomah	Port of Portland Bulk Loading Facility	JAP	7/22/74			Awaiting information on on controls (information will be received when Port approves project funding).	
NC550	6/17/74	Washington	Western Foundry - control of Furnace, Sand Handling, Cleaning Room	JAP	7/25/74	10/2/74	10/10/74	Approved	
NC526	6/20/74	Multnomah	Rich Manufacturing Baghouse	JAP	7/21/74	10/2/74	10/8/74	Approved	
P305	6/28/74	Multnomah	Owens Corning Fiberglass Plant	JFK	7/31/74			Awaiting information on more efficient controls and tradeoffs	
P306	6/28/74	Multnomah	Portland Steel Mills New Steel Mill	JAP	7/17/74	10/18/74		Proposed permit being drafted	
NC539	7/9/74	Multnomah	Triangle Milling Dust Control	DDO	9/20/74			Awaiting information on system design	
NC533	7/12/74	Washington	Pacific Building Materials Concrete Readymix Plant	DDO	9/6/74			Awaiting Permit Application	
NC537	7/12/74	Yamhill	Publishers Paper - Newberg New Digester	DDO	9/26/74	10/1/74		Drafting letter of approval	

DEPARTMENT OF ENVIRONMENTAL QUALITY
 NORTHWEST REGION - AQ-Plan Disposition

I N F O R M A T I O N R E C E I V E D							DEQ Staff Disposition		
No.	Date Received	Location	Project	Review Engineer	Information Req'd	Information Rec'd	Approval Date	Action	By
NC535	7/17/74	Marion	Boise Cascade - Salem New Washers	DDO	8/15/74			Awaiting final engineering design on controls	
NC534	7/17/74	Marion	Boise Cascade - Salem New Digester	DDO	8/15/74			Awaiting final engineering design	
NC538	7-18-74	Yamhill	Publishers Paper - Newberg New Hog Fuel Boiler	DDO	9/26/74	10/1/74	10/28/74	Approved	
P317	7/18/74	Multnomah	Oregon Steel Mills - Rivergate Pellet Metallizing	DDO	9/16/74	10/29/74		Reviewing emission calculations	
NC543	7/24/74	Multnomah	Oregon Steel Mills - Front St. Baghouse with Canopy	DDO	10/16/74			Awaiting information on hooding design and capture efficiency	
NC548	7/31/74	Clackamas	Barton Sand and Gravel Rock Crusher	JAP	9/17/74			Awaiting information on final process design	
NC544	8/1/74	Multnomah	Oregon Steel Mills - Front St. Ladle Fume Exhaust	DDO				Drafting approval letter	
NC545	8/8/74	Multnomah	Teeples & Thatcher, Inc. Sawdust Cyclones	DDO	8/27/74	10/29/74		Reviewing request to temporarily use existing cyclone while installing bag filter to exhaust inside building	
NC549	8/15/74	Washington	Western Foundry - Scrubber to Control Cupola Emissions	JAP				Drafting approval letter	
P321	8/19/74	Multnomah	J. Arlie Bryant, Inc. Portable Rock Crusher	DDO	9/4/74	9/20/74	10/24/74	Issued proposed permit 10/24/74	
P323	9/11/74	Columbia	Charter Energy Company New Oil Refinery	JAP	10/11/74			Evaluating tradeoffs and effect on ambient air quality	

P = Permit
 NC = Notice of Construction

DEPARTMENT OF ENVIRONMENTAL QUALITY
 NORTHWEST REGION - AQ-Plan Disposition

I N F O R M A T I O N R E C E I V E D							DEQ Staff Disposition		
No.	Date Received	Location	Project	Review Engineer	Information Req'd	Rec'd	Approval Date	Action	By
P324	9/13/74	Multnomah	Chamberlain's Pet Crematorium Cremation Incinerator	JAP	9/19/74	10/8/74		Proposed permit being drafted	
P325	9/17/74	Multnomah	The Oregon Humane Society Cremation Incinerator	JAP				Processing	
NC556	9/27/74	Clackamas	Oregon Ready-Mix Concrete Batch Plant	DDO				Preparing to mail out permit application	
NC561	10/4/74	Multnomah	Rhodia-Chapman Division Dichlorophenol distillation expansion	DDO				Processing - letter requesting expected increase in air emissions	
NC557	10/10/74	Multnomah	Ross Island Sand and Gravel Concrete Batch Plant	JAP			10/31/74	Approved	
P333	10/10/74	Multnomah	Ross Island Sand and Gravel Concrete Batch Plant	JAP				Proposed permit being drafted	
NC558 NC559 NC560	10/11/74	Clackamas	Oregon Portland Cement Paving of vehicular traffic areas	DDO				Drafting approval letters	
NC562	10/15/74	Multnomah	ESCO - Plant #3 New 4 ton induction furnace	DDO				Processing - reviewing emission calculations	
P345	10/7/74	Multnomah	Medford Corporation Green wood chip storage and distribution center	JAP				Processing	

DEPARTMENT OF ENVIRONMENTAL QUALITY
Northwest Region
Technical Services

Air Quality Division - Project/Plan Review

During the month of October 1974, the following air quality project plans and specifications were reviewed by the staff. The disposition of each project is shown pending ratification by the Environmental Quality Commission. See attached sheets for disposition of each project.

Summary of Projects

Air Quality Plan Reviews - Notice of Construction

7	Received
11	Pending (awaiting additional information requested)
9	Processing
4	Approvals

New Source Air Quality Permits

2	Received
1	Pending (awaiting additional information requested)
10	Processing
4	Proposed Permits Issued



ENVIRONMENTAL QUALITY COMMISSION

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

TOM McCALL
GOVERNOR

MEMORANDUM

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Salem

RONALD M. SOMERS
The Dalles

KESSLER R. CANNON
Director

To: Environmental Quality Commission

From: Director

Subject: Status Report of Air Quality Control Division Workload

No Br

Attached is a status report of the various projects in the Air Quality Control Division as of November 1, 1974. This status report includes special projects and ongoing programs including air contaminant discharge permit applications and source tests.

Also attached to the status report is a brief summary of the Air Quality Control Division activities.

KESSLER R. CANNON
Director

HMP - 11/18/74



Contains
Recycled
Materials

AIR QUALITY CONTROL DIVISION SUMMARY OF ACTIVITIES FOR OCTOBER

Public Hearings		
Indirect Source Rule		1
Project Plans		
Plan reviews received		18
Plan reviews completed		8
Surveys		
Odor survey, Publishers Paper, Newberg		1
Aerial survey, Willamette Valley		1
Computer Programs		
Computer programs completed		8
Meteorological Report		
Number of days on Alert Status		2
Number of days under Air Stagnation Advisory		3
Permit Activities		
Permit Applications received		3
Permits issued		3
Public Hearings held		0
Notice of Intent to issue permits		14
Permits revised, reissued		1

Summary of AQCD permits by source categories

	Received*	Issued	Pending
Wood products	210	84	126
Minerals and Metals	162	51	111
Pulp and paper	13	12	1
Miscellaneous	86	20	66

*Includes applications for renewals

Source Compliance Evaluations		
Plant inspections		7
Source tests received and/or reviewed		39
EPA Quarterly Reports		1
Training Activities		1
Regulation Revisions in process		1
Tax Credits		
Review reports prepared		10

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1	4/5/74	Toledo	Georgia Pacific veneer dryer emission control	Burkart	Notice/Const.		
2	7/29/74	Glide	Little River Box - Hog fuel boiler	"	"	9/27/74	Completed and approved
3	12/7/73	Medford	Boise Cascade - Leckenby scrubber for veneer dryer emissions control	"	" "		
4	3/1/74	Bandon	Rogge Mills, stud mill const.	"	" "		
5	6/28/74	North Bend	Weyerhaeuser Cyclo screen separator	"	" "		
6	8/5/74	Grants Pass	Agnew Plywood Veneer dryer emission control	"	" "		
7	8/15/74	North Bend	Weyerhaeuser - veneer dryer emission control (Air-Air condenser)	"	" "		
8	9/13/74	Klamath Falls	Weyerhaeuser - veneer dryer emissions control	"	" "		

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1	8/28/74	Dee	Champion International	Burkart	Permit compl.	9/18/74	H. F. boiler in compliance. Letter to be answered
2	9/13/74	North Bend	Weyerhaeuser	"	Compliance status	9/13/74	Letter to be answered
3			Veneer Dryer emissions control program	"	Special Project		

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1	9/30/74	Gold Beach	Champion International Cyclone test	Burkart	Source test		To be reviewed
2	7/5/74	Glendale	Robert Dollar - bark dryer	"	" "		" "
3	6/10/74	Medford	Timber Products Dryer, boilers, cyclones	"	" "		" "
4	12/31/73	Medford	Boise-Cascade, cyclones	"	" "		" "
5	3/5/73	Redmond	Brooks Willamette, cyclones	"	" "		" "
6	10/2/73	Redmond	Brooks Willamette, HF boilers	"	" "		" "
7	5/29/74	Redmond	Brooks Willamette, HF Boiler	"	" "		" "
8	12/74	Bend	Brooks Willamette, cyclones	"	" "		" "
9	5/24/73	Bend	Brooks Willamette, HF Boilers	"	" "		" "
10	11/14/72	Redmond	Brooks Willamette, HF Boilers	"	" "		" "
11	9/26/73	Kerby	Cabax Mills, H. F. boiler	"	" "		" "
12	3/28/73	Cascade Locks	Cascade Locks Lumber H. F. boiler	"	" "		" "
13	7/72	Dillard	Dillard Lbr., H.F. boiler	"	" "		" "
14	6/73	Drain	Drain Plywood, H. F. boiler	"	" "		" "
15	6/11/73	Drain	Drain Plywood, cyclones	"	" "		" "

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
16	3/8/74	Hines	Edward Hines Lumber Co. cyclones	Burkart	Source test		To be reviewed
17	1/15/74	Hines	Edward Hines Lumber Co. Hog fuel boiler	"	" "		" "
18	3/23/72	Gardiner	International Paper - cyclones	"	" "		" "
19	11/22/72	Chiloquin	D. G. Shelter Lbr., HF boiler	"	" "		" "
20	4/17/73	K. Falls	Modoc Lumber, HF boiler	"	" "		" "
21	4/12/73	White City	Olsen-Lawyer, HF boiler	"	" "		" "
22	4/72	Medford	Medford Corp., cyclones	"	" "		" "
23	9/21/73	White City	Permaneer - cyclones	"	" "		" "
24	2/2/73	Glendale	Robert Dollar Co. - cyclones	"	" "		" "
25	4/19/73	"	" " - HF boilers	"	" "		" "
26	4/72	Grants Pass	So. Oregon Plywood - cyclones	"	" "		" "
27	7/72	Roseburg	Sun Studs - H.F. boiler	"	" "		" "
28	5/5/73	"	" " H.F. boiler	"	" "		" "
29	1/3/72	Grants Pass	Tim Ply - Cyclones	"	" "		" "
30	9/17/74	Grants Pass	Tim Ply - H.F. boiler	"	" "		" "

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
31	9/17/74	Medford	Timber Products - HF boiler	Burkart	Source Test		To be reviewed
32	9/17/74	"	" ", dryer and sander-dust scrubbers	"	" "		" "
33	11/17/71	"	" " cyclones	"	" "		" "
34	10/6/71	"	" " cyclones	"	" "		" "
35	11/17/71	"	" " H. F. Boiler	"	" "		" "
36	1/73	Gold Beach	U.S. Plywood - H. F. boiler	"	" "		" "
37	4/10/73	Lebanon	U.S. Plywood - rotary dryer	"	" "		" "
38	4/12/73	Port Orford	Western States Plywood H. F. boiler	"	" "		" "
39	6/71	Pilot Rock	U.S. Gypsum - stacks, cyclone	"	" "		" "
40	3/27/73	" "	" ", H. F. boiler, cyclones	"	" "		" "

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1	11/20/73	Brookings	Brookings Plywood, EI 8-0015	Burkart	Permit Appl.		
2	8/1/74	Gold Beach	Pacific Teollisuus, Appl. 473	"	"	"	Permit to be issued
3		Medford	SWF Plywood, Appl 469	"	"	"	Variance approved by EQC Permit Public Hearing scheduled for 9/23/74
4	12/3/73	Brookings	South Coast Lumber, Appl 317	"	"	"	
5	11/20/73	Glide	Little River Box, App. 276	"	"	"	Permit to be issued
6	11/8/73	Drain	Smith River Lbr. App. 259	"	"	"	
7	12/6/73	Central Pt.	LA-Pacific, App 346 (Cheney Forest Products)	"	"	"	
8	11/20/73	Grants Pass	SH&W Lumber, App. 275	"	"	"	
9	12/6/73	Grants Pass	WEBCO (App. 343) (Brown Bros. Lumber)	"	"	"	
10	12/6/73	Alicel	Peacock Lumber, App. 363	"	"	"	
11	6/1/73	Union	Ronde Valley Lumber, App 178	"	"	"	

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
12	4/2/74	Bandon	Rogge Lumber, App. 436	Burkart	Permit Appl.		
13	4/2/74	Bandon	Rogge Lumber, Appl. 435	"	" "		
14	11/20/73	Bandon	Moore Mill & Lbr. App. 277	"	" "		
15	12/6/73	Broadbent	Alder Pacific, Appl. 350	"	" "		
16	1/18/74	Lakeside	Bohemia, Appl. 406	"	" "		
17	12/6/73	Myrtle Pt.	Leep Logging, Appl. 347	"	" "		
18	12/3/73	Langlois	R. D. Tucker, Appl. 334	"	" "		
19	4/2/74	Sixes	Rogge Lumber, Appl. 437	"	" "		
20	11/20/73	Riddle	C & D Lumber, Appl. 274	"	" "		
21	9/18/73	Dillard	Dillard Lumber, Appl. 245	"	" "		
22	11/20/73	Sutherlin	L & H Lumber, Appl. 284	"	" "		
23	1/18/74	Reedsport	Reedsport Mill, Appl. 407	"	" "		
24	11/8/73	Drain	Mt. Baldy Mill, Appl. 261	"	" "		
25	12/6/73	Myrtle Cr.	Green Valley Lumber, App. 355	"	" "		
26	12/18/73	Reedsport	Bohemia, Appl. 385 (Bolon Is. Division)	"	" "		

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
27	12/6/73	Reedsport	Schafer Lumber, Appl. 344	Burkart	Permit Appl.		
28	12/28/73	Riddle	D.R. Johnson Lumber, App. 394	"	" "		
29	1/10/74	Riddle	Herbert Lumber, App. 401	"	" "		
30	5/17/73	Central Pt.	Double Dee Lumber, App. 150	"	" "		
31	12/3/73	Central Pt.	Steve Wilson Co.	"	" "		
32	12/18/73	Central Pt.	Mt. Pitt Co., Appl. 381	"	" "		
33	5/8/73	White City	Eugene Burrill Lumber, App. 119	"	" "		
34	11/14/73	Grants Pass	Morris Lumber, App. 264	"	" "		
35	11/27/73	Grants Pass	Lew Merrill Lbr., App. 290	"	" "		
36	1/10/74	Grants Pass	So. Ore. Lumber, App. 403	"	" "		
37	12/6/73	Grants Pass	Grants Pass Moulding, App. 367	"	" "		
38	5/7/74	Pendleton	Blue Mtn. Forest Prod. Appl. 455	"	" "		
39	5/10/73	Pendleton	Harris Pine Mills, App. 131	"	" "		
40	6/7/73	Pilot Rock	Kerns Furniture, App. 190	"	" "		

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
41	11/20/73	Athena	S & G Lumber, App. 271	Burkart	Permit Appl.		
42	6/6/73	LaGrande	Boise Cascade, App. 184	"	" "		
43	6/6/73	Joseph	Boise Cascade, App. 185	"	" "		
44	12/3/73	Lostine	Starner Lumber, App. 332	"	" "		
45	11/27/73	Wallowa	Victor & Sons, App. 302	"	" "		
46	7/22/74	Wallowa	Rogge Lumber, App. 470	"	" "		

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1	8/7/74	LaGrande	Boise Cascade - permit rev.	Bosserman			To be reviewed
2	8/26/74	Coquille	Roseburg Lumber, compliance schedule change	"			" "
3	8/1/74	Grants Pass	Four Ply - permit revisions	"			" "
4	8/1/74	Brookings	Four Ply - permit conditions	"			" "
5	8/29/74	Medford	Timber Products, T582	"	Tax credit		Request information
6	8/28/74	Creswell	Mazama Timber, T581	"	" "		Awaiting CPA's report

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	EI # Information	Approval Date	Action
1	12/27/73	Baker	Ellingson Timber, App. 391	Bosserman	01-0004		To be issued
2	5/31/73	Grants Pass	Mountain Fir Lumber, App. 170	"	17-0011		Permit drafted 9/74
3	9/19/73	Lakeview	Louisiana Pacific, App. 246	"	19-0004,0016		To be issued
4	9/26/73	Baker	Ellingson Lumber, App. 247	"	01-0003		" "
5	6/13/73	Prineville	Hudspeth Pine, App. 208	"	07-0004		"
6	6/7/73	Prineville	Ochoco Lumber, App. 189	"	07-0005		"
7	1/25/74	Roseburg	Roseburg Shingle, App. 419	"	10-0026		"
8	11/20/73	Dillard	Round Prairie Lumber, 281	"	10-0027		"
9	1/25/74	Prairie City	Prairie City Timber, App. 422	"	12-0003		"
10	6/11/73	Cascade Locks	Cascade Locks Timber, 198	"	14-0005		"
11	12/3/73	Ashland	Bellview Moulding, App. 322	"	15-0070		"
12	12/18/73	White City	Cascade Wood Products, 377	"	15-0005		"
13	11/27/73	Madras	Brightwood Corp., App. 301	"	16-0003		"
14	6/18/73	Grants Pass	Spalding & Son, App. 213	"	17-0013		"
15	12/3/73	Cave Junction	Rough & Ready Lbr., 309	"	17-0018		"
16	1/15/74	Selma	M & Y Lumber, App. 405	"	17-0019		"

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	EI No. Information	Approval Date	Action
17	11/8/73	Bly	Weyerhaeuser Co, App. 257	Bosserman	18-0037		To be issued
18	6/7/73	Klamath Falls	Modoc Lumber, App. 191	"	18-0009		"
19	5/14/73	Lakeview	Lakeview Lumber, App. 141	"	19-0006		"
20	7/30/73	Toledo	Publishers Forest Prod. 233	"	21-0011		"
21	11/8/73	Toledo	Guy Roberts Lbr., Appl. 160	"	21-0018		"
22	1/25/74	Philomath	3-G Lumber, App. 421	"	21-0029		"
23	2/13/74	Spray	Heppner Lumber, App. 428	"	35-0004		"
24	12/3/73	Bunker Hill	Coos Head Timber, App. 338	"	06-0074		"
25	11/20/73	Coos Bay	Pierce Lumber, Appl. 267	"	06-0004		"
26	11/27/73	Prineville	Clear Pine Mouldings, 296	"	07-0001		"
27	12-18-73	Prineville	Coin Millwork, Appl. 373	"	07-0002		"
28	6/4/73	Prineville	Consolidated Pine, App. 181	"	07-0003		"
29	5/31/73	Prineville	Pine Products Corp. 169	"	07-0006		"
30	11/14/73	LaPine	Russell Industries, App. 265	"	09-0031		"
31	12/18/73	Bend	Cascade Forest Prod., 382	"	09-0014		"
32	11/27/73	Bend	Oregon Trail Wood Prod. 307	"	09-0033		"
33	12-6-73	Bend	F & F Products, App. 360	"	09-0010		"

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	EI No. Information	Approval Date	Action
34	5/30/74	Bend	Bend Millwork, Appl. 462	Bosserman	09-0015		To be issued
35	11/20/73	Bend	Oregon Woodwork, App. 283	"	09-0016		"
36	5/7/74	Bend	Northwood Corp. App. 453	"	09-0046		"
37	1/18/74	Bend	DeSoto/Kerns, Appl. 409	"	09-0036		"
38	11/20/73	Redmond	Ponderose Moulding, App. 269	"	09-0017		"
39	12/3/73	Redmond	Whittier Moulding, App. 335	"	09-0018		"
40	12/18/73	Redmond	Boyle Mfg., Appl. 383	"	09-0019		"
41	12/3/73	Redmond	Oregon Fir Supply, Appl. 341	"	09-0009		"
42	6/13/73	Glendale	Superior Lumber, Appl. 206	"	10-0048		"
43	12/6/73	Roseburg	Keller Lumber, Appl. 345	"	10-0019		"
44	12/6/73	Prairie City	Taynton, Appl. 359	"	12-0018		"
45	6/6/73	John Day	San Juan Lumber, Appl. 186	"	12-0004		"
46	5/7/74	Long Creek	Blue Mtn. Forest Prod., 456	"	12-0022		"
47	11/14/73	Cascade Locks	Gorge Lumber, Appl. 263	"	14-0010		"
48	6/14/73	Neal Creek	U. S. Plywood, Appl. 211	"	14-0009		"
49	1/22/74	Hood River	Krieg Millwork, Appl. 413	"	14-0007, 0002		"
50	12/6/73	White City	Alder Mfg., Appl. 349	"	15-0060		"

AIR QUALITY CONTROL DIVISION

Program - Engr. Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	EI No. Information	Approval Date	Action
51	1/22/74	White City	Delah Timber Prod., 415	Bosserman	15-0009		To be issued
52	5/22/73	White City	So. Oregon Dry Kiln, 152	"	15-0053		"
53	11/27/73	White City	Olson-Lawyer Lbr., 294	"	15-0046		"
54	11/20/73	White City	Medford Moulding, App. 285	"	15-0037		"
55	11/27/73	White City	Oregon Cutstock, Appl. 305	"	15-0047		"
56	11/20/73	Talent	Fountain Lumber, Appl. 280	"	15-0013		"
57	6/7/73	Ashland	McGrew Bros. Sawmill, 188	"	15-0016		"
58	11/20/73	Ashland	Parson Pine Prod., App. 268	"	15-0035		"
59	11/27/73	Ashland	Bigfoot Wood Prod., 287	"	15-0086		"
60	6/11/73	Chiloquin	D. G. Shelter, Appl. 199	"	18-0016		Draft to typing 10/1/74
61	7/9/73	Chemult	Boise Cascade, Appl. 227	"	18-0019		Draft to typing 10/1/74
62	11/27/73	Malin	Loveness Co., Appl. 292	"	18-0007		To be issued
63	4/25/74	Klamath Falls	Jeld Wen, Appl. 447	"	18-0059		"
64	11/27/73	K. Falls	Chris Moulding, Appl. 298	"	18-0028		Draft for approval 10/2/74 To be issued
65	1/10/74	K. Falls	Jeld Wen, Appl. 400	"	18-0006		"
66	11/27/73	Yachats	Dahl Lumber, Appl. 303	"	21-0021		"
67	12/18/73	Newport	Paul Barber Hardwoods 387	"	21-0020		"

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	EI No. Information	Approval Date	Action
68	5/29/73	Tygh Valley	Tygh Valley Lbr., App. 163	Bosserman	33-0008		To be issued
69	12/3/73	Maupin	Mountain Fir Lbr., App. 316	"	33-0009		"
70	6/8/73	Kinzua	Kinsua Corp., Appl. 194	"	35-0002		"

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1	4/15/74	Coos Bay	Georgia Pacific, log chipper	Bosserman	Notice of Construction		
2	4/4/74	Coos Bay	Geo. Pac., truck dumper	"	"		
3	4/24/74	Dillard	Roseburg Lumber, particle pre-dryer	"	"		
4	8/10/74	Bend	Bend Millwork, cone collectors	"	"		
5	8/9/74	Bend	Northwood, spray booths	"	"		
6	6/24/74	John Day	Edward Hines, H. F. boiler	"	"		
7	5/26/74	Dillard	Roseburg Lumber, truck dump	"	"		
8	5/10/74	Dillard	Round Prairie Lbr., H. F. boiler	"	"		
9	4/9/74	Roseburg	Raintree Wood Products, cyclones	"	"		
10	6/28/74	Nyssa	Amalgamated Sugar, boiler	"	"		
11	7/23/74	Lakeview	Fremont Sawmill, boilers	"	"		
12	8/23/74	Pilot Rock	Louisiana=Pac., boilers	"	"		

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
		NO ACDP APPLICATIONS RECEIVED					
1		Coos Co.	Arago Cedar - SIC 2429	Bosserman	06-0042	No permit needed	Letter to be sent
2		Coos Co.	Weyerhaeuser, SIC 2492	"	06-0051	12/14/73	"
3		Coos Co.	Acme Wood Products, SIC 2499	"	06-0018		"
4		Coos Co.	Rose City Archery, SIC 2499	"	06-0069		"
5		Crook Co.	Burnet Box, SIC 2441	"	07-0009		"
6		Douglas Co.	Dillard Veneer, SIC 2430	"	10-0011	Closed	(see #245 for Dillard Lbr.)
7		Douglas Co.	Duco-Lam, Inc., SIC 2433	"	10-0060	Probably no permit needed	Letter to be sent
8		Douglas Co.	B.F. Cleat & Slat, SIC 2441	"	10-0008	"	"
9		Douglas Co.	Poteet Wood Prod., EI 2442	"	10-0062	"	"
10		Douglas Co.	A. F. Saar, SIC 2499	"	10-0065		"
11		Grant Co.	Edward Hines, SIC 2421	"	12-0021	See 12-0001	"
12		Jefferson	Warm Springs Forest Prod. Warm Springs. SIC 2421	"	16-0001		Meeting arranged 9/24/74
13		Jefferson	Warm Springs Forest Prod. Madras SIC 2430	"	16-0008		"
14		Josephine	Cabax Mills Lbr, SIC 2421	"	17-0005		Letter to be sent

AIR QUALITY CONTROL DIVISION
INFORMATION RECEIVED

Program - Engineering Services
DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	EI No. Information	Approval Date	Action
			NO ACDP APPLICATIONS RECEIVED				
15		Josephine	Diamond Indus., SIC 2431	Bosserman	17-0046	Probably does not need permit	Letter to be sent
16		Klamath	D. G. Shelter, SIC 2421	"	18-0016	App. rec.	"
17		Klamath	A.L. Pennington, SIC 2441	"	18-0055	Not needed	"
18		Klamath	Hudson Lumber, SIC 2499	"	18-0022		"
19		Klamath	Paint Rock Cedar, SIC 2421	"	18-0022	Sold	"
20		Lake	Dame Lumber, SIC 2431	"	19-0005		Received 8/20/74 (o 29)
21		Lake	Oregon Windor, SIC 2431	"	19-0008		See Lakeview Lumber Permit
22		Lincoln	Toledo Shingle, SIC 2429	"	21-0015		Letter to be sent
23		Umatilla	Exterior Wood, SIC 2429	"	30-0034		"
24		Umatilla	Harris Pine Mills, SIC 2421	"	30-0005	App. rec.	"
25		Wasco	J. H. Baxter, SIC 2491	"	33-0003		"

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1	4/12/74	St. Helens	Boise Cascade, condensible and non-condensibile gas systems, Tax Credit T-550.	Clinton			Requested additional info
2	7/24/74	Toledo	Georgia Pacific No. 1 electrostatic precipitator, Tax Credit No. T-531R	Clinton			Requested additional info
3	7/24/74	St. Helens	Kaiser Gypsum Co., baghouse, Tax Credit No. T-572	Clinton			
4	7/24/74	St. Helens	Kaiser Gypsum Co. scrubber, Tax Credit No. T-571	Clinton			
5	9/18/74	Portland	Terminal Flour Mills Co. baghouses. Tax Credit No. T-585	Clinton			
6	9/23/74	Toledo	Georgia-Pacific Corp. scrubber, Tax Credit T589	Clinton			
7	9/30/74	Newberg	Publishers Paper Co., blow stack emission control tax credit T-591	Clinton			
8	9/30/74	Oregon City	Publishers Paper Co., smoke density recorder Tax Credit No. T-594	Clinton			
9	9/30/74	Oregon City	Fourth stage venturi for Publishers Paper Co. Tax Credit No. T-595	Clinton			

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1	9/18/74	Halsey	American Can Co. lime mud oxidation system plan	Clinton			Under review
2		Albany	Pesticide research project	Clinton			Equipment has been ordered and I have started collecting the equipment in one location.
3			5 test report reviews	Clinton			
4			Policy on permit violations	Clinton			

AIR QUALITY CONTROL DIVISION

Program -Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1	11/27/73	Metolious	Gourmet Food Products, Inc.	Clinton	Permit Appl.		Visited site, to prepare permit
2	4/22/74	Pendleton	Pendleton Community Hospital	"	" "		" " "
3	12/6/73	Pendleton	St. Anthony Hospital	"	" "		" " "
4	11/14/73	John Day	Blue Mountain Hospital	"	" "		" " "
5	5/7/74	Burns	Harney County Hospital	"	" "		" " "
6	4/24/74	Nyssa	Malheur Memorial Hospital	"	" "		" " "
7	12/3/74	LaGrande	Eastern Oregon State College	"	" "		" " "
8	4/26/74	Nyssa	Albertson Land & Cattle	"	" "		" " "
9	12/6/73	Newport	Pacific Communities Hospital	"	" "		" " "
10	1/29/74	Toledo	New Lincoln Hospital	"	" "		" " "
11	12/18/74	Reedsport	Lower Umpqua Hospital	"	" "		" " "
12	11/27/73	Bandon	So. Coos General Hospital	"	" "		" " "
13	10/29/73	Pendleton	General Foods Corporation	"	" "		" " "
14	10/29/73	Pendleton	General Foods Corporation	"	" "		" " "
15	4/22/74	Pendleton	Eastern Oregon Hospital and Training Center	"	" "		" " "

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
16	5/31/73	Medford	Morton Milling Co.	Clinton	Permit Appl.		Visited site, to prepare permit
17	5/25/73	Central Point	Grange Coop Supply	"	" "		" " "
18	6/1/73	Roseburg	Box J Pellet Co.	"	" "		" " "
19	5/29/73	Grants Pass	Josephine Growers Co-op	"	" "		" " "
20	4/5/73	Boardman	Eastern Oregon Farming	"	" "		To prepare permit
21	4/29/74	Coos Bay	Bay Area Hospital	"	" "		"
22	5/31/73	Klamath Falls	Full Circle, Inc.	"	" "		"
23	5/31/73	Roseburg	Douglas County Farm Bureau	"	" "		"
24	4/16/74	Enterprise	Wallowa Memorial Hospital	"	" "		"
25	1/23/74	Medford	Rogue Valley Memorial Hosp.	"	" "		"
26	5/22/74	Island City	Pioneer Flouring Mills Co.	"	" "		"
27	12/27/73	Roseburg	V. A. Hospital	"	" "		"
28	12/3/73	Hermiston	Lamb-Weston, Inc.	"	" "		"
29	12/6/73	Hermiston	Union Pacific Railroad	"	" "		"
30	11/20/73	Hood River	Diamond Fruit Growers	"	" "		"
31	12/3/73	Hood River	Hood River Mem. Hospital	"	" "		"
32	5/13/74	Umatilla	Umatilla Hospital	"	" "		"

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
33	4/24/74	Hermiston	Good Shepherd Hospital	Clinton	Permit Appl.		To prepare permit
34	11/27/73	The Dalles	Columbia Park Hospital	"	" "		"
35	12/6/73	The Dalles	The Dalles General Hospital	"	" "		"
36	6/4/73	The Dalles	Sunshine Biscuits, Inc.	"	" "		"
37	5/17/74	Grants Pass	So. Oregon General Hospital	"	" "		"
38	3/1/74	White City	3M Company	"	" "		"
39	7/23/74	Ontario	Andrews Seed Co.	"	" "		"
40	4/10/74	Roseburg	Douglas Community Hosp.	"	" "		"
41	11/27/73	Lakeview	Lake Hospital District	"	" "		"
42	12/3/73	Medford	Harry and David	"	" "		"
43	12/18/73	Medford	Providence Hospital	"	" "		"
44	11/20/73	Klamath Falls	Presbyterian Intercommunity Hospital	"	" "		"
45	4/10/74	Grants Pass	Josephine General Hospital	"	" "		"
46	10/26/73	Grants Pass	State Highway Division	"	" "		"
47	12/7/73	Roseburg	Mercy Hospital	"	" "		"
48	12/6/73	Redmond	Central Oregon Dist. Hosp.	"	" "		"

11-1-74

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
49	12/6/73	Roseburg	Pacific Building	Clinton	Permit Appl.		To prepare permit
50	1/7/74	Ashland	Ashland Community Hospital	"	" "		"
51	12/18/73	Ashland	So. Oregon College	"	" "		"
52	6/14/73	McNary	John Mansville Products	"	" "		"
53	10/22/74	Eagle Point	So. Ore. Tallow Co., Inc.	"	" "		"
54	10/29/74	North Bend	Menasha Corporation	"	" "		"
55	11/8/74	Klamath Falls	Klamath Tallow Co.	"	" "		"

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Permit Applic. EI No.	Approval Date	Action
1		Durkee	Oregon Portland Cement	J. A. Broad	01-0027		Pending review, to prepare permit
2		Huntington	Oregon Portland Cement	"	01-0015		Pending review "
3		Redmond	Central Oregon Pavers	"	09-0050		
4		Bend	Central Oregon Pumice	"	09-0024		Pending inspection, to issue Permit
5		Roseburg	Umpqua Sand & Gravel	"	10-0091		Pending inspection "
6		Roseburg	Roseburg Sand & Gravel	"	10-0044		Pending inspection "
7		Riddle	Mining Minerals & Mfg.	"	10-0066		Pending review, to prepare permit
8		Cascade Locks	Hood River S&G & Redimix	"	14-0012		Pending inspection, to issue permit
9		Jacksonville	Sasco Gravel	"	15-0089		Pending inspection "
10		Klamath Falls	Klamath Rock Products	"	18-0047		Pending inspection "
11		Hermiston	Rohde Sand & Gravel	"	30-0055		Pending inspection "
12		Boardman	Ready Mix Sand & Gravel	"	30-0046		Pending inspection "
13		Pendleton	Rogers Construction(Airport)	"	30-0047		
14		Pendleton	Morrison Knudsen	"	30-0053		Pending inspection "
15		Pendleton	Rogers Const. (Pendleton)	"	30-0068		Pending inspection "
16		Hermiston	E. S. Schnell	"	30-0069		Pending inspection "

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Permit Appl. EI No.	Approval Date	Action
17		Island City	R. D. Mac	Broad	31-0020		Pending insp., to issue permit
18		Portable	Jarl Construction	"	37-0069		Pend. review, to prepare permit
19		Portable	C. H. Stinson	"	37-0073		Pending review " "
20		Portable	Klamath Road Department	"	37-0019		Pending review " "
21		Portable	J. C. Compton	"	37-0065		
22		Portable	So. Oregon Aggregate	"	37-0067		Pend. insp., to issue permit
23		Bandon	Bullard Sand & Gravel	"	06-0003		Pend. review, to prepare permit
24		Grants Pass	Copeland Paving	"	17-0001		Pending review " "
25		Klamath Falls	George Stacy	"	18-0060		Pending review " "
26		Klamath Falls	Klamath Rock Products	"	18-0012		Pending review " "
27		Malheur Co.	Ontario Asphalt Paving	"	23-0001		Pending review " "
28		Milton-Free water	Ready Mix Sand & Gravel	"	30-0002		Pending review " "
29		Umatilla Co.	Percy E. Jellum	"	30-0003		Pending review " "
30		Hermiston	E. S. Schnell	"	30-0071		Pending review " "
31		Pendleton	Rogers Cont. (Airport)	"	30-0066		Pending review " "
32		Pendleton	Rogers Const. (Mission)	"	30-0067		Pending review " "

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Permit Appl. EI No.	Approval Date	Action
33		Portable	L. W. Vail	Broad	37-0068		Under special permit pending review
34		Portable	J. C. Compton	"	37-0078		Pend. review-to prepare permit
35		Portable	Coos County	"	37-0031		Pending review " "
36		Portable	L. W. Vail	"	37-0043		Pending review " "
37		Portable	L. W. Vail	"	37-0041		Pending review " "
38		Portable	L. W. Vail	"	37-0025		Pending review " "
39		Portable	J. C. Compton	"	37-0022		Pending review " "
40		Portable	Peter Kiewit & Sons	"	37-0024		Pending review " "
41		Portable	S. D. Spencer	"	37-0052		Pending review " "
42		Portable	Oregon St. Highway RE 64	"	37-0003		Pending review " "
43		Portable	Oregon St. Highway RE 65	"	37-0004		Pending review " "
44		Portable	Babler Brothers	"	37-0021		Pending review " "
45		Portable	Rogue River Paving	"	37-0028		Pending review " "
46		Portable	Tillamook Co. Rd. Dept.	"	37-0034		Pending review " "
47		Portable	B & D Paving	"	37-0047		Pending review " "
48		Portable	Klamath Paving	"	37-0051		Pending review " "

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Permit Appl. EI No. #	Approval Date	Action
49		Baker	Baker Redi Mix	Broad	01-0028		Pend. review-to prepare permit
50		Crook Co.	Ochoco Redi Mix	"	07-0011		Pending review " "
51		Curry Co.	Pacific Redi Mix	"	08-0021		Pending review " "
52		Curry Co.	Ferry Creek Rock & Conc.	"	08-0030		Pending review " "
53		Deschutes Co.	Bend Redi Mix	"	09-0038		Pending review " "
54		Deschutes Co.	Redmond Redi Mix	"	09-0039		Pending review " "
55		Douglas Co.	Beaver State Redi Mix	"	10-0098		Pending review " "
56		Douglas Co.	Tri City Redi Mix	"	10-0087		Pending review " "
57		Douglas Co.	Umpqua Redi Mix	"	10-0086		Pending review " "
58		Douglas Co.	Jimelcrete	"	10-0095		Pending review " "
59		Douglas Co.	Pre Mix Concrete Pipe	"	10-0096		Pending review " "
60		Douglas Co.	Bohemia Umpqua Div.	"	10-0103		Pending review " "
61		Hood River Co.	Hood River S & G	"	14-0015		Pending review " "
62		H. Rvr. Co.	Hood Rvr. S & G & Redimix	"	14-0016		Pending review " "
63		Jackson Co.	M. C. Liniger	"	15-0071		Pending review " "
64		Jackson Co.	Pine St. Redi Mix	"	15-0082		Pending review " "
65		Jackson Co.	Tru Mix Leasing	"	15-0090		Pending review " "

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Permit Appl. EI No.	Approval Date	Action
66		Jackson Co.	M. C. Liniger	Broad	15-0062		Pend. review-to prepare permit
67		Josephine Co.	Davidson Redi Mix	"	17-0041		Pending review " "
68		Josephine	Gilbert Rock & Redi Mix	"	17-0048		Pending review " "
69		Josephine	Mel Barlow	"	17-0051		Pending review " "
70		Josephine	Gary L. Peterson	"	17-0053		Pending review " "
71		Klamath Co.	Klamath Redi Mix	"	18-0042		Pending review " "
72		Klamath Co.	Concrete Products Ind.	"	18-0041		Pending review " "
73		Lincoln Co.	Ocean Lake Redi Mix	"	21-0030		Pending review " "
74		Lincoln Co.	Ocean Lake Redi Mix	"	21-0034		Pending review " "
75		Lincoln Co.	Lincoln Redi Mix	"	21-0035		Pending review " "
76		Lincoln Co.	Lincoln Redi Mix	"	21-0028		Pending review " "
77		Malheur Co.	Oregon Concrete Products	"	23-0014		Pending review " "
78		Malheur Co.	RTP Concrete	"	23-0015		Pending review " "
79		Malheur Co.	Flynn Sand and Gravel	"	23-0013		Pending review " "
80		Morrow Co.	Ready Mix Sand & Gravel	"	25-0014		Pending review " "
81		Umatilla Co.	Ready Mix Sand & Gravel	"	30-0057		Pending review " "

AIR QUALITY CONTROL DIVISION

Program - Engineering Services

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Permit Appl. EI No.	Approval Date	Action
82		Pendleton	Pendleton Redi Mix	Broad	30-0019		Pend. review-to prepare permit
83		Umatilla Co.	Central Cement	"	30-0020		Pending review " "
84		Union Co.	R. D. Mac	"	31-0010		Pending review " "
85		Wasco Co.	Tygh Valley Sand & Gravel	"	33-0017		Pending review " "
86		Wasco Co.	The Dalles Concrete	"	33-0019		Pending review " "
87		Portable	Acme Vickery	"	37-0077		Pending review " "
88		Portable	Bohemia-Umpqua Division	"	37-0063		Pending review " "
89		Portable	Ready Mix Sand & Gravel	"	37-0054		Pending review " "
90		Portable	ACCO Contractors	"	37-0055		Pending review " "
91		Portable	Bi State Redi Mix	"	37-0056		Pending review " "

AIR QUALITY CONTROL DIVISION

Program - Indirect Sources

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1	7/22/74	Clackco	Clackamas Town Center	RMJ/RLV	E. A. requested		
2	7/22/74	Mulco	Mt. Hood Mall	RMJ/RLV	E. A. Requested		
3	8/26/74	Mulco	Randall Construction	RMJ	Application to be amended		
4	2/25/74	Mulco	MacDonalds Restaurant	RMJ/RLV	Add'l info requested		
5	7/8/75	Mulco	Safeway Stores Shopping Center	RMJ	"		
6	4/19/74	Clackco	Lincoln International Center	RMJ/RLV	"		
7	7/30/74	Mulco	Presbyterian Church of Laurelhurst	RMJ	"		Approve pending explanation of discrepancy in number of spaces
8	7/2/74	Mulco	McCormick Dock	RMJ/RLV	Info requested		
9		Washco	Lloyd Properties, Inc.	RMJ	Need applic.		
10	6/24/74	Mulco	Owens-Corning Fiberglas	RMJ	Info requested		

AIR QUALITY CONTROL DIVISION

Program - Indirect Sources

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Status or Information	Approval Date	Action
11	4/3/74	Mulco	Columbia Independent Refinery	RMJ	Applic. request		
12	7/2/74	Washco	Payless Distribution Center	RMJ	Transit rec.		
13	8/29/74	Marion Co.	Pringle Creek Parking	RMJ			Info rec'd 10/1/74 Starting review
14	9/25/74	Washco	Tualatin Plaza - 54 spaces	RMJ	Approval	10/25/74	Approval schedule
15	9/26/74	Mulco	Rivergate North Shopping Cen.	RMJ		10/26/74	
16	9/26/74	Washco	Farmers Insurance Modification to existing	RMJ	Applic. rec.		
17	9/15/74	Washco	Tektronix	RMJ/RLV	Requested add'l info	ASAP	Approve with conditions
18	9/18/74	Washco	Sunset West Shopping Center	RMJ	Add'l info req.		
19	9/4/74	Mulco	Tri-Met	RMJ	Needs land use approval		
20	10/28/74	Mulco	Sommerwood	RMJ	Add'l info requested	11/25/74	
21	11/1/74	Mulco	Argay Square Shopping Cen.	RMJ	"	12/1/74	
22	11/7/74	Lane Co.	Eugene Motor Pool	RMJ		11/7/74	
23	11/7/74	Mulco	Aldean Construction	RMJ	Add'l info requested	12/7/74	

AIR QUALITY CONTROL DIVISION

Program - Indirect Sources

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1a			Lead Standard	RMJ	Report completed		
2a			Federal Register Search	RMJ	Continuing Program		Review as needed
3a			CRAG, Transportation Committee, Watchdog Comm.	RMJ/RLV	"	"	
4a			Hearings, informational meeting, etc. for various indirect sources	RMJ	"	"	

AIR QUALITY CONTROL DIVISION

Program - Program Development

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1	9/24/74	Portland	Revision of "Pollution Particle Index" portion of daily air pollution advisory	RBP	Statistical re-evaluation	ASAP completed	Revision of active program
2	Indeterminate	Portland	Terwilliger H.V. Pb study	RBP	Summary report	ASAP completed	Review of data and environmental factors for possible use in setting Pb standard. Some statistical review.
3	March 74	Statewide	Implementation, review of operation of Air Quality Assurance Program as required by EPA	RBP	Operational review, statistical	Continuing	Statewide program to validate methods used to collect and report sample data
4	March 73	Statewide	Operation and execution of Emergency Action Plan for Alert, Emergency and Warning levels of pollutants according to guidelines in Federal Register and OSIP.	RBP	Levels of high pollutants	Continuous	Surveillance of pollutant levels at statewide sampling sites. Consultation with EPA, Regional agencies, DEQ staff, U.S. Weather Bureau. Determine and recommend declaration of Alert if conditions warrant. Recommend termination of episode conditions when normal levels return.
5	March 73	Statewide	Date handling and validation of accuracy. Inspection of values, trends and summaries Distribution of same to designated agencies and other parties.	RBP	Date review and distribution. Recall of past data	Continuous	Raw Lab data inspection. Review of data after data processing. Transmittal.

AIR QUALITY CONTROL DIVISION
INFORMATION RECEIVED

Program - Program Development
DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
6	Apr.-Oct. 1973 and	The Dalles	Make summary report of sample results for ambient air F ⁻ levels measured at sampling sites	RBP	Summary report	ASAP	Review of data and weather conditions at location during ambient sampling. Some statistical review.
7	Aug. 74	Portland and Rainier	H.V. and PFO sampling at Rainier for particulates originating from Power Plant in State of Washington	NWRO and part-time RBP	Data collection and review. Transmittal to NWRO	Indeterm.	Dependent on information furnished by NWRO. Review of sampling sites and methods contact with SWAPCA personnel.
8	July 74	Salem Boise Cascade	Air monitoring at Salem for SO ₂ , PFO, H.V. and sticky paper. Determine extent and level of B.C. emissions.	NWRO and part-time RBP	Network plans, equipment, correct procedures	Continuous	Dependent on information furnished by many staff members involved outside main DEQ office. Check with EPA.
9	March 73	Portland	Rewrite and update E.A. plan presently being used	RBP	New contacts revised procedures	ASAP	
		Portland	Information on various air quality connected subjects requested by phone calls, written correspondence or staff members	RBP	Air sampling procedures, methods, types of instruments, etc. data requests.	Continuing	Requests from private consultants, other government agencies and interested individuals.

AIR QUALITY CONTROL DIVISION

Program - Program Development

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
10	Aug. 74	Portland	Supervise operation of Dept. daily air pollution advisory. Answer questions concerning what it means and obtaining information on levels at various times during the day.	RBP	P.R. for TV newspapers and Public Info program	Continuing	Daily reports to TV, news media and staff members. Secretaries handle actual work and transmittal of info.
11	Mar. 73	Portland	Miscellaneous assignments which are not part of long range plan. Usually do not require extensive time.	RLV/HMP	Misc. as needed	Continuing as needed	Dependent on need
12	10/31/74	Portland	Summarize Air Quality Assurance Data	RBP	Field data, lab data, operational data	Dec. 15-31, 1974	Review and evaluate efficiency of Air Monitoring Program based on possible maximum effective success rate.
13	Nov. 1974	Portland	Arrange for monitoring trailer use in Portland and Willamette Valley	RLV/HMP	Determine of need and production of useful data for DEQ	ASAP	Write letter, review requests

AIR QUALITY CONTROL DIVISION
INFORMATION RECEIVED

Program - Program Development
DEQ Staff Disposition

374

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1	Jan. '74	Designated AQMA's	AQMA Plan Development	C.Simons	Coordinated program with COG's, ODOT, EPA, CAC's, etc.	Pending EPA approval	Ongoing program to be completed by June, 1975. Draft to be prepared by February, 1975.
2	Oct. '72	Portland	Portland Transportation Control Strategy Implementation	C.Simons	Coordinated implementation of approved strategies	Approved by EQC	Ongoing program to be completed by July 1, 1975.
3		As required by I.S. regulations	Developed by Revised Parking Facility Guidelines to conform with new proposed Indirect Source Rules.	C.Simons	Presently being revised	Pending EQC approval of I.S. regulations	
4		Portland	Prepare agenda for Citizens' Watchdog Committee on TCS	C.Simons	To keep Committee abreast of TCS activities		Monthly meetings.
5	Sept. '74	Portland	Represent DEQ on CRAG Air Quality Technical Committee	C.Simons	To coordinate land use, transportation air quality plans.		Monthly meetings.
6	Nov. '74	Portland	Represent DEQ on Ad Hoc Committee on Shopping Centers	C.Simons	To develop land use, environmental criteria for Shopping Centers		Periodic

11-1-74

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
7	Sept. '74	Portland	Represent DEQ on CRAG Transportation Committee	C.Simons	To review & comment on all transportation projected effect by A-95 & 3C Processes		Monthly meetings.
8		Portland	Review of Applications for Parking Facility Permits	C.Simons	Review all applications submitted	As required by regulations	Review all applications as required by OAR 20-050 thru 20-070.

AIR QUALITY CONTROL DIVISION

Program - Field Burning/Meteorology

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1			Field Burning	LDB		Completion Expected 10/10/74	
2			Slash burning review	LDB		1/1/75	
3			Open burning regulations	LDB		12/20/74	Public hearing
4			PGE Boardman site application	LDB			
5			Field burning report 1974	LDB		1/1/75	
6			Daily burning announcements and weather records	LDB		Continuous 365 days per year	
7			Field burning law recommendations	LDB		1/1/75	
8			Episode forecasts	LDB		as occurring	
9			EMSU	LDB		1/1/75	Implementation

AIR QUALITY CONTROL DIVISION

Program - Program Development

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1	10/1/74	Portland	Present model package - update - modification - Application	W.B.C.	Calibration, validation, application of existing EPA Model pack for Portland and other areas of interest.		Familiarization with the computing facilities, with the Oregon State Model pack, with the available data base. Simulation testing, calibration, and validation using input parameter data base and output monitoring data.
2	10/1/74	Portland	Emissions Inventory	WBC	Development and maintenance of an "up to date" emissions inventory.		Familiarization with present system. Development of logistical procedures necessary for successful maintenance.
3	10/1/74	Portland	Oregon-Washington Diffusion Modeling Study	WBC	Be an integral participant in the development, operation, calibration, sensitivity and other facets of the production of a usable air quality simulation model for the Portland/Vancouver study area		Work in direct connection with the prime and sub-contractors in all phases of model development, as participant and reviewer as conditions dictate.

AIR QUALITY CONTROL DIVISION

Program - Program Development

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
4	11/1/74	Portland	Present model package EPA UNAMAP Series	WBC	PTDIS PTMAX PTMPT are all modified for our system		In house capability to use EPA Air Quality Models is now available.
5	11/1/74	Portland	Present model package - emission factors	WBC	EMFAC		Written and compiled yet to be validated

11-1-74

AIR QUALITY CONTROL DIVISION

Program - Data Processing

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1	9/16/74		CSDS - Write a program to produce extended forecasts of compliance data	Hawthorne	Needed ASAP		Completed 10/1/74
2			VID - Write a program to analyze average cost of repair for motor vehicle inspection program	Hawthorne			Completed 10/17/74
3	10/23/74		Write a program to convert old format of data (3 cards/test) to the new format (2 cards/test)	Hawthorne	Needed ASAP		Completed 10/29/74
3			EI - complete conversion of EI data into new format	Hawthorne	Needed ASAP		Completed 11/8/74
			Update current EI files and generate annual print-out	Hawthorne	Data required from regions		Tentative completion 12/1/74
			Design logic for edit step of new EI system. Code programs and debug	Hawthorne			Tentative completion 12/15/74
			Visit Regions concerning new EI and provide assistance relative to implementation of new system.	Hawthorne Crews			To be completed by 12/1/74
			Begin learning PL/I for use in new EI System	Hawthorne Rendar			

AIR QUALITY CONTROL DIVISION

Program - Data Processing

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
4			AQDMS - Assist in analysis of EPA suggested methodology for analyzing ambient data as part of AQMA's	Rendar and Hawthorne			Preliminary results by 12/1/74
5			MDS - Write a program to summarize by station by month by year all data on the meteorological master files	Hawthorne			Completed 11/10/74

AIR QUALITY CONTROL DIVISION

Program - Data Processing

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Approval Date	Action
1			CSDS	Hawthorne	On-going		Monthly update and generate forecast
2			MDS	Hawthorne	On-going		Monthly update
3			EI	Hawthorne	On-going	October	Completed conversion of 1974 data to new format
				Hawthorne		October	Begin system design for new system
4			Air Quality Data System update, printouts, EPA reports, statistical analysis	Rendar	On-going Monthly, quarterly throughout year		
5	September		Meteorological Data System X-tabulation printouts	Rendar	In process		Currently being debugged
6			Extend Whittaker-Henderson method to HV sites	Rendar/ Hawthorne	In process		Results end of November
7			Look into EPA statistical tests of significance	Rendar/ Hawthorne	Start Nov. or Dec.		Will try to evaluate applicability to our ambient data
8			Look into PL/I	"	In process		Will be writing part of EI and future ambient programs in PL/I

AIR QUALITY CONTROL DIVISION

Program - Program Development

INFORMATION RECEIVED

DEQ Staff Disposition

No.	Received Date	Location	Project	Review Engineer	Information	Expected comp. Date	Action
1			Revising E.I. data and format to be somewhat compatible with NEDS and more efficient for our use.	RCH		Dec. 1974	
2			Reviewing NESHAPS	RCH		12/15/74	
3			Source search for users of vinyl chloride or poly vinyl chloride	RCH		11/30/74	
4			Odor survey of Publishers Paper mill, Newberg, Ore.	RCH		Jan-Feb. 1975	
5			Emission Inventory update	RCH			Ongoing
6			Working with OSPIRG'S proposed rules for significant deterioration	RCH		11/20/74	
7			Revising and updating listing of 100 ton sources	RCH		11/20/74	



ENVIRONMENTAL QUALITY COMMISSION

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

TOM McCALL
GOVERNOR

MEMORANDUM

B. A. McPHILLIPS
Chairman, McMinnville

To: Environmental Quality Commission

GRACE S. PHINNEY
Corvallis

From: Director

JACKLYN L. HALLOCK
Portland

Subject: Agenda Item C, November 22, 1974 EQC Meeting

MORRIS K. CROTHERS
Salem

Tax Credit Application T-580, Weyerhaeuser Company No. 4
Recovery Furnace, Springfield, File No. 20-8850, SIC 2631

RONALD M. SOMERS
The Dalles

Background:

KESSLER R. CANNON
Director

Prior to the installation of the Number 4 recovery furnace, Weyerhaeuser Company had three recovery furnaces at their Springfield pulp mill. All of these furnaces used the exhaust gases of the furnaces to directly evaporate the liquor to its final concentration before firing. The use of the exhaust gas to evaporate incompletely oxidized liquor results in significant emissions of Total Reduced Sulfur compounds. The heat causes the release of reduced sulfur compounds from the black liquor. The water must be evaporated from the liquor or it will not burn continuously and allow recovery of chemicals.

When the decision to install the Number 4 furnace was made, the three furnaces all had black liquor oxidation. Black liquor oxidation reduces the emission of total reduced sulfur compounds by oxidizing these compounds to sulfites which will not be released in the evaporation process. The emissions of the Number 3 furnace were half of those of the Number 1 and 2 furnaces. The capacity of the Number 1 and 2 furnaces was approximately 50% of the mill production.

The decision was made to install a non-direct contact evaporator type furnace to replace the Number 1 and 2 furnaces. At that time, the proposed process (of indirect contact evaporation) was one of two methods of offering assurance that recovery furnace emissions would meet emission limitations and is considered to be highest and best practical treatment.

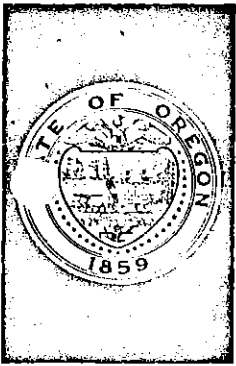
The installation of the Number 4 recovery furnace reduced Total Reduced Sulfur emissions by 895 pounds per day and particulate emissions by 8500 pounds per day.



Contains
Recycled
Materials

KESSLER R. CANNON
Director

CRC:H 11/21/74



ENVIRONMENTAL QUALITY COMMISSION

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

TOM McCALL
GOVERNOR

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Chairman, McMinnville

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MORRIS K. CROTHERS
Salem

RONALD M. SOMERS
The Dalles

KESSLER R. CANNON
Director

To: Environmental Quality Commission
From: Director
Subject: Agenda Item C, November 22, 1974, EQC Meeting

Tax Credit Applications

Attached are review reports on 11 Tax Credit Applications. These applications and the recommendations of the Director are summarized on the attached table.

KESSLER R. CANNON

AHE

November 8, 1974 •

Attachments

Tax Credit Summary
Tax Credit Review Reports (11)

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>
Portland Mobile Home Court	T-547	Improvements to sewage treatment facility	\$ 25,182		Deny
Kaiser Gypsum Company, Inc.	T-571	Scrubber for retrim operations	71,324	80% or more	Issue
Kaiser Gypsum Company, Inc.	T-572	Baghouse filter in Finishing (Tile) Room	67,283	80% or more	Issue
Timber Products	T-582	Hogged fuel boiler fly ash collector	102,924.22	80% or more	Issue
Georgia-Pacific Corporation	T-586	Two baghouses	50,081	80% or more	Issue
Georgia-Pacific Corporation Toledo Division	T-589	Wet scrubber on Number One smelt dissolving tank vent	40,605	80% or more	Issue
Hanna Nickel Smelting Company	T-597	Upgrading of existing dust control system for dryers	183,519	80% or more	Issue
Hanna Nickel Smelting Company	T-598	Dust collecting system for four ore melter furnaces	2,513,639	80% or more	Issue
Hanna Nickel Smelting Company	T-599	Dust conveying system-skiphoise #2	18,620	80% or more	Issue
Hanna Nickel Smelting Company	T-600	Dust conveying & storage system for ferrosilicon furnace	21,414	80% or more	Issue
Hanna Nickel Smelting Company	T-601	New hoods and ductwork for conveying dust from two refining furnaces to baghouse collectors.	72,497	80% or more	Issue

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Ronald R. Grant, Mary Grant and Jo Anne K. Grant dba
Portland Mobile Home Park
Route 1, Box 244
Cornelius, Oregon 97113

The applicant owns and operates a mobile home court which has a population of 500 people and is located at 9000 N. E. Union Ave., Portland, Oregon, Multnomah County.

2. Description of Claimed Facility

Improvements to sewage treatment facility serving 500 resident mobile home court.

The claimed improvements were complete and placed in operation July 1, 1972.

Claimed Cost: \$25,182 with 100% allocated to pollution control.

(Cost documentation was submitted)

3. Evaluation of Application

The improvements made were required by the Department of Environmental Quality. In order for facilities to be eligible for certification, they must meet the requirements of a "pollution control facility" as defined in ORS 468.155. Under this definition, facilities for human waste (sewage) are specifically excluded and thus not eligible for certification. Facilities for treatment, disposal or elimination of "industrial waste" are eligible for certification. The Department thus concludes that the claimed facilities are not eligible for certification.

4. Director's Recommendation

It is recommended that certification of the facilities claimed in Application No. T-547 be denied.

H. L. Sawyer

ak

Date October 14, 1974

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Kaiser Gypsum Company, Inc.
St. Helens, Oregon 97051

The applicant owns and operates an insulating board manufacturing facility at St. Helens, Oregon.

2. Description of Claimed Facility

The facility described in this application is a scrubber which collects dust from the retrim operations.

Facility cost: \$71,324.00 (Accountant's certificate was provided).

The facility was placed in operation in July, 1973. Certification is claimed under the 1969 Act.

The percentage claimed is 100%.

3. Evaluation of Application

The company was required by the Columbia-Willamette Air Pollution Authority to reduce particulates emitted from the retrim operations. The claimed facility replaced cyclones which were not adequate in controlling particulate emissions. The scrubber is designed to remove 99.7% of the particulate.

The plans and specifications for the facility were reviewed and approved by Columbia-Willamette Air Pollution Authority. The Department has inspected the facility and has found that it is operating satisfactorily. The materials collected by the system do not pay for the installation. Therefore it is concluded that the facility was installed and is operated for pollution control.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$71,324.00 be issued for the facility claimed in Tax Credit Application No. T-571 with 80% or more allocated to pollution control.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Kaiser Gypsum Company, Inc.
St. Helens, Oregon 97051

The applicant owns and operates an insulating board manufacturing facility at St. Helens, Oregon.

2. Description of Claimed Facility

The facility described in this application is a baghouse filter which collects dust from the machining operation of the Finishing (Tile) Room.

Facility cost: \$67,283.00. (Accountant's certificate was provided).

The facility was placed in operation in June, 1972. Certification is claimed under the 1969 Act.

The percentage claimed is 100%.

3. Evaluation of Application

The company was required by the Columbia-Willamette Air Pollution Authority to reduce particulate emissions from the Finishing Room machining operations in order to obtain compliance with CWAPA regulations. The claimed facility replaced cyclones which were not adequate in controlling particulate emissions. The baghouse filter is designed to remove about 99.8% of the particulate.

The plans and specifications for the facility were reviewed and approved by Columbia-Willamette Air Pollution Authority. The Department has inspected the facility and has found that it is operating satisfactorily. The materials collected by the system do not pay for the installation; therefore, it is concluded that the facility was installed and is operated for pollution control.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$67,283.00 be issued for the facility claimed in Tax Credit Application No. T-572 with 80% or more allocated to pollution control.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Timber Products Company
P. O. Box 1669
Medford, OR 97501

The applicant operates a plywood plant at 111 NE Mill st., Grants Pass, Josephine County, Oregon.

2. Description of Claimed Facility

The facility claimed in this application is described as a hogged fuel boiler fly ash collector consisting of:

1. Ash collector (multiclone)
2. Rotary valve
3. Sand classifier
4. Re-injection system
5. Sand box

The facility was completed in March, 1973.

Certification is claimed under the 1969 Act. The percentage claimed for pollution control is 100%.

Facility cost: \$102,924.22 (Accountant's certification was provided).

3. Evaluation of Application

This facility was installed as a result of DEQ Stipulation and Order 72-0910050 and in accordance with plans reviewed and approved by the Department. (Notice of Construction 136).

The Department has observed the facility and considers it to be capable of operating in continuous compliance with OAR, Chapter 340, Section 21-015.

The ash and char collector considerably improves the particulate emissions from this plant.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$102,924.22 with 80% or more of the cost allocated to pollution control be issued for the facility claimed in Tax Application T-582.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Georgia-Pacific Corporation
P. O. Box 869
Coos Bay, Oregon 97420

The applicant owns and operates a hardboard plant at Coos Bay, Oregon.

2. Description of Claimed Facility

The facility claimed in this application is described as two baghouses consisting of:

1. Two Clarke bag filters
2. High pressure blowers
3. Controls and other miscellaneous equipment

The facility was completed and put in operation on December 1, 1973. Certification is claimed under the 1969 Act. The percentage claimed for pollution control is 100%.

Facility cost: \$50,081.00 (Accountant's certification was provided).

3. Evaluation of Application

This facility was installed as a result of DEQ regulations limiting the weight allowed to be emitted from all their cyclones to 52 lbs/hr. By N/C 203, DEQ reviewed and approved installation of these two baghouses on three of their worst cyclones. With the completion of this and other work, Georgia-Pacific, in their 2-27-74 letter, has demonstrated compliance with DEQ's emission standards. These two baghouses alone reduced emissions by about 20 lbs/hr.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$50,081.00 with 80% or more of the cost allocated to pollution control be issued for the facility claimed in Tax Application T-586.

PBB:mh

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Date October 29, 1974

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Georgia-Pacific Corporation
Toledo Division
P. O. Box 580
Toledo, Oregon 97391

The applicant owns and operates an unbleached Kraft pulp and paper mill at Toledo, Oregon.

2. Description of Facility

The facility described in this application is a wet scrubber which collects particulate from the Number One smelt dissolving tank vent.

Facility cost: \$40,605.00 (Accountant's certificate was provided).

The facility was placed in operation in August, 1972. Certification is claimed under the 1969 act.

The percentage claimed is 100%.

3. Evaluation of Application

This facility was installed in response to the 1969 Kraft Pulp Mill Emission Regulation which required that smelt dissolving tank vent particulate emissions not exceed 0.5 pounds per air dried ton of pulp produced by May 1, 1975. The claimed facility replaced a demister pad which could not meet the regulations. The additional chemicals collected by the new scrubber do not pay for the installation.

The plans and specifications for the facility were reviewed and approved by the Department. The particulate emissions are currently below the May 1, 1975 limits, set forth in the Kraft Pulp Mill Regulations.

It is concluded that the scrubber was installed and is operated for pollution control.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$40,605.00 with 80% or more of the cost allocated to pollution control be issued for the facility claimed in Tax Credit Application Number T-589.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Publishers Paper Company
419 Main Street
Oregon City, Oregon 97045

The applicant owns and operates a bleached sulphite pulp and paper mill located in Oregon City.

2. Description of Facilities

The facilities are described as five (5) smoke density recorders. These instruments continuously monitor and record the visible emissions from the steam boilers.

Facility cost: \$9,670.00 (Accountant's certification was provided).

The facilities were placed in operation in September, 1973. Certification is claimed under the 1969 act with 100% allocable to pollution control.

3. Evaluation of Application

These instruments were installed to indicate visible emissions to the boiler operators, so they can prevent violations of the Department's Visible Emission Standards. These devices are not necessary for routine boiler control, since other instrumentation provides the necessary information for that purpose. Therefore, it is concluded that no economic function is served by these facilities, and they were installed for pollution control.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$9,670.00 with 80% or more allocated to pollution control be issued for the facilities claimed in Tax Credit Application Number T-594.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Hanna Nickel Smelting Company
P.O. Box 85
Riddle, Oregon 97469

The applicant produces ferronickel, an alloy consisting of 50% nickel and 50% iron, from a laterite ore at a smelter located about four miles west of Riddle, Oregon.

2. Description of Claimed Facility

The claimed facility is described to be an upgrading of the existing dust control system for the three dryers. The claimed facility consists of fans, wetting screen sections, foundations, pumps, piping, miscellaneous steel work, and associated electrical equipment including a substation transformer.

The claimed facility was completed and placed into operation in May, 1974.

Certification is claimed under the 1969 Act with 100% being claimed as allocable to pollution control.

Facility cost: \$183,519 (Accountant's certificate was provided).

3. Evaluation of Application

The claimed facility, which is an addition to the existing dryer dust control system, was installed as a part of an extensive emission reduction program approved by the Department of Environmental Quality.

The gross cost of all improvements to the dryer dust control system was \$240,347, less the expense charged to the replacement of like equipment, \$56,828, leaves a total cost for the claimed facility of \$183,519.

The dust collected by the claimed facility, which is returned to the process, has an estimated annual value of \$5,800. The annual operating cost of the claimed facility (including depreciation) is estimated to be \$51,684. Thus, the claimed facility experiences an operating loss of about \$45,884 annually.

It is concluded that the claimed facility was installed and is operated to control air pollution and that 100% of its cost is allocable to pollution control.

Tax Relief Application T-597
November 1, 1974
Page 2

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$183,519, with 80% or more allocable to pollution control, be issued for the facility claimed in Tax Application T-597

JAB:ahe

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Hanna Nickel Smelting Company
P. O. Box 85
Riddle, OR 97469

The applicant produces ferronickel, an alloy consisting of 50% nickel and 50% iron, from a laterite ore at a smelter located about four miles west of Riddle, Oregon.

2. Description of Claimed Facility

The claimed facility is described to be a dust collecting system for the four ore melter furnaces. The facility consists of two Industrial Clean Air 320,000 CFM pressure bag houses, foundations, fans, two Fuller Kenyon compressors, three electrode mantle air heaters, cooling tower, two Ingersoll-Rand cooling water pumps, recording and monitor systems, approximately 550 feet of 9' diameter duct, additional hooding on the melting furnaces, and electrical control equipment.

The claimed facility was completed and put into service in February 1974.

Certification is claimed under the 1969 Act with 100% being claimed as allocable to pollution control.

Facility cost: \$2,513,639 (Accountant's certificate was provided).

3. Evaluation of Claimed Facility

The claimed facility, was installed as a part of an emission control program approved by the Department of Environmental Quality. The claimed facility collects and conveys dust from the four ore melter furnaces to two new bag houses.

The gross cost of all improvements to the ore-melter dust control system, \$3,283,135, less cost overlap with previously claimed controls on the No. 1 ore melter furnace, \$571,896, less the expense charged to replacement of like equipment, \$197,600, leaves a total cost for the claimed facility of \$2,513,639.

The dust collected by the claimed facility, which is returned to the process, has an estimated annual value of \$33,300. The annual operating cost of the claimed facility (including depreciation) is estimated to be \$430,013. Thus, the claimed facility experiences an annual operating loss of approximately \$396,713.

It is concluded that the claimed facility was installed and is operated to

Tax Relief Application T-598
November 7, 1974
Page 2

control air pollution, and that 100% of its cost is allocable to pollution control.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost \$2,513,639, with 80% or more allocable to pollution control, be issued for the facility claimed in Tax Application T-598.

JAB:rp

Date November 7, 1974

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Hanna Nickel Smelting Company
P. O. Box 85
Riddle, OR 97469

The applicant produces ferronickel, an alloy consisting of 50% nickel and 50% iron, from a laterite ore at a smelter located about four miles west of Riddle, Oregon.

2. Description of Claimed Facility

The claimed facility is described to be a dust conveying system consisting of hoods and duct work connecting skiphoist #2 with two existing bag house collectors.

The claimed facility was completed and put into service in May, 1974.

Certification is claimed under the 1969 Act with 100% being claimed as allocable to pollution control.

Facility cost: \$18,620 (Accountant's certificate was provided).

3. Evaluation of Claimed Facility

The claimed facility which is an addition to an existing dust control system was installed as a part of an emission reduction program approved by the Department of Environmental Quality.

The gross cost of all improvements to skiphoist #2 dust control system, \$41,620, less the expense charged to replacement of like equipment, \$23,000, leaves a total cost for the claimed facility of \$18,620.

The dust collected as a result of the claimed facility is returned to the process and has an estimated annual value of \$1,600. The annual operating cost of the claimed facility (including depreciation) and the two existing bag houses is estimated to be \$18,593. Thus, the claimed facility is associated with an annual operating loss of about \$16,993.

It is concluded that the claimed facility was installed and is operated to control air pollution and that 100% of its cost is allocable to pollution control.

Tax Relief Application T-599
November 7, 1974
Page 2

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$18,620, with 80% or more allocable to pollution control, be issued for the facility claimed in Tax Application T-599.

JAB:rp

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Hanna Nickel Smelting Company
P.O. Box 85
Riddle, Oregon 97469

The applicant produces ferronickel, an alloy consisting of 50% nickel and 50% iron, from a laterite ore at a smelter located about four miles west of Riddle, Oregon.

2. Description of Claimed Facility

The claimed facility is described to be a dust conveying and storage system for the ferrosilicon furnace consisting of new ductwork, a pneumatic conveying system, four Westinghouse fans, and a storage bin with variable drive screw.

The claimed facility was completed and placed into service in April, 1974.

Certification is claimed under the 1969 Act with 100% being claimed as allocable to pollution control.

Facility cost: \$21,414 (Accountant's certification was provided).

3. Evaluation of Claimed Facility

The claimed facility was installed as part of an emission reduction program approved by the Department of Environmental Quality.

The gross cost of all improvements to the ferrosilicon dust control system, \$181,365, less the expense charged to replacement of like equipment, \$159,951, leaves a total cost for the claimed facility of \$21,414.

The dust collected by the claimed facility in conjunction with the ferrosilicon furnace baghouse collector is not returned to the process and has no salvage value. The annual cost of the claimed facility (including depreciation) is estimated to be \$19,547. Thus, the claimed facility has an operating loss of about \$19,547 annually.

It is concluded that the claimed facility was installed and is operated to control air pollution and that 100% of its cost is allocable to pollution control.

Tax Relief Application T-600
October 30, 1974
Page 2

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$21,414, with 80% or more allocable to pollution control, be issued for the facility claimed in Tax Application T-600.

JAB:ahe
11-07-74

Date 10-30-74

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Hanna Nickel Smelting Company
P.O. Box 85
Riddle, Oregon 97469

The applicant produces ferronickel, an alloy consisting of 50% nickel and 50% iron, from a laterite ore at a smelter located about four miles west of Riddle, Oregon.

2. Description of Claimed Facility

The claimed facility is described to be new hoods and ductwork which convey dust from two refining furnaces to two existing baghouse collectors.

The claimed facility was completed and placed into service in May, 1974.

Certification is claimed under the 1969 Act with 100% being claimed as allocable to pollution control.

Facility cost: \$72,497 (Accountant's certificate was provided).

3. Evaluation of Claimed Facility

The claimed facility was installed to control emissions from the two refining furnaces and is part of the emission reduction program approved by the Department of Environmental Quality.

The dust collected by the claimed facility in conjunction with the two existing baghouse collectors, which is returned to the process, has an estimated annual value of \$3,800. The annual operating cost of the claimed facility (including depreciation) is estimated to be \$23,491. Thus, the claimed facility experiences an operating loss of about \$19,691 annually.

It is concluded that the claimed facility was installed and is operated to control air pollution and that 100% of its cost is allocable to pollution control.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$72,497, with 80% or more allocable to pollution control, be issued for the facility claimed in Tax Application T-601.

JAB:ah
11-07-74

Date September 9, 1974

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Weyerhaeuser Company
Paperboard Manufacturing
P. O. Box 275
Springfield, Oregon 97477

The applicant owns and operates an unbleached Kraft pulp and paper mill in Springfield.

2. Description of Facility

The facility claimed in this application is described to be the No. 4 recovery furnace system and includes a "low-odor" recovery furnace, an air cascade evaporator, a concentrator, an electrostatic precipitator and associated auxiliary equipment (pipes, pump and electrical equipment).

Facility cost: \$8,511,981.00 (Accountant's certification was provided).

The facility was placed in operation in February, 1971. Certification is claimed under the 1969 Act with 100% allocable to pollution control.

3. Evaluation of Application

This facility was installed in response to the 1969 Kraft Pulp Mill Emission Regulation which required that recovery furnace Total Reduced Sulfur emissions should not exceed 0.5 pound of sulfur per ton of air dried pulp produced after July 1, 1975. The claimed facility replaced two recovery furnaces which could not be economically modified to meet the regulation. These two furnaces have been removed from service.

The installation of the new recovery furnace increased the total plant recovery furnace capacity from 1220 air dried tons per day to 1265 air dried tons per day. This is a 3.7 percent increase over previous capacity. Therefore, the percent allocable to pollution control should be 96.3%.

The electrostatic precipitator installed on the new furnace has a design particulate removal efficiency of 99.6 percent, whereas the precipitators on the old furnaces were designed for a particulate removal efficiency of 91 percent.

The additional chemicals recovered by the new recovery system does not pay for the installation. Therefore, it is concluded that the No. 4 recovery furnace system was installed solely for pollution control.

The facility represents highest and best practicable treatment and it is currently complying with the 1978 limits of the Kraft pulp mill Emission Regulation.

4. Director's Recommendation

It is recommended that a Pollution Control Facility certificate bearing the cost of \$8,511,981.00 be issued for the facility claimed in Tax Credit Application No. T-580 with more than 80% allocated to pollution control.



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Salem

RONALD M. SOMERS
The Dalles

KESSLER R. CANNON
Director

MEMORANDUM

To : Environmental Quality Commission

From : Shirley Shay 

Subject: Agenda Item No. D, November 22, 1974 EQC Meeting
Presentation of Renewal Plaques to American Can Company
and Publishers Paper

The staff reports which follow are from the September 20th EQC meeting and are included only for your information.

The renewal plaques will be presented by Chairman McPhillips.



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GRACE S. PHINNEY
Corvallis

MEMORANDUM

JACKLYN L. HALLOCK
Portland

TO: Environmental Quality Commission

MORRIS K. CROTHERS
Salem

From: Director

RONALD M. SOMERS
The Dalles

Subject: Agenda Item No. E, November 22, 1974 EQC Meeting

KESSLER R. CANNON
Director

Permit Applications for Columbia Independent Refinery
(Rivergate), Charter Oil (Columbia County) and Cascade
Energy (Rainier) Oil Refineries and Proposed Companion
Fuels Use Policy - Status Report

Background

Permit applications for three proposed oil refineries have been briefly discussed at previous EQC meetings, specifically in regard to the development and adoption at the October 25, 1974 EQC meeting of the rule establishing interim criteria for approval of new air contaminant sources in the Portland Metropolitan Special Air Quality Maintenance Area.

Comprehensive and voluminous Environmental Impact Assessments projecting environmental effects on air, water and land quality were submitted to the Department by the three oil refineries during the week of November 4, 1974, thus apparently completing submittal of all necessary information to complete processing of pending permit application. The oil refineries' consultants and the Department staff have worked intensively over at least a six month period developing and documenting among other items, air emission rates, realistic ambient air impact projections, present and future fuel usages in Oregon and Southwest Washington and calculation of potential air emission tradeoffs that might be realized by requiring use of cleaner fuels which could be produced by these facilities.



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Even though the lengthy delay in developing information has undoubtedly caused great financial impact on project costs, it is believed that refinery representatives as well as Department staff are in agreement that this work was necessary to provide a sound basis upon which to make recommendations and decisions on these facilities which can have a very significant effect on Oregon's future environment and energy supply as well as economic base.

It appears beneficial from an overall environment management standpoint to process the three pending permit applications on the same time schedule concurrently with a new clean fuels rule, considering that:

1. All three refinery applicants have completed their information submittal nearly at the same time,
2. That a new clean fuels regulation would be needed in order to approve one of the refineries to assure tradeoffs needed to meet the criteria of the new rule for approval of new air contaminant sources in the Portland Metropolitan area,
3. That a new clean fuel regulation will undoubtedly be needed to maintain air quality standards in the Portland Metropolitan Area regardless if any oil refineries were built in the State, and
4. That a new fuels regulation would significantly affect the specific product mix and marketing of all three refineries.

The Department staff has, after preliminary evaluation of information submitted, considered the following time schedule the most rapid and realistic for acting on pending oil refinery applications:

November 29, 1974	Complete review and analysis of information submitted.
December 20, 1974	Complete drafting of Clean Fuels Regulation and issue thirty (30) day public notice for rule hearing. Complete staff reports with recommendations for action on pending permit applications, including any draft permits that may be proposed, and issue thirty (30) day notice for public hearing on staff recommendation.
January 24, 1975	Hold hearing in Portland at scheduled EQC meeting on Clean Fuels Regulation and refinery permit applications.

In view of the anticipated significant public interest on the proposed oil refineries, not only from residents of areas near proposed plant sites, but from the general citizenry regarding environmental, economic and energy matters, the staff has prepared the following brief informational report, based on staff review to date, which is intended to:

1. Provide the EQC and public with a broad perspective of the energy picture in Oregon,
2. Identify potential major issues regarding each of the proposed refineries, and
3. Discuss the potential effects of a clean fuels policy.

Since there are no existing oil refineries in the State of Oregon nor in Southern Washington, this information should provide the foundation for comprehending technical information on these projects and formulating questions, and finally, for making decisions which could undoubtedly materially affect the public and industrial communities in Oregon and adjacent states.

General Information Regarding Fuel Oil Supply and Demand

Information regarding fuel oil supply and demand has been extremely difficult to obtain as evidenced by the scarcity of gasoline supply data during last year's energy crisis. Extreme efforts have been made to obtain fuel oil (and natural gas) supply and demands and the Department is of the opinion that it now has the most accurate information available. Table I presents a partial summary of this information.

TABLE I
Oil Consumption
(barrels per day)

	1973 Oregon	1973 Portland Metro Area(1)	1973 Southwest Washington(2)
Gasoline	82,000	27,300	10,100
Jet Fuel, Kerosene and Naptha	8,750		
Distillate Fuels	42,375		
Residual Fuels	19,115	8,669	6,800
LPG	4,200		
Other	9,560		
TOTAL	166,000		

(1) Multnomah, Clackamas and Washington Counties

(2) Clark and Cowlitz Counties

Presently most petroleum products reach Oregon and Southwest Washington areas by pipeline from refineries in Northwest Washington and by ship from refineries in California.

Of significance is the fact that of the nearly 170,000 barrels per day of petroleum consumed in the State of Oregon, nearly half is motor gasoline. A forty percent (40%) increase in total oil consumption by 1985 has been recently forecasted for the State of Oregon.

The projected demands are at best a crude estimate with many potential factors causing possible deviations such as greater or lesser than average growth, and natural gas or alternative fuel (coal) availability.

Table II presents potential above-average demands for petroleum products.

TABLE II
Potential Above-Average Petroleum Demands
(barrels per day)

1.	Northwest Natural Gas Synthetic Natural Gas Plant	10,000(a)	Naptha
2.	Reichhold Chemical Fertilizer Plant Expansion	8,000(b)	Residual Oil
3.	PGE Combustion Turbines		
	Beaver	20,000(c)	Distillate Oil
	Harborton	10,000(c)	Distillate Oil
	Bethel	5,000(c)	Distillate Oil
4.	Replacement of gas by oil due to 67% curtailment of interruptable gas from 1973-1977	5,665(d)	Residual Oil
5.	Projected industrial growth assuming no increase in natural gas supply.	14,400(e)	Residual Oil

- (a) Depends on FEA approval and continued interest in the project by Northwest Natural Gas.
- (b) Preliminary information.
- (c) Yearly demand depends on needed operation of turbines. Beaver most likely to operate lengthy periods (six months per year or more).
- (d) Very likely.
- (e) Not very likely.

Availability of oil from the Alaskan Pipeline, the high transportation costs for supplying finished petroleum products to Oregon and Southwest Washington, deep water port access and adjacent vacant industrial land has undoubtedly spurred the interest of the three independent refineries to locate in Oregon. The Alaskan oil is scheduled for delivery in 1977 or 1978 at a rate of up to 1,200,000 barrels per day with potential increase to 2,000,000 barrels per day. Existing major company refineries on the West Coast are also expanding or planning on expansion to process some of this new oil supply for future growth. Of interest is the fact that present suppliers of oil to Oregon have not indicated a problem in supplying future demands in Oregon, including cleaner (low sulfur) fuels given adequate planning time of about three to five years and barring another major energy crisis. The advantages of refineries locating in Oregon may thus not include guaranteed oil supplies or lower sulfur content fuels or even lower prices as evidenced by past Federal regulation of production, distribution and price. Indeed, the only advantage may be economic benefit to the community by providing some additional jobs and ad valorem tax base. Oil refineries are typically more capital intensive than employment intensive industries and the total estimated installation cost of all three proposed facilities is almost one-half billion dollars with a total permanent employment of less than 300 persons.

General Information Regarding Oil Refinery Permit Applications

Table III presents general details of the three proposed oil refineries.

TABLE III
General Facts Regarding Proposed Oil Refineries

<u>Name</u>	<u>Location</u>	<u>Capacity (bbl/day)</u>	<u>Comment</u>
Columbia Independent Refinery, Inc.	Rivergate (N. Portland)	100,000	1st phase-50,000 bbl/day 1978 2nd phase-50,000 bbl/day 1983
Charter Energy	St. Helens (Reichhold Chemical Site)	52,400	1978 - land potential to expand beyond 100,000 bbl/day
Cascade Energy	Rainier	30,000	1st phase-15,000 bbl/day 1976 2nd phase-15,000 bbl/day 1979

All three proposed refineries are basically similar in that they will not employ catalytic cracking, an old method which maximizes gasoline production and is the source of significant quantities of particulate sulfur oxide and carbon monoxide emissions. The three refineries will basically employ distillation and desulfurization (a relatively new practice in the United States) to produce gasoline or Naptha, distillate fuels and residual fuels.

Quantities of specific products manufactured by each refinery are quite flexible in the design state, depending on demand. Once refineries are built they retain some product manufacturing flexibility. Although specific product manufacturing will in part depend on fuel regulations adopted by the Department and actions taken on each specific refinery permit application, possible average product manufacturing rates for the three refineries are shown in Table IV.

TABLE IV
Possible Refinery Product Distribution

	<u>CIRI</u>	<u>Charter</u> (barrels per day)	<u>Cascade</u>	<u>Totals</u>
High Sulfur Ship Fuel	29,400(1)			29,400
Low Sulfur Residual Fuels	13,200 (1/2%S)	25,500(2) (1%S)	8,400 (1/2%S)	46,600
Diesel and Distillate Fuels	33,000	16,500	8,000	57,500
Gasoline/Naptha	22,000	8,800	11,580	42,380
Other	3,200	1,600	-	4,800
Total Production	100,000	52,400	30,000	182,400

- (1) A considerable portion of this fuel could be processed into low sulfur residual oil.
- (2) Refinery could be designed to produce 0.5% sulfur fuel at a 20% increase in capital construction costs.

It is noteworthy that the two larger refineries, Columbia Independent Refinery, Inc. and Charter Energy are primarily fuel oil producers while the smallest refinery, Cascade Energy, is oriented towards gasoline production. It is apparent when comparing Oregon fuel demand with possible refinery production that the refineries would produce at most only thirty percent (30%) of Oregon's future motor gasoline needs. This percentage would be even less if some Naptha which can be converted to gasoline is used for SNG production or other use. Low sulfur residual fuel would be available in sufficient quantities to easily supply Oregon and Southwest Washington needs although some of this fuel might be diverted to other needs such as the Reichhold Chemical expansion fuel-conversion project. Distillate fuel supplies might totally fulfill Oregon's needs but much of this fuel could be used by PGE turbines which are now supplied by Hawaiian Independent Refinery, a parent company of Columbia Independent Refinery, Inc.

Air Emissions from the refineries would be almost solely from the fuel burned in process heaters or boilers. It is noteworthy that refineries burn a significant quantity of fuel, nearly six percent (6%) of their rated throughput capacity.

Table V presents expected air emissions from these facilities.

TABLE V
Projected Air Emissions from Proposed Oil Refineries

Refinery	Fuel Burned	Emissions, Tons/Year		
		Particulate	SOx	NOx
CIRI	A combination of refinery gas distillate fuel & residual (0.5%S)	218	1980	2290
Charter	Distillate fuel (.05% S)	140	168	642
Cascade	Residual fuel (0.5% S)	397	1586	1369

Type of fuel, burner type, emission factors and size of facility account for the variation in emissions. CIRI proposes to employ special low emission burners while Charter proposes to burn lower emission distillate fuel. Cascade, in projecting its emissions, proposes to use its desulfurized residual oil, but has used EPA emission factors which tend to maximize particulate emissions and may be unrealistically high.

General Information Regarding Emission Tradeoffs and Effects of a New Clean Fuels Regulation

Columbia Independent Refinery, Inc., because it is proposed for location in Rivergate, is the only refinery subject to the Portland Metropolitan Special Air Quality Maintenance Area rule which limits net emissions after considering tradeoffs to 107 tons per year particulate and 357 tons per year SO₂ from any single source. This rule also limits ambient air impact from any one source to not more than twenty-five percent (25%) of the available margin between projected air quality and ambient air standards. Clearly, CIRI needs emission tradeoffs from use of cleaner fuels to meet both particulate and SO₂ criteria of the rule.

Considerable efforts have been expended to identify emission tradeoffs for particulates, SOx and NOx that might be realized, primarily by use of lower sulfur residual oil. Oregon has a 1.75% sulfur limit for residual oil which is a fairly liberal limit and has resulted in use of residual oil averaging about 1.4%. Table VI presents the potential air emissions from use of 1% and 1/2% desulfurized residual oil compared with presently utilized 1.4% sulfur residual oil.

TABLE VI
Potential Air Emission Reduction by Substitution
of Desulfurized Residual Oil
(Pounds of Pollutant per Barrel of Oil Burned)

	1.4%S	1%S*	1/2%*
Particulate	0.77	0.55	0.42
SO ₂	9.48	6.59	3.30
NOX	2.87	1.92	1.92

*Based on desulfurized Alaskan Oil.

Table VII presents air emission reductions in the Portland Metropolitan Special Air Quality Maintenance Area as a result of substituting 1% or 1/2% sulfur residual fuel oil for existing 1.4%S fuel.

TABLE VII
Potential Air Emission Rates and Reductions
in Portland Metropolitan Area (1977)

	Reductions, Tons per year		Projected Emission Rate All Sources (Using) <u>Present Fuels)</u>
	<u>1%S</u>	<u>1/2%</u>	
Particulate	460	732	9,000
SO ₂	6049	12,936	25,000
NOx	1988	1,988	44,000

From Tables V and VII it would appear that adoption of a 1%S regulation would allow CIRI to meet the emission criteria of the Portland Metropolitan Special Air Quality Maintenance Area rule when considered on an area-wide basis. However, it is believed that a 1/2%S regulation can be justified on the basis of only slightly greater cost per barrel of fuel produced and the substantially increased benefits to air quality.

In addition to providing greater assurance of achieving projected particulate tradeoffs, 1/2%S fuel would provide significantly greater reductions in SOx and could have additional side benefits resulting in improved visibility and reducing potentials for formation of sulfate particulate and acid rain.

Adoption of a 1/2%S residual fuel regulation to become effective January 1, 1979 or thereabout, seems feasible and necessary, with or without establishment of one or more of the proposed refineries, to maintain air quality standards, enhance air quality and provide room for some future growth. Cost of the cleaner fuel is somewhat speculative at this time but a \$1 per barrel additional cost for 1/2%S residual and \$.90 per barrel additional cost for 1%S residual appears realistic. This can be compared to present-day cost of residual oil of approximately \$12 per barrel. The prime users of residual fuel who would have to pay the increased costs would generally be industrial and commercial establishments, schools, hospitals and large apartment houses.

Due to the adverse location of CIRI with respect to air quality impact in Downtown Portland, there appears to be a potential problem in meeting the ambient air impact criteria of the special maintenance area rule with a 100,000 barrels per day facility, although no problem appears at the 50,000 barrels per day capacity. This matter will have to be analyzed further.

Specific Issues Regarding Proposed Refineries

Water quality impacts appear to be negligible for the Charter and Cascade refineries which would discharge treated effluents to the Columbia River. Effluent from the CIRI refinery may create some problem with respect to phenols since discharge would be to the Willamette River. To meet phenol water quality standards at 100,000 barrels per day capacity would appear to require dilution with nearly 1/10 of the total low summer river flow. This matter needs further investigation.

Disposal of solid wastes from any or all of the proposed refineries should present no major problem. Large quantities of elemental sulfur derived from oil desulfurization would have to be disposed of, probably through sale or export. This material could be handled in a liquid state thereby eliminating dust problems associated with handling dry sulfur. Oily sludges may be incinerated, but emissions would be negligible compared to refinery emissions.

Noise impact appears to be insignificant for Columbia Independent Refinery and Charter Energy, but a potential problem exists for Cascade which would be located quite close to existing residences. Further evaluation is needed in terms of evaluating effectiveness of proposed noise control measures.

Air quality degradation might be a concern at the Charter location, however the clean fuel proposed to be used would appear to create a very small ambient air impact.

Other issues to consider including oil spill potential will be analyzed and reported with the full assessment of each project in staff reports regarding recommended action on permit applications.

Summary

A clean fuels policy for reducing sulfur content in residual fuel oil to 1/2% by 1979 could have very beneficial effects on Portland Metropolitan air quality and possibly other areas of the State and Southwest Washington. It appears that proposed local refining capacity can insure a supply of such fuel without serious adverse environmental impact, although specific details of the three proposed refineries in Oregon need to be more thoroughly reviewed. The Department proposes to have recommendations for acting on pending refinery permit applications and a companion clean fuels rule prepared by December 20, 1974 for consideration at a public hearing before the Environmental Quality Commission on January 24, 1975.

Recommendation

Since this report is intended to provide only information as to the status of pending permit applications for three new oil refineries and companion clean fuels rule, no action is necessary by the Commission at this time.



KESSLER R. CANNON
Director



ENVIRONMENTAL QUALITY COMMISSION

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KESSLER R. CANNON
Director

To: Environmental Quality Commission

From: Director

Subject: Agenda Item F, November 22, 1974 EQC Meeting

Ambient Air Standard for Lead

Background

On June 24, 1974, pursuant to a petition received by the Department on May 2, 1973 from the Committee to End Needless ^{Mr. Park} Freeways and others, a public hearing was held to consider adoption of a proposed ambient air standard for lead. On July 19, 1974, the Commission received the Hearings Officer's report (attached as Appendix A) and approved deferral of action on the standard to allow the staff to further evaluate information received.

Since the public hearing, information requested and received includes:

1. Letter and attached information from the State of Pennsylvania, dated July 26, 1974 and attached as Appendix B.
2. "EPA's Position on the Health Implications of Airborne Lead", publication by U. S. Environmental Protection Agency, received July 2, 1974, attached is a summary, Chapter VIII, as Appendix C.
3. Letter and information from the State of Montana, dated July 22, 1974, including "Lead Report, Dona Ana County, New Mexico 1973", and "Transcript of Proceedings In the Matter of the May 26-27, 1967 Public Hearing for the Establishment of Ambient Air Quality Standards for the State of Montana".
4. Letter and information from the State of California, dated July 23, 1974, including "Proposed Revisions of and Additions to the Ambient Air Quality Standards" dated October 21, 1970, and "Lead in the Environment and Its Effect on Humans" dated March, 1967.

5. Letter from the International Lead Zinc Institute dated August 13, 1974, including "An Assessment of the Data in Respect of Population Blood Levels in the Vicinity of the Gravelly Hill Motorway Interchange System, Birmingham", attached as Appendix D.
6. Letter and information from Dr. Leonard J. Goldwater, M.D., Duke University Medical Center, dated June 28, 1974.
7. Letter and information from Industrial Bio-Test Laboratories, dated August 15, 1974 and including "Review of EPA's Position on the Health Implications of Airborne Lead and the Final Lead Additive Regulations of the Environmental Protection Agency."
8. "Multnomah County, Oregon Lead Poisoning Project Report" dated June 1, 1974 and received October 23, 1974.
9. Department of Environmental Quality, Corbett-Terwilliger Area Lead Study dated November 7, 1974, attached as Appendix E.
10. "A Preliminary Model of the Human Assimilation of Lead Aerosols from Gasoline Consumption", a National Science Foundation Grant Study by W. Brian Crews and Michael Truffer, University of California, Davis, attached as Appendix F.

Discussion:

In the initial evaluation and recommendation for a proposed ambient air standard for lead, the Department relied heavily on information provided in a document entitled "EPA's Position on the Health Hazards of Airborne Lead". EPA has withdrawn from a previously held position that a level of 2.0 ug/m³ of airborne lead would cause significant increases in blood lead levels.

The current EPA publication, (Appendix C, attached) suggests that subclinical changes are associated with blood lead levels of approximately 40 ug/100 ml and above. They further suggest "for a standard man with average dietary lead intake, exposure to average airborne lead concentrations of 5.0 to 6.7 ug/m³ could cause his blood lead levels to reach 40 ug/100 ml within a year".

The Department received information concerning a modelling study of the human assimilation of lead aerosols from gasoline combustion, attached as Appendix F. The Department's evaluation of the report indicates that prolonged exposure to atmospheric concentrations of 5.0 ug/m³, could result in blood lead levels of less than 30 ug/100 ml.

The State of Pennsylvania adopted an ambient air standard of 5.0 ug/m³. Included in the submission from Pennsylvania was the following:

"Testimony by Dr. Robert Kehoe indicates that a total of 0.5 mg/day of lead can be ingested regularly without any risk, so long as there is no significant increase in the intake of lead from the atmosphere. Dr. Kehoe estimates that the average amount absorbed from the atmosphere is between 0.02 and 0.03 mg/day. He also estimates that about 10% of the amount ingested is absorbed and 50% of that inhaled is absorbed.

Using these figures the total allowable absorbed dose is about 0.08 mg/day. Since the average amount of lead absorbed from ingestion is about 0.03 mg/day, this leaves about 0.05 mg/day permissible absorption from the air. Using the 50% absorption figure and a daily respiration rate of 20 M³ (for the "standard man"), absorption from the air is 5 ug/M³."

Included in public testimony received and included in the Hearings Officer's report was a newspaper clipping concerning blood lead levels in the vicinity of the Gravelly Hills Motorway Interchange, Birmingham, England. The International Lead Zinc Research Organization submitted additional information including a copy of an assessment by P.S.I. Barry, Chief Medical Officer, Associated Octel Co., England, of the Gravelly Hill information (attached as Appendix D). The evaluation concludes "...it is doubtful if the results can be interpreted with a predictable level of confidence, or be attributable to lead from traffic using the motorway. In any event it is noteworthy that the values reported in all three Series lay within the upper acceptable range for a population with no unusual level of exposure to lead."

The Department received information from the State of Montana where a standard of 1.0 ug/m³ was proposed, but on the basis of testimony the State adopted a standard of 5.0 ug/m³/30 day period.

The final results of the Lead Poisoning Project Report undertaken by Multnomah County were published and made available to the Department. This study has shown that there is an apparent increase in blood lead levels in individuals residing near freeways, but that these levels do not constitute any serious hazard to individuals living in the Portland study area. The County has, in fact, determined from the evaluation of some 3,365 individuals in the metropolitan area that only one child had possible clinical symptoms of lead encephalopathy. The source of lead in this case was attributed to lead in paint, as indicated by the remission of symptoms and a decrease in blood lead levels in this child following "deleading" procedures in the child's home and in a neighbor's garage. The report further states that "in Portland, the risk of lead encephalopathy is extremely low. The probability of significant elevations of blood lead is also minor except perhaps in small urban poverty pockets". Another conclusion of the report was as follows:

"Early findings of this study, especially those occasioned by the finger stick contamination of heavy-lead-containing dust near urban freeways, was misquoted (and continues to be) as producing suggestive evidence of a health hazard. Ultimately, the battle of urban lead standards will have to be fought on the basis of acceptable uncertainty. Clearly the findings of the current research project only corroborate our assertions at the onset that we do not have evidence of significant medical hazards from the urban lead environment. The evidence that this study has produced indicates only a gradient of blood lead greater (but not proven to be clinically dangerous levels) adjacent to more heavily trafficked areas."

This study has clearly shown that in the areas studied, no medically significant blood lead levels have occurred as a result of exposure to ambient levels of lead.

An ambient air sampling study of lead particulate, conducted by the Department over a years period in the southwest Portland area near the I-5 freeway was completed and summarized on November 1, 1974. Samples were collected at three sampling locations, View Point Terrace and Richardson Street, Kneeland and Kneeland at 0305 S. W. Curry Street, and at the Terwilliger School, 6318 S. W. Corbett Street.

The highest single samples obtained for these stations were 4.9 ug/m³/24 hours; 5.7 ug/m³/24 hours; and 3.6 ug/m³/24 hours. The highest monthly averages for these stations were 2.4 ug/m³/month; 2.5 ug/m³/month; and 1.8 ug/m³.

Composite monthly samples were analyzed for lead particulate for all sampling locations around the Statewide Air Sampling Network. Of the 730 total monthly averages, only 7 samples exceeded 2.0 ug/m³/month and none exceeded 4.0 ug/m³/month.

Probable decreases in ambient air concentrations of lead will result from Federal Fuel Lead Content regulations. As stated in the Federal Regulations, 40 CFR Part 80, Wednesday January 10, 1973, "It was the Agency's judgment that these reductions, together with the introduction of lead free gasoline would provide for the protection of health in major urban areas within the shortest time reasonably possible."

Conclusions:

1. As stated by EPA, "Blood lead levels exceeding 40 ug/100 ml are considered medically undesirable and may ultimately be harmful."
2. Prolonged exposure to ambient air concentrations of at least 5.0 to 6.7 ug/m³ would likely be required to cause blood lead concentrations to reach 40 ug/100 ml, and therefore an ambient air standard based on a one month exposure period would appear to be conservative.

3. The Multnomah County study, along with work previously reported by the Oregon Graduate Center conclude that no significant medical hazard from lead exists in the areas studied. These studies indicate a gradient of blood leads greater adjacent to areas of heavy traffic.
4. Data from the statewide air sampling network and from special free-way oriented sampling sites has shown that a 5.0 ug/m³/month concentration has not been exceeded.
5. The Department has been petitioned to adopt an ambient air standard for lead to protect the public health.
6. In the future, industries with lead emissions may locate in areas of the State. No significant uncontrolled stationary sources of lead particulate emissions are known by the Department to exist in the State. New sources are required to submit control programs for approval. In most all cases control of lead particulate lends itself to control with the same equipment that removes particulates. No high level lead particulate areas are expected to develop as a result of stationary sources.
NEW
7. Motor vehicles will continue to be a primary source of lead particulate in the urban atmosphere. Despite expected large gains in passenger riders by mass transit, the number of vehicle trips are expected to continue to rise (from a 1971-73 base). The Department has not concluded that the lead content in gasoline will continue to be reduced under the Federal program. Therefore, new roadways with high traffic projections should be evaluated for ambient air lead levels occurring off the road right-of-way.
8. The Department should have an adopted reference standard or guideline to evaluate proposed large freeways or vehicle traffic concentration.

Director's Recommendation

It is the recommendation of the Director that the following standard be adopted for concentrations of lead in the ambient air:

Standard: The lead concentration measured at any sampling station, using sampling and analytical methods on file with the Department, shall not exceed 5.0 ug/m³ as an arithmetic average concentration of all samples collected during any one calendar month period.

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KESSLER R. CANNON
Director

APPENDIX A



ENVIRONMENTAL QUALITY COMMISSION

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

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The Dalles

KESSLER R. CANNON
Director

TO: Environmental Quality Commission
FROM: Hearings Officer
SUBJECT: Agenda Item No. G, July 19, 1974, EQC Meeting
Proposed New Ambient Air Standard for Lead

Background

In May, 1973, a group calling itself the Committee to End Needless Urban Freeways (ENUF), together with four environmental groups and ten private persons, petitioned the Environmental Quality Commission for the commencement of rule-making proceedings on lead concentrations in ambient air, directed particularly toward the area above and alongside newly-constructed urban roadways. Proposed rule 11. 2. of that petition was phrased:

"The ambient air concentration of lead at any point within 1000 feet of the edge of [any roadway or segment thereof constructed after January 1, 1974, in any urban area of this state] shall not exceed two micrograms per cubic meter averaged on a monthly basis."

In May, 1974, the Air Quality Control Division proposed, along with sampling and analytical methods, an ambient air standard for lead. The proposed standard in its entirety reads:

"The lead concentration measured at any sampling station, using sampling and analytical methods on file with the Department, shall not exceed $2.0 \mu\text{g}/\text{m}^3$ [micrograms per cubic meter] as an arithmetic average concentration of all samples collected during any three calendar month period."

A hearing was scheduled and conducted in Portland on June 24, 1974, to receive public testimony on the proposed rule change. The record was left open for written additional comments until July 3, 1974, closing at the close of business that day.

Summary of Oral Testimony

Mrs. Louis Brent, herself one of the ten individual petitioners for the rule change and representing ENUF, one of the organizations which petitioned for the rule change, testified in general support of the proposed standard. She noted that on page 2.8 of the staff report accompanying the proposed standard, the DEQ staff has predicted that the I-205 freeway will be in violation of the proposed standard within 200 feet of at least two points along the route based upon the impact statement. She recommended that DEQ require that I-205 be constructed in a manner which would assure compliance with the proposed rule so that the lead problem will be removed rather than merely moved.

Gregg Fritts, representing the Oregon Environmental Council, another of the original petitioners, summarized his review of scientific findings relating to lead to date. He noted that California has enacted an ambient air standard of a maximum 30-day average of 1.5 micrograms per cubic meter and suggested that Oregon's standard should be at least as stringent.

Tom Rocks, Oregon coordinator of the Columbia Group of the Sierra Club, another of the original petitioners, testified that he supports the proposed standard as a minimum. He, like Charles Merten (see below), found difficulty with the "arithmetic average concentration of all samples". Does it mean an average of samples from one point or an average of different sampling stations? He expressed concern about enforcement of the standard since, as a practical matter, a roadway is unlikely to be closed once constructed. He therefore wants a mechanism to review the likelihood of violation before a roadway is constructed. He testified that DEQ should look beyond unleaded gasoline or wider rights-of-way as alternatives for lead. He suggests transit alternatives and the consideration of not building roadways.

Helen M. Virnig, another of the individual petitioners, supports the proposed standard but suggests that it be supplemented to protect the users of highways, as well as those people living near highways.

Charles Merten, attorney for the petitioners, introduced into the record by reference several documents, which include the two EPA documents on lead issued in April and November, 1972, respectively, pages 3-27, 3-30, 3-32, and 3-33, and Appendix C-24 of the I-205 environmental impact statement, Mr. Merten's letter dated May 10, 1973 to the Commission, the Air Quality Control Division's report to the Commission for its May 1974, meeting in Portland, and an article from the London Times of March 10, 1974. Since only the newspaper article is new material not previously brought to the Commission's attention, I will excerpt from that article only in this report:

"The level of lead in the bloodstream of families living on the edge of Birmingham's 'Spaghetti Junction' has more than doubled since the Gravelly Hill motorway interchange opened two years ago.

"The figures were reported to a meeting of the Birmingham City Council's health committee last Friday. One hundred residents were first tested in April, 1972, just before Spaghetti Junction opened. The average lead content in their blood was then 12.2 micrograms per 100 millilitres. By March last year the figure for the same residents had risen to 16.6 micrograms and by January this year it was 26.3."

Mr. Merten noted that the major difference between the proposed DEQ standard and the petitioners' proposed rule is that the DEQ rule does not protect roadway users, as opposed to residents alongside the roadway. He requested that the EQC instruct the DEQ to continue its investigation. Mr. Merten also cited the ambiguity in the averaging phrase summarized above in Mr. Rock's testimony. In light of California's having adopted a one-month average, Mr. Merten objected to Oregon's proposed three-month averaging. Since inversion periods rarely would last for three consecutive months, the proposed DEQ standard would allow one month with low lead readings to bring two months with high readings into compliance. Mr. Merten advised caution in the drafting of complex source rules that they not be seen to amend or modify the lead standard. Finally, in light of the fact that lead is a hazard to health, that the State Board of Health has failed to act with regard to airborne lead, and that the Environmental Quality Commission and Department of Environmental Quality have taken over a year even to bring the matter to hearing, he urged quick action to protect the public health.

Betty Ream, herself a victim of lead poisoning, is the president of the Foster-Powell Neighborhood Association. She testified that that association has voted to support the proposed standard. She further testified on a personal level as to the effects of lead poisoning: pain in her elbows and feet, five years of anemia, with low iron and calcium counts. She said that the lead detoxification process itself is unpleasant.

There were two witnesses generally opposed to the proposed lead standard. James F. Cole, Deputy Director of the International Lead Zinc Research Organization, Inc., and Director of Environmental Health for the Lead Industries Association, came from New York City to testify at the hearing. Mr. Cole noted that the two micrograms per cubic meter standard, originally recommended by the EPA in April 1972, was heavily criticized in public hearings in 1972 causing EPA to back away from the recommendation. Mr. Cole cast doubt on the references used by the EPA and, later, the National Academy of Sciences to justify the two microgram figure, supporting his statement with references to the literature. Citing the so-called Seven Cities Study, Mr. Cole conceded that the blood lead levels of urban women are consistently slightly higher than those for suburban women but asserted that airborne lead was not a significant contributor to blood lead concentrations. Mr. Cole also questioned whether lead-containing dust and dirt near roadways constituted any significant portion of ingested lead in children when compared to lead-based paint.

Mr. Cole stated that the rationale for a two-microgram standard is scientifically unsupportable and recommended against the proposed standard for that reason. Noting that Pennsylvania and Montana have five-microgram standards (averaged over thirty days) and New Mexico has a ten-microgram standard (for all heavy metals combined averaged over thirty days), Mr. Cole recommended a five-microgram standard for Oregon (averaged over ninety days).

Mr. Cole also submitted an extensive and bewildering array of written technical documents. See the section on written testimony below.

Dr. Leonard J. Goldwater, a member of the faculty of Community Health Sciences of Duke University, accompanied Mr. Cole as a consultant. Dr. Goldwater emphasized at the outset that he will receive no fee for the consultation culminating in his testimony nor does he have a continuing relationship with the International Lead Zinc Research Organization nor the Lead Industries Association, Inc.

Dr. Goldwater testified that EPA has changed its position since the two reports on lead relied upon by the DEQ staff in preparing its report and setting its standard. He said that the November 28, 1973 EPA document, "EPA's Position on the Health Implications of Airborne Lead," repudiates many points of the November 29, 1972 EPA document, "EPA's Position on the Health Effects of Airborne Lead," relied upon by the DEQ. He suggested that the Commission and Department build mechanisms into the rule to allow review of the scientific validity of the standard from time to time without the need of going through a rule-making procedure.

Dr. Goldwater challenged the assertion that lead is a "highly toxic material." Compared to organo-phosphate pesticides, for instance, it is, not, he said. He urged the EQC and DEQ to base their actions upon reasonably strong scientific bases lest the whole standard fail to withstand challenge in the courts. He would find a four-microgram standard (averaged over ninety days) less objectionable than the two-microgram standard, he said. Finally, he noted that other substances added to motor fuels in place of lead might be more harmful to man than lead. Dr. Goldwater also submitted written documentation of his position.

Summary of Written Testimony

State Senators George Wingard and Ted Hallock and University of Oregon law professor Frank Barry each submitted short letters and Valerie A. Cobb of Portland submitted a considerably longer one supporting the proposed standard of two micrograms per cubic meter averaged over a three-month period. Gary Michael, chairman of Sensible Transportation Options for People (STOP), submitted a letter supporting "strict standards" to assure that lead near roadways will not exceed "reasonable levels."

Multnomah County Commissioner Donald Clark submitted a written statement supporting the proposed two-microgram level as a reasonable starting point, recognizing that as more scientific data is accumulated, the standard can be revised upward or downward. He noted the danger of previously undetected subclinical effects of lead poisoning and urged the wisdom of guarding against such poisoning.

Jerome F. Cole, who also gave oral testimony, submitted several documents for the record. These include "A Survey of Air and Population Lead Levels in Selected American Communities" by Lloyd B. Tepper and Linda S. Levin of the Department of Environmental Health, Kettering Laboratory, University of Cincinnati (December, 1972, 72 pages); "EPA's Position on the Health Implications of Airborne Lead" (November, 1973, 116 pages plus tables); "A Critique of EPA's Position on the Health Implications of Airborne Lead" prepared by Jerome F. Cole, Sc.D. and Donald R. Lynam, Ph. D. (submitted to the Panel on Environmental Science and Technology of the Subcommittee on Environmental Pollution of the U. S. Senate Public Works Committee, May, 1974, 27 pages); "Children and Lead," an editorial in the February, 1974, issue of American Journal of Diseases of Children by Donald Barltrop, M.D., a British physician (two pages); a submission of March 9, 1973, by the International Lead Zinc Research Organization, Inc. to the Environmental Protection Agency in response to proposed rule making, with additions dated June 29, 1973, and July 30, 1973 (61 pages); and a written critique of the staff report of the DEQ supporting the proposed standard (3 pages) containing an attachment of a study report by James L. McNeil, M.D., and J. A. Ptasnik, Ph.D., entitled "Evaluation of Long-Term Effects of Elevated Blood Lead Concentrations in Asymptomatic Children" (11 pages).

Dr. Leonard Goldwater, who also gave oral testimony, submitted a copy of a letter he wrote to the Environmental Protection Agency on February 13, 1973, in response to proposed regulation of fuels and fuel additives (13 pages), an article titled "An Assessment of the Scientific Justification for Establishing $2\mu\text{g}/\text{m}^3$ as the Maximum Safe Level for Airborne Lead" by Dr. Goldwater and published in the July, 1972, issue of Industrial Medicine (6 pages), and his critique of the DEQ staff report supporting the proposed standard (2 pages).

Analysis

The hearings officer has read, with difficulty and less than total comprehension, the 314 pages of written testimony submitted by Drs. Cole and Goldwater. There are several propositions which the studies tend to establish and several, no less important, which they fail to establish.

It appears to the hearings officer that the link between airborne lead concentrations (with the possible exception of the heavy concentrations encountered in some industrial workers' locations--see Cole & Lynam "A Critique of EPA's Position on the Health Implications of Airborne Lead," page 12)--and blood lead levels has yet to be established with rigor. However, there is no lack of circumstantial evidence, such as that reported in the excerpt from the London Times article in the summary of Mr. Merten's oral testimony above, which tends to make the nonexistence of a link improbable. The analogy might be made between airborne lead and health effects and smoking and lung cancer, i.e., while the definitive study has yet to be made, the probability that a link exists becomes stronger with each new study.

Second, there is no study which intimates in any way that the reduction of airborne lead, in itself and ceteris paribus, is harmful. There are some suggestions that substitutes for lead in motor fuels may cause more harmful effects than the lead causes. However, there is no substantiation of these suggestions in the documents submitted for the record, and until such harmful effects are shown, the possibility of harm from substances unknown stands as a weak argument against the probability of harm from a known substance. Further, the reduction of lead in motor fuels may be pre-empted by the Federal Government in any event. See page 3.2 of the staff report accompanying the proposed standard.

Third, if airborne lead is harmful and if the reduction of airborne lead is not harmful, then the greater the reduction in airborne lead, the greater margin of safety exists against possible health effects. The statement by Jerome Cole that "[i]gnorance...is a justifiable reason for conducting research but not for enacting restrictive regulations" (in "A Critique of EPA's Position on the Health Implications of Airborne Lead," page 5) seems false in light of the statement in the very same paragraph that "[o]bviously, there exists the possibility that we may be ignorant of some detrimental effect of lead."

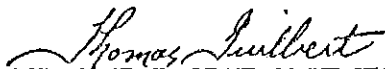
Fourth, the scientific justification for establishing a standard at precisely two micrograms per cubic meter apparently does not exist at the present time. However, neither Dr. Cole, who has suggested a five-microgram standard, nor Dr. Goldwater, who suggested a four-microgram standard, have made a convincing case for the numbers they have put forth either. The two-microgram standard appears to this scientifically naive observer, the hearings officer, to be equally as well supported by the literature as either a four- or five-microgram standard would be, and more consistent with allowing a margin for safety.

Fifth, the three-calendar-month averaging proposed by the DEQ staff appears out of step with the other four states who have adopted load standards: California, Pennsylvania, Montana, and New Mexico, all of which require averaging over a thirty-day period.

Sixth, none of the studies addresses the question of enforcement of any standard. The staff report addresses this to some extent in part three but only Charles Merten and Tom Rocks addressed the question in testimony and those two witnesses only in passing.

Finally, as both Mr. Merten and Mr. Rocks observed in oral testimony, the proposed standard is ambiguously worded as to what data can be combined to derive an arithmetic average. In this respect, the standard clearly needs to be re-drafted to eliminate the possible source of confusion.

Submitted this tenth day of July, 1974.



Thomas Guilbert
Hearings Officer

TG:bm

APPENDIX B

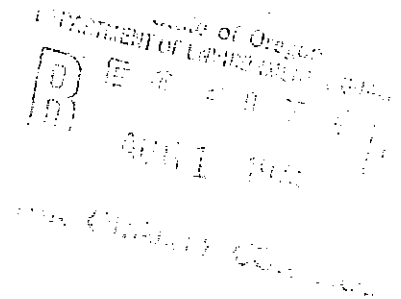
COMMONWEALTH OF PENNSYLVANIA



DEPARTMENT OF ENVIRONMENTAL RESOURCES

P. O. Box 2063
Harrisburg, PA 17120

July 26, 1974



Mr. H. M. Patterson, Administration
Air Quality Control Division
State of Oregon
Department of Environmental Quality
1234 S.W. Morrison Street
Portland, Oregon 97205

Dear Mr. Patterson:

This will acknowledge your July 15, 1974 request for information on Pennsylvania's ambient air quality standard for lead. The following is a brief outline of the Council of Technical Advisors' reasoning with respect to the lead standard.

"Testimony by Dr. Robert Kehoe* indicates that a total of 0.5 mg/day of lead can be ingested regularly without any risk, so long as there is no significant increase in the intake of lead from the atmosphere. Dr. Kehoe estimates that the average amount absorbed from the atmosphere is between 0.02 and 0.03 mg/day. He also estimates that about 10% of the amount ingested is absorbed and 50% of that inhaled is absorbed.

Using these figures the total allowable absorbed dose is about 0.08 mg/day. Since the average amount of lead absorbed from ingestion is about 0.03 mg/day, this leaves about 0.05 mg/day permissible absorption from the air. Using the 50% absorption figure and a daily respiration rate of 20 M³ (for the "standard man"), the calculated average daily concentration which will lead to 0.05 mg/day absorption from the air is 5 µg/M³.

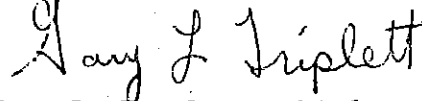
This calculation is based on average conditions which will be most nearly duplicated over a long time period such as a month. Furthermore, in this range of absorption, lead has only long term cumulative effects. Daily fluctuations, by even a wide margin, would not be expected to have any demonstrable ill effects. Consequently, the criterion of 5 µg/M³ was established as a 30-day average concentration, with regard to daily variations."

July 26, 1974

Attached is a copy of Chapter 131 on Ambient Air Quality Standards and Chapter 139 on Sampling and Testing. Our experience has been that we have had very little difficulty in achieving the lead standard, except for a few isolated local cases where appropriate action was taken against specific sources of lead emissions.

*"Air Pollution - 1966, Hearings before a Subcommittee on Air and Water Pollution United States Senate", U.S. Government Printing Office, Washington, 1966, pp. 208-228.

Very truly yours,



Gary L. Triplett, Chief
Division of Air Resource
Management and Research
Bureau of Air Quality and
Noise Control

Attachments

TITLE 25. RULES AND REGULATIONS
 PART I. DEPARTMENT OF ENVIRONMENTAL RESOURCES
 Subpart C. PROTECTION OF NATURAL RESOURCES
 ARTICLE III. AIR RESOURCES

CHAPTER 131. AMBIENT AIR QUALITY STANDARDS

Authority

The provisions of this Chapter 131 issued under act of January 8, 1960, P.L. 2119, § 5 (35 P.S. § 4005).

Source

The provisions of this Chapter 131 adopted September 2, 1971, effective September 11, 1971, 1 Pa. B. 1804, and revised January 27, 1972.

§ 131.1. Purpose.

The purpose of this Chapter is to:

(1) Establish the maximum concentrations of air contaminants that shall be permitted to exist in the ambient air, at the point of its use, under various conditions and in various areas of this Commonwealth.

(2) Provide standards against which existing air quality may be compared.

§ 131.2. National ambient air quality standards.

National Ambient Air Quality Standards promulgated by the Administrator of the United States Environmental Protection Agency pursuant to the provisions of the Clean Air Act, are hereby incorporated, by reference, as part of the standards in § 131.3 of this Title (relating to ambient air quality standards).

§ 131.3. Ambient air quality standards.

The following standards shall apply and unless otherwise stated, are maximum values that shall not be exceeded:

Contaminant	Concentrations Averaged Over			
	1-Year	30-Days	24-Hours	1-Hour
Settled particulate (total)	0.8 mg/cm ² /mo.	1.5 mg/cm ² /mo.	--	--
Lead	--	5 µg/m ³	--	--
Beryllium	--	0.01 µg/m ³	--	--
Sulfates (as H ₂ SO ₄)	--	10 µg/m ³	30 µg/m ³	--
Fluorides (total soluble, as HF)	--	--	5 µg/m ³	--
Hydrogen sulfide	--	--	0.005ppm	0.1ppm

§ 131.4. Application of ambient air quality standards.

The values specified in §§ 131.2 and 131.3 of this Title (relating to ambient air quality standards) shall be considered as representing minimum quality, not necessarily

desirable quality. Nothing contained in this Chapter shall be construed to preclude the Department from enforcing or applying any provision of this Article in areas where the ambient air quality is, or will be, at concentrations less than those specified in § § 131.2 and 131.3 of this Title (relating to ambient air quality standards).

TITLE 25. RULES AND REGULATIONS
PART I. DEPARTMENT OF ENVIRONMENTAL RESOURCES
Subpart C. PROTECTION OF NATURAL RESOURCES
ARTICLE III. AIR RESOURCES

CHAPTER 139. SAMPLING AND TESTING

Authority

The provisions of this Chapter 139 issued under act of January 8, 1960, P.L. 2119, § 5 (35 P.S. § 4005).

Source

The provisions of this Chapter 139 adopted January 27, 1972.

GENERAL

§ 139.1. Sampling facilities.

Upon the request of the Department, the person responsible for a source shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance by the Department of tests on such source. The Department shall set forth, in the request, the time period within which the facilities shall be provided as well as the specifications for the said facilities.

§ 139.2. Sampling by others.

Sampling and testing done by persons other than the Department may be accepted by the Department provided that:

(1) The Department has been given reasonable notice of the sampling and testing and has been given reasonable opportunity to observe and participate in the sampling and testing.

(2) The sampling and testing is conducted under the direct supervision of persons qualified, by training and experience, to conduct such sampling and testing.

(3) Procedures for the sampling and testing are in accord with the provisions of this Chapter.

(4) The reports of the sampling and testing are accurate and comprehensive.

§ 139.3. General requirements.

(a) The Department shall use the methods set forth in this Chapter to assess emissions from stationary sources or ambient levels of air contaminants.

(b) The Department shall publish a supplement to this Chapter containing detailed information on source test methods and procedures and indicating the information that should be contained in a report of emissions.

(c) The performance standards for stationary sources set forth in this Chapter permit freedom in the selection of equipment and consistency in obtaining accurate results which are representative of the conditions under which a source is evaluated.

(d) The sampling and analytical procedures employed to measure ambient levels of air contaminants shall be consistent with obtaining accurate results which are representative of the conditions being evaluated.

§ 139.4. References.

The following are references referred to in this Chapter:

- (1) "Standards of Performance for New Stationary Sources," Federal Register, Part II, Volume 36, No. 247, pp. 24876 - 24895, December 23, 1971, Washington, D.C.
- (2) Devorkin, H., et al. "Air Pollution Source Testing Manual," Los Angeles Air Pollution Control District, Second Printing, November 1965.
- (3) "Standard Method for Sampling Stacks for Particulate Matter," American Society for Testing Materials, D 2928-71, 1916 Race Street, Philadelphia, Pennsylvania.
- (4) Jacobs, M.D. et al., "Ultramicrodetermination of Sulfides in Air," *Anal. Chem.*, 29:1349 (1957).
- (5) "Air Sampling Instruments," 2nd ed., American Conference of Governmental Industrial Hygienists, 1014 Broadway, Cincinnati 2, Ohio, 1962, pp B-3-12-B-3-14.
- (6) "Recommended Standard Method for Continuing Dust Fall Survey (APM-1, Revision 1)," TR-2 Air Pollution Measurements Committee, *J. Air Poll. Control Assoc.*, 16:372 (1966).
- (7) "Air Pollution Measurements of the National Air Sampling Network: Analyses of Suspended Particulates 1957-1961," Public Health Service Pub. No. 978, Washington, D.C., 1962.
- (8) Interbranch Chemical Advisory Committee, "Selected Methods for the Measurement of Air Pollutants," PHS Pub. No. 999-AP-11, Cincinnati, Ohio, 1965, p. I-1.
- (9) "Standard Method of Test for Inorganic Fluoride in the Atmosphere," ASTM Standards on Methods of Atmospheric Sampling and Analyses, Philadelphia, Pennsylvania, 1962, p. 67.

STATIONARY SOURCES

§ 139.11. General requirements.

The following are applicable to source tests for determining emissions from stationary sources:

(1) All performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department.

(2) The Department shall consider for approval test results where sufficient information is provided to verify the source conditions existing at the time of the test and where adequate data is available to show the manner in which the test was conducted. Information submitted to the Department shall include, as a minimum:

- (i) A thorough source description, including a description of any air cleaning devices and the flue.
- (ii) Process conditions, e.g., charging rate of raw material or rate of production of final product, boiler pressure, oven temperature and other conditions which may affect emissions from the process.
- (iii) The location of the sampling ports.
- (iv) Effluent characteristics, including velocity, temperature, moisture content, gas density (%CO, CO₂, O₂ and N₂), static and barometric pressures.
- (v) Sample collection techniques employed, including procedures used, equipment descriptions and data to verify that isokinetic sampling for particulate matter collection occurred and that acceptable test conditions were met.
- (vi) Laboratory procedures and results.
- (vii) Calculated results.

§ 139.12. Emissions of particulate matter.

The following are applicable to tests for determining emissions of particulate matter from stationary sources:

- (1) Test methods for particulate emissions shall include both dry filter(s) and wet impingers and provide for at least a 95% collection efficiency of particulate matter.
- (2) Isokinetic sampling procedures shall be used in sampling for particulate

matter emissions and the weights of all soluble and insoluble particulate determined gravimetrically after removal of uncombined water.

(3) Test methods and procedures shall be equivalent to or modified to produce results equivalent to those which would be obtained by employing the procedures specified in § 139.4 (1) and (2) of this Title (relating to references). The equipment shall be inert where appropriate and similar to that specified in § 139.4 (1) - (3) of this Title (relating to references).

(4) The minimum sampling time shall be one hour and the minimum sample volume shall be 50 cubic feet corrected to standard conditions (dry basis).

(5) Results shall be reported as pounds of particulate matter per hour and in accordance with units specified in § § 123.11 - 123.13 and 129.12 of this Title (relating to standards for contaminants and sources).

§ 139.13. Emissions of SO₂, H₂S and NO₂.

The following are applicable to tests for determining emissions of SO₂, H₂S and NO₂ from stationary sources:

(1) Test methods for SO₂, H₂S and NO₂ shall provide for at least 95% collection efficiency of oxides of sulfur, hydrogen sulfide and oxides of nitrogen, respectively.

(2) Sample collection for SO₂ shall be at a rate proportional to the stack gas velocity and the weight of oxides of sulfur shall be determined gravimetrically.

(3) Test methods and procedures for SO₂ shall be equivalent to or modified to produce results equivalent to those which would be obtained by employing the procedures specified in § 139.4 (2) of this Title (relating to references). The equipment shall be inert where appropriate and similar to that specified in § 139.4 (2) of this Title.

(4) Sample collection for H₂S shall be at a rate proportional to the stack gas velocity and the weight of hydrogen sulfide shall be determined colorimetrically.

(5) Test methods and procedures for H₂S shall be equivalent to or modified to produce results equivalent to those which would be obtained by employing the procedures specified in § 139.4 (4) of this Title (relating to references). The equipment shall be inert where appropriate and similar to that specified in § 139.4 (2) of this Title (relating to references).

(6) For determining emissions of SO₂ and H₂S, the minimum sampling time shall be one hour and the minimum sample volume shall be 30 cubic feet corrected to standard conditions (dry basis).

(7) Test methods and procedures and equipment for NO₂ shall be similar to those specified in § 139.4 (1) of this Title (relating to references).

(8) Results shall be reported as pounds per hour of SO_x as SO₂, pounds per hour of H₂S, or pounds per hour of NO_x as NO₂ and in accordance with units specified in § § 123.21 - 123.23 and 129.11 - 129.13 of this Title (relating to standards for contaminants and sources).

§ 139.14. Emissions of other air contaminants.

Test methods and procedures may be modified for determining emissions of contaminants other than particulate matter, SO₂, H₂S and NO₂ from stationary sources in any manner consistent with accepted air pollution testing practices and with obtaining accurate results which are representative of the conditions evaluated. Such modifications shall be subject to the approval of the Department and shall be clearly indicated in the report of test results.

FUGITIVE PARTICULATE MATTER

§ 139.21. Emissions of fugitive particulate matter.

The following are applicable to tests for determining fugitive particulate matter emissions:

(1) Test methods and procedures and equipment for fugitive particulate matter shall be equivalent to those specified in § 139.4 (5) of this Title (relating to references).

(2) The concentration of particulate matter shall be determined by counting and the results shall be reported in accordance with the requirements of § 123.2 of this Title (relating to standards for contaminants).

(3) Samples to determine background fugitive particulate matter concentrations shall be taken upwind of the source(s).

AMBIENT LEVELS OF AIR CONTAMINANTS

§ 139.31. General.

The provisions of § § 139.32 and 139.33 of this Title (relating to sampling and analytical procedures) are applicable to methods for determining ambient levels of air contaminants.

§ 139.32. Sampling and analytical procedures.

(a) The following sampling and analytical techniques may be used directly or employed as reference standards against which other methods may be calibrated:

Contaminant	Sampling Method	Analytical Method
Settled particulates (total)	open top cylinder (6)	gravimetric (6)
Lead	high-volume filtration (7)	spectrographic (7)
Beryllium	high-volume filtration (7)	spectrographic (7)
Sulfates (as H ₂ SO ₄)	high-volume filtration (7)	turbidimetric (8)
Fluorides (total soluble, as HF)	filtration plus gas absorption (9)	thorium-alizarin lake titration (9)
Hydrogen sulfide	gas absorption (4)	methylene blue method (4)

(b) The numbers following the reference standards in subsection (a) of this section refer to references contained in § 139.4 of this Title (relating to references).

§ 139.33. Incorporation of federal procedures.

Sampling and analytical procedures promulgated by the Administrator of the United States Environmental Protection Agency pursuant to the provisions of the Clean Air Act are hereby incorporated, by reference, as part of the techniques listed in § 139.32 (a) of this Title (relating to sampling and analytical procedures).

APPENDIX C

VIII. Summary and Conclusions

Summary

Lead occurs widely in the environment. Its present distribution is the result of natural occurrence, greatly influenced by man's activities. In 1971, in the United States, 1,431,514 tons of lead were consumed with over one million tons used as metallic lead or lead alloys and in storage batteries. About 135,000 tons were used in coatings and pigments. Of the 264,000 tons used in gasoline additives, more than two-thirds enters the environment. Combustion of gasoline contributes by far the largest fraction of lead reaching the environment. Other sources of lead in the environment are wear and erosion of lead-containing painted surfaces, and incineration of lead-containing substances.

Man takes in lead from many sources: water; food; air; and, particularly in the case of children, from ingestion of lead-containing non-food items such as paint and dust. It is probable that lead in dust and dirt is inadvertently ingested by both children and adults. It is generally agreed that food is the major source of lead for the general population. A World Health Organization expert committee reports that according to the results of total diet studies in industrialized countries, the total intake of lead from food generally ranges from 200-300 μg per person per day. WHO further states that based upon available

data, these levels are similar to those found in the past 30-40 years and that no upward trend in lead levels in food is evident. Reducing the amount of airborne lead in the environment constitutes an accessible means for reducing potential human exposure to environmental lead particularly when that fraction is large compared with that absorbed from the diet. (Section II)

Lead has not been shown to be biologically essential or beneficial to man. In sufficiently high quantities, it is clearly toxic, and, at somewhat lower levels, has been shown to cause biochemical changes. Lead is also suspected of producing subclinical neurologic damage.

The studies reviewed in Section III permit no unequivocal conclusions to be drawn. On balance, they suggest that subclinical changes are associated with blood lead levels of approximately 40 $\mu\text{g}/100\text{g}$ and above. As blood lead levels increase above 40 $\mu\text{g}/100\text{g}$, the likelihood that these changes will occur increases markedly. Based upon evidence from these studies, it would seem prudent to regard blood lead levels over 40 $\mu\text{g}/100\text{g}$ as indicators of lead intake that should be prevented. The 40 $\mu\text{g}/100\text{g}$ figure, however, does not represent a sharp demarcation between health and disease.

Blood lead levels, under most circumstances, serve as a reasonably accurate measure of lead body burden and have been widely employed in public health surveillance. It is not

possible at this time to firmly establish a single acceptable blood lead level protective of all high risk population groups. It would appear prudent, however, to recommend that the current U.S. Public Health Service Guideline for older children and adults, i.e., 40 $\mu\text{g}/100\text{ml}$ whole blood be regarded as a strict upper limit for younger children. Whether the acceptable upper limits should be lower than 40 $\mu\text{g}/100\text{ml}$ for the fetus, neonate, and the woman of child bearing age will require further investigation. (Section IV)

In Section V, it is shown that lead from automotive exhaust contributes to increased exposure for humans both from the air and from fallout. Blood lead levels exceeding 40 $\mu\text{g}/100\text{g}$ are considered medically undesirable and may ultimately be harmful. Blood lead levels depend on daily dietary intake and adsorption of respired lead. For a "standard man" with average dietary lead intake, exposure to average airborne lead concentrations of 5.0 to 6.7 $\mu\text{g}/\text{m}^3$ could cause his blood lead concentrations to reach 40 $\mu\text{g}/100\text{g}$ within a year. Airborne lead levels near to or in excess of 5 $\mu\text{g}/\text{m}^3$ have been observed in several U.S. cities.

Lead in dust and dirt is an important potential source of exposure, especially for young children. Daily ingestion of relatively small quantities of dirt or dust (less than 1 gram or about 1/4 of a teaspoonful) containing 1000-2000ppm of lead would be medically undesirable. Although dustfall exposure to lead is still often considered an hypothesis, much of the available evidence is consistent with this hypothesis. Present day lead

exposure via air or dusts in some sections of large cities leaves little or no margin of safety in relation to those concentrations associated with biomedical harm.

In Section VI, it was shown that lead emissions from automobiles contribute to lead present in urban soils, in street dirt and in house dust. Lead content of soil has been demonstrated to decrease with increased distances from both painted houses and roadways. Lead concentrations in fallout dust from the air also decrease away from roadways. Dust lead levels in street sweepings from large cities usually range from 0.1 to 0.25% and at times exceed 0.5%. Housedust from urban areas commonly contains 0.1% lead or higher. Concentrations of lead in housedust vary with lead fallout from the air and are reported to be higher in homes located near heavily travelled roadways than in homes on side streets. Quantities of lead in housedust do not vary directly with the presence of peeling paint in the home but they are higher in older homes, reflecting greater amounts of lead paint, as well as increased atmospheric ventilation and dust fallout in older homes. Erosion of paint is clearly a contributor to lead in housedust. Urban dust and dirt, if sufficiently contaminated with lead represent a hazard to children, if ingested. With the available data one cannot quantitatively assess the relative contribution of erosion of lead paint and of other lead sources to the total lead content of soil, street dirt and housedust. Nevertheless, it is evident that lead emissions from automobiles are major contributors to this contamination.

Clinical experience indicates that leaded paint is primarily responsible for the great majority of overt clinical lead poisoning in children. There is, however, sufficient data to strongly suggest that sources of lead other than paint play an important role in childhood lead exposure. These other sources may be especially significant at levels of exposure below overt clinical poisoning.

Lead in air, and particularly lead in dust are ubiquitous sources of lead, which may well be important contributing factors in the childhood lead problem. Exposure to dirt and dust, if sufficiently contaminated by lead, could significantly reduce the quantity of additional lead required to produce clinical poisoning in a child with other sources of exposure. Although exposure to lead contaminated dirt and dust from automotive exhausts has not been shown to be responsible for cases of overt lead poisoning, automotive lead has been related to undue lead absorption in children. At this time, it would be prudent to decrease the potential air and dust lead exposure. It should be recognized that further studies are necessary to better quantitate the sources of lead contamination in dust and dirt as well as the magnitude of the contribution that leaded dust and dirt make to both subclinical and clinical lead overexposure.

It is clear that undesirable levels of lead in the blood, indicating elevated exposure, and elevated lead body burdens exist to a great extent among children, and to a small, but significant extent among adults. There are also a number of

adult groups in which undesirable elevated blood lead levels are found directly related to exposure to automobile exhausts. Thus, much of the excess exposure to lead in the general population is due at least in part to lead from automotive exhaust. (Section VII)

Conclusions

A small but significant fraction of the adult population has blood lead levels of 40ng/100g or higher, and such levels occur in a much larger proportion of urban children. Such levels are medically undesirable and should be reduced if possible.

Sources of exposure to lead include food, water, air, and ingested non-food items such as lead based paint and dust. Food is the largest contributor of lead to the general population.

Lead based paint is the major cause of overt clinical lead poisoning in children, though sources of lead other than paint play an important role in childhood lead exposure particularly at levels below overt poisoning.

Lead in dust and dirt is believed by EPA to contribute to increased lead levels in man, both through inhalation of resuspended dusts and at least in children, through inadvertent

ingestion of dirt and dust. This source could significantly reduce the quantity of additional lead required to produce clinical poisoning in a child with other sources of exposure. Automotive lead is a major contributor to lead in dust and dirt and has been related to undue lead absorption in children.

Lead from all these sources should be reduced to the degree possible.

Actions have already been taken by the Federal and other levels of government to reduce the lead content of paint and further actions in this regard are being contemplated so that this source of lead will decline with time as older buildings with leaded paint are replaced. Action has also been taken to substantially reduce controllable sources of lead in food, and efforts to further reduce lead in food are continuing. One controllable source of lead in food is residue from use of lead compounds as insecticides. Tolerances for these residues are being reevaluated at this time. Lead in a few drinking water supplies is higher than desirable, and efforts should be continued to reduce this source of lead exposure.

In EPA's opinion, lead in gasoline is the most important remaining source of controllable lead entering the environment. Reduction of lead in gasoline has shown to reduce lead in the ambient air. Leaded gasoline results in direct exposure to the population through inspired air and by presence of lead in dirt

and dusts which may be inspired or inadvertently ingested. General widespread contamination of the environment by lead occurs through deposit of airborne lead directly in water, and on streets and other paved areas from which some will be washed into waters. Airborne lead also is deposited in relatively high amounts on plants, along heavily travelled roads, and in lesser concentrations but over vast areas more distant from highways. Reduction of lead in gasoline will, therefore, result in reduced exposure of man, both directly from reduction in atmospheric lead, and indirectly from reduction of lead in dirt, dust, and at least to a minor extent, on and in foods.

APPENDIX D

INTERNATIONAL LEAD ZINC RESEARCH ORGANIZATION, INC.

292 MADISON AVENUE, NEW YORK, N.Y. 10017
TELEPHONE 532-2373 (AREA CODE 212)
CABLE ADDRESS: NYILZRO NEW YORK

August 13, 1974

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

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
R E C E I V E D
AUG 19 1974

OFFICE OF THE DIRECTOR

Dear Mr. Cannon:

Proposed Ambient Air Standard for Lead

We are grateful to the Oregon Environmental Quality Commission for providing us with a copy of your memorandum of July 11, 1974 to the Commission, the copy of the letter from Governor McCall, and Mr. Guilbert's Hearing Officer Report.

We note that the Commission has voted to defer action on the proposed standard until the meeting of August 23, 1974. Will there be an opportunity to present oral testimony at that meeting? We feel that such an opportunity should be granted in view of the admitted lack of comprehension on the part of the Hearing Officer of the information supplied to him.

We would like to take this opportunity to address the Analysis portion of the Hearing Officer's report in view of the interpretations and conclusions reached. We are sorry that the Hearing Officer found our submission to be "bewildering." We certainly did not intend this to be the case. The Hearing Officer's difficulty, however, underscores the complexity of the issues with which we are dealing. Unfortunately, there is no way to make our points clearly without supplying "back-up" information. Presumably, on a matter as serious as the setting of a State Ambient Air Standard, those with responsibility would want to have available to them factual, supportable information instead of relying simply on opinion and emotion. A review of the Summary of Oral Testimony would reveal that proponents of the standard, with one exception, presented no data which indicated that ambient air lead levels in excess of 2 ug/m^3 cause any harm to the public health. That one exception was a reference to a newspaper report on the blood lead content of residents near the Gravelly Hill interchange in Birmingham, England. Since the Hearing Officer was apparently impressed by this newspaper report, I am including a document "An Assessment of the Data in Respect of Population Blood Lead Levels in the Vicinity of the Gravelly Hill Motorway Interchange System, Birmingham (March 1972 - January 1974)" by P.S.I. Barry, Chief Medical Officer of Associated Ocel Company, Ltd. dated May 8, 1974.

K.R. Cannon

- 2 -

August 13, 1974

You will note that several major methodological changes were made during the period of the study thus precluding any reliable comparisons which might otherwise have been made among the series. Therefore, the implication that the Hearing Officer drew from this study has no basis in fact. We must disagree, strongly, with the Hearing Officer's statement that a link between ambient air lead levels and increased blood lead levels "becomes stronger with each new study." This is certainly not so as many studies cited or included in the material provided to Mr. Guilbert clearly show. Finally, with regard to the Hearing Officer's first point, the analogy between the effect of airborne lead levels on blood lead levels and the link between cigarette smoking and lung cancer is most inappropriate. Even if one could rely on the Gravelly Hill data, the mean blood lead concentration found during the latest series was well within the normal range and certainly was not medically significant. An elevated blood lead level, within the normal range, can hardly be compared with lung cancer.

With regard to the second point, a reduction in airborne lead levels is harmful if one takes into consideration other than environmental factors. There would be significant costs in terms of dollars and energy if costly control steps are taken. These represent costs without benefit if they are unnecessary. If the Hearing Officer's philosophy is valid then one would have to wonder why we bother to set pollution standards at all. It would seem far simpler to ban all sources of emissions. Certainly, this would result in no harm by the Hearing Officer's apparent definition of "harm." Obviously, standards are set as maximum allowable concentrations to prevent harm and are not, or should not be, set lower than needed. Why there should be a separate standard setting philosophy for lead eludes us.

It is unclear why the Hearing Officer chose to take portions of sentences from one of our documents and rearrange them so as to make his third point. The full paragraph in which the quoted portions appear is as follows:

"In reality, then, there is no evidence that changes detrimental to health occur at blood lead concentrations below that known to be associated with overt illness. Obviously, there exists the possibility that we may be ignorant of some detrimental effect of lead. Ignorance, however, is a justifiable reason for conducting research, but not for enacting restrictive regulations."

K.R. Cannon

- 3 -

August 13, 1974

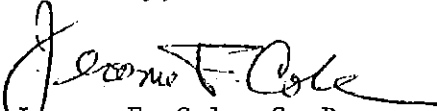
There is no conflict as is implied by the Hearing Officer. Standards must be based on fact rather than speculation. Research must be conducted to ascertain facts. Were we to set standards and restrictions on the basis of what we do not know, rather than what we know then to be 100% safe, we would have to ban virtually everything.

We would agree that the scientific justification for setting a standard of 2 ug/m³ does not exist. We would also agree that there is little scientific justification for a 4 or 5 ug/m³ value. We do know, however, that ambient air lead levels lower than the 4 or 5 ug/m³ levels cause no identifiable harm and therefore it is unjustified to set a lower standard.

With regard to the fifth point raised by Mr. Guilbert, we would only state that reducing the averaging time from three months to thirty days would make an already unnecessarily low proposed standard even lower.

We trust that the above comments will be given consideration when the Commission meets on August 23rd. Should you desire further information on this subject, please do not hesitate to contact me.

Sincerely,



Jerome F. Cole, Sc.D.
Deputy Director

Enclosure

cc: Mr. Thomas Guilbert
Hearings Officer

SW

An Assessment of the Data in Respect of
Population Blood Lead Levels in the
Vicinity of the Gravelly Hill Motorway
Interchange System, Birmingham.
(March 1972 - January 1974)

P.S.I. Barry
Chief Medical Officer

The Associated Octel Co. Ltd.,
Ellesmere Port,
Wirral, Cheshire.

8th May 1974

Population Blood Lead Levels in the Vicinity of the
Gravelly Hill Motorway Interchange System, Birmingham.

Introduction

A report was made by the Senior Administrative Medical Officer for Environmental Services to the Birmingham Area Health Committee on 8th March, 1974, on the results of a survey of blood lead levels in a population living in the vicinity of a motorway interchange system located at Gravelly Hill. The survey covered the period between March 1972 and January 1974 to include the time immediately prior to the opening of the interchange.

It was reported that a significant increase in blood lead concentrations had been observed in the population under investigation, following the opening of the motorway system. The mean values were reported to vary between 12.2 $\mu\text{g.Pb}/100\text{ ml.}$ blood prior to the opening of the motorway and 21 $\mu\text{g.Pb}/100\text{ ml.}$ blood by January 1974, about 18 months after the opening of the interchange system. (A laboratory engaged only in the latter part of the investigation reported a mean value of 26.3 $\mu\text{g.Pb}/100\text{ ml.}$ blood).

Study Outline

The population investigated was composed of a mixed group of male and female adults and children under the age of 10 years, and comprised a total of approximately 900 subjects. The study was separated into three series in which Series 1 related to the period April/May 1972, prior to the opening of the motorway interchange, Series 2 to the period October 1972 to March 1973, and Series 3 to the period October 1973 to January 1974. Series 2 and Series 3 covered the period following the opening of the motorway interchange.

Each series was assessed in relation to geographical location to the motorway interchange system, designated as Areas 1, 2 and 3. Area 1 was within 100 metres of the interchange, Area 2 lay between 100 and 300 metres away and Area 3 between 300 and 600 metres away from the interchange system.

In Series 1 only capillary blood samples were obtained. Most of these were from the thumb, after the collection of samples from the ear was abandoned due to difficulties experienced by the sampling teams. If a high lead result was

obtained, up to two further samples were taken and the lowest result used in the statistical analysis for the series.

In Series 2 venous blood samples were obtained, apart from 100 capillary samples which were paired with the same number of capillary samples in Series 1.

In both series the blood samples were analysed by atomic absorption spectrophotometry at the Dudley Road Hospital laboratory.

In Series 3 only venous blood samples were obtained. All of these were analysed by atomic absorption spectrophotometry at the laboratory of the City Analyst. In addition, 100 duplicate samples were analysed at the Dudley Road Hospital laboratory.

Results

The variables introduced into the investigation by alteration of collection methods, types of blood sample, and change of analytical laboratory make any comparison of results between the three series of doubtful interpretive validity.

The results of 899 capillary blood samples in Series 1 are given in Table 1. The mean value for all subjects was found to be 14.4 $\mu\text{g.Pb}/100 \text{ ml. blood}$, with a mean of 16 $\mu\text{g}/100 \text{ ml.}$ in 359 male adults, 12.7 $\mu\text{g}/100 \text{ ml.}$ in 442 female adults and 16.1 $\mu\text{g}/100 \text{ ml.}$ in 98 children under the age of ten years. These results contrast with the overall mean value of 12.2 $\mu\text{g.Pb}/100 \text{ ml. blood}$ reported to the Area Health Committee in March 1974. In respect of the distribution of blood lead levels in areas, the area furthest from the motorway showed the mean blood lead level of the resident population to be the highest, at 15.7 $\mu\text{g.Pb}/100 \text{ ml. blood}$, and lowest in the area nearest to the motorway, at 12.2 $\mu\text{g.Pb}/100 \text{ ml. blood}$, a figure identical to the overall value reported to the Area Health Committee.

In Table 2 the blood lead results are given for 902 subjects in Series 2. The mean values had increased for the 902 venous blood samples obtained and also in 100 capillary blood samples, but the mean of the venous blood lead levels was lower, by two micrograms, than the mean of the capillary blood sample results (17.5 $\mu\text{g.}$ compared to 19.5 $\mu\text{g.}$). The distribution

of venous blood lead levels in areas showed higher mean values for male adults and children in the area nearest to the motorway, at 20.1 $\mu\text{g}/100\text{ ml.}$ and 17.7 $\mu\text{g}/100\text{ ml.}$ respectively, compared to respective values of 17.4 $\mu\text{g}/100\text{ ml.}$ and 15.3 $\mu\text{g}/100\text{ ml.}$ in the area furthest from the motorway. Female adults showed no difference in the mean distribution of blood lead concentrations between areas, with a variance of 16.6 $\mu\text{g}/100\text{ ml.}$ to 16.9 $\mu\text{g}/100\text{ ml.}$

The 681 venous blood samples in Series 3 (Table 3), all of which were analysed at the City Analyst's laboratory, showed a further rise of blood lead level to a mean value of 27.1 $\mu\text{g.Pb}/100\text{ ml.}$ blood. The results from the Dudley Road Hospital laboratory of 100 duplicate venous blood samples showed a mean of 21.1 $\mu\text{g.Pb}/100\text{ ml.}$ blood, a difference of 6 $\mu\text{g.}$ between the two laboratories. There was no difference in mean blood lead concentrations between the areas in any of the groups of subjects in Series 3, except for the children who showed slightly lower mean values in Area 1.

In each of the three series male adults showed higher concentrations of lead in blood than female adults or children (except in Series 1 where male adults and children showed the same mean value of 16 $\mu\text{g. Pb}/100\text{ ml.}$ blood). This is a usual finding. In respect of a possible effect of lead emitted by automobile exhausts on the motorway it might have been expected that female adults and children would have significantly increased their blood lead levels in proportion to the male adults who, by virtue of their absence at work during the day, would be less exposed to the motorway traffic. This outcome is not shown to have occurred, which would suggest that the contribution of lead from the motorway was not of intrinsic importance in relation to bodily absorption. Further confirmation for such a conclusion is reflected in the lack of a consistent difference in the blood lead concentrations of the populations living in the three areas at varying distances from the motorway interchange system in Series 2 and Series 3. No traffic census data were available, but the proportion of diesel engined vehicles, which emit no lead, to petrol engined vehicles would have been of interest.

In a comparison of 100 paired results in Series 1 and Series 2 (Table 4), the area most distant from the motorway (Area 3) showed higher mean blood lead values than the area nearer to the motorway (Area 2). This applied to each of the groups of male and female adults, as well as to the type of blood sample, i.e. capillary and venous, except for male venous sample results which were comparable in each area.

In Table 5 a comparison is made of 100 paired venous blood results from Series 2 and Series 3 for subjects in Area 2 only. The results indicate an average disparity of 5.3 µg. Pb/100 ml. blood between the two laboratories engaged in the investigation, the laboratory of the Dudley Road Hospital showing the lower values. There appeared to have been an increase in the mean blood lead levels between Series 2 and Series 3, but with no significant alteration of difference in ratio of blood lead concentrations between male and female adults.

Paired comparisons for 100 venous samples, obtained only from Series 2 and Series 3, are shown in Table 6. The mean difference in results of samples analysed at the Dudley Road Hospital laboratory showed 4.07 µg. lead for 58 adult female subjects and 4.80 µg. lead for 41 male adults (4.37 µg. overall). The mean difference in results between the Dudley Road Hospital laboratory and the laboratory of the City Analyst was 5.34 µg. lead for samples from Series 3.

The results of a paired comparison of 681 venous samples from Series 2 and Series 3 is shown in Table 7, after allowance is made for the mean discrepancy of 5.34 µg. lead between the two laboratories. The results are apportioned to male and female adults and children, as well as to the three geographical locations adjacent to the motorway. The mean difference for the female adults of just over three micrograms of lead between the two series, was the same for each area. Male adults and children showed differences which approximated closely to each other, lower for Area 1, at 2.96 µg. and 2.61 µg. respectively, and higher for Areas 2 and 3 which showed nearly identical differences for both groups of 5.77 µg. each for Area 2 and 5.86 µg. and 5.66 µg. respectively for Area 3. Thus male adults and children showed what appeared to be a greater increase in blood lead content

in the areas more distant from the motorway, whereas female adults showed no difference between areas. The findings cannot be held to support the view that lead from the motorway formed a significant contribution to bodily uptake.

Discussion

The variables introduced during the period of the investigation precluded any reliable comparisons that might reasonably have been made between the series. In addition, the Series 1 results may have been influenced by the method of sample collection, causing a dilution of red blood cells (as indicated in an interim report to the Area Health Committee on 13th July 1973), which, in view of the known selective concentration of lead in red cells relative to serum, would give rise to whole blood lead levels that would be lower than the true values. The mean values of the concentrations of lead in blood in Series 1 are lower than those recorded in city populations in the U.S.A. and most other countries of the World.

It might be reasonable to suppose that the difficulties experienced in the collection of samples in Series 1 had been largely overcome, by reason of greater expertise, by the time the Series 2 samples were collected. The higher mean capillary blood lead values, compared to the mean of the paired venous blood lead results of Series 2 (shown in Table 4) are compatible with the experience of other investigators who have compared capillary and venous blood samples from the same individuals.

The difference in paired sample results in Series 3 between the two laboratories concerned in the investigation gives further reason to doubt the validity of the absolute values and comparability of results between the series.

The consistently higher blood lead values recorded in male subjects in each series, who would spend less time in the home environment than the female subjects and children, together with the lack of consistent difference between areas, suggests that the contribution of lead from the motorway to bodily uptake cannot have been of significant proportions.

The differences observed in the mean concentrations of lead in blood between the three Series seem to be of statistical significance, but, for reasons stated above, it is doubtful if the results can be interpreted with a predictable level of confidence, or be attributable to lead from traffic using the motorway. In any event it is noteworthy that the values reported in all three Series lay within the upper acceptable range for a population with no unusual level of exposure to lead.

TABLE 1

SERIES 1

Capillary Blood Samples $\mu\text{g.Pb}/100 \text{ ml. Blood}$

	<u>All Subjects</u>	<u>Male Adults</u>	<u>Female Adults</u>	<u>Children</u>
Total	899	359	442	98
Mean	14.40	16.01	12.71	16.11
Standard Deviation	10.31	17.76	8.49	11.58
Range	4-110	4-110	4-40	6-58
<u>AREA 1</u>				
Total	171	68	78	25
Mean	12.25	14.15	10.54	12.40
Standard Deviation	7.30	8.89	5.61	6.01
Range	6-48	6-48	6-29	6-25
<u>AREA 2</u>				
Total	438	173	225	40
Mean	14.35	16.05	12.22	18.95
Standard Deviation	11.02	12.82	8.34	13.29
Range	4-110	6-110	4-40	6-58
<u>Area 3</u>				
Total	290	118	139	33
Mean	15.75	17.02	14.74	15.48
Standard Deviation	10.52	11.03	9.63	11.97
Range	4-60	4-60	6-40	6-60

TABLE 2

SERIES 2

Venous Blood Samples
(Capillary Blood Samples in Parenthesis)
µg. Pb/100 ml. Blood)

	<u>All Subjects</u>	<u>Male Adults</u>	<u>Female Adults</u>	<u>Children</u>
Total	902 (100)	361 (47)	443 (49)	98 (4)
Mean	17.54 (19.52)	18.81 (22.36)	16.63 (16.69)	16.93 (20.75)
Standard Deviation	6.64 (9.48)	7.17 (10.56)	6.09 (7.71)	6.31 (6.99)
Range	4-46 (7-50)	5-46 (7-50)	4-46 (8-45)	6-33 (13-30)
<u>Area 1</u>				
Total	171	68	78	25
Mean	18.28	20.12	16.87	17.68
Standard Deviation	7.47	8.51	6.53	6.28
Range	5-46	6-37	5-46	8-33
<u>Area 2</u>				
Total	441 (59)	175 (26)	226 (30)	40 (3)
Mean	17.75 (15.73)	19.26 (18.04)	16.57 (13.20)	17.78 (21.00)
Standard Deviation	6.57 (7.04)	6.96 (8.14)	6.07 (4.77)	6.33 (8.54)
Range	4-42 (6-33)	5-42 (7-33)	4-36 (8-30)	6-32 (13-30)
<u>Area 3</u>				
Total	290 (41)	118 (21)	139 (19)	33 (1)
Mean	16.78 (24.98)	17.40 (27.71)	16.60 (22.21)	15.33 (20.00)
Standard Deviation	6.17 (9.95)	6.42 (10.92)	5.91 (8.33)	6.20
Range	4-42 (8-50)	7-42 (8-50)	4-36 (14-45)	6-33

TABLE 3

SERIES 3

Venous Blood Samples - City Analyst Laboratory
 µg.Pb/100 ml. Blood
 (Results from Dudley Road Hospital in Parenthesis)

	<u>All Subjects</u>	<u>Male Adults</u>	<u>Female Adults</u>	<u>Children</u>
Total	681 (100)	270 (41)	345 (58)	66 (1)
Mean	27.11 (21.06)	29.77 (23.73)	25.10 (19.16)	26.30 (22.00)
Standard Deviation	6.79 (6.14)	6.90 (6.80)	6.12 (4.92)	6.14
Range	14-56 (12-42)	16-56 (13-42)	14-54 (12-31)	17-41
<u>Area 1</u>				
Total	128	49	59	20
Mean	26.92	29.45	25.75	24.20
Standard Deviation	7.17	8.09	6.76	3.17
Range	14-54	17-54	14-54	17-29
<u>Area 2</u>				
Total	332 (100)	128 (41)	177 (58)	27 (1)
Mean	27.14 (21.06)	30.32 (23.73)	24.74 (19.16)	27.81 (22.00)
Standard Deviation	6.91 (6.14)	6.89 (6.80)	5.77 (4.92)	7.86
Range	14-60 (12-42)	17-56 (13-42)	14-42 (12-31)	17-60
<u>Area 3</u>				
Total	221	93	109	19
Mean	27.17	29.18	25.60	26.37
Standard Deviation	6.41	6.22	6.32	5.28
Range	15-54	16-50	15-54	19-41

TABLE 4

Comparison of 100 Paired Results in Series 1 and Series 2
 µg.Pb/100 ml. Blood

	SERIES 1 Capillary Samples				SERIES 2 Capillary Samples (Venous Sample Results in Parenthesis)			
	<u>All Subjects</u>	<u>Male</u>	<u>Female</u>	<u>Children</u>	<u>All Subjects</u>	<u>Male</u>	<u>Female</u>	<u>Children</u>
Total	100	47	49	4	100	47	49	4
Mean	15.83	18.36	13.63	13.00	19.52 (14.84)	22.36 (16.38)	16.69 (13.82)	20.75 (9.25)
Standard Deviation	8.90	9.18	8.34	4.24	9.48 (5.50)	10.56 (5.62)	7.71 (5.11)	6.99 (0.96)
Range	4-40	4-39	4-40	9-18	7-50 (5-33)	7-50 (5-33)	8-45 (6-30)	13-30 (8-10)
<u>Area 2</u>								
Total	59	26	30	3	59	26	30	3
Mean	14.68	17.77	12.23	12.33	15.73 (13.80)	18.04 (16.27)	13.20 (12.13)	21.00 (9.00)
Standard Deviation	8.32	9.46	6.66	4.93	7.04 (5.85)	8.14 (6.52)	4.77 (4.58)	8.54 (1.00)
Range	6-39	7-39	6-25	9-18	6-33 (5-33)	7-33 (5-33)	8-30 (6-24)	13-30 (8-10)
<u>Area 3</u>								
Total	21	21	19	1	41	21	19	1
Mean	17.49	19.10	15.84	15.00	24.98(16.34)	27.71 (16.52)	22.21 (16.47)	20.00 (10.00)
Standard Deviation	9.53	8.99	10.28		9.95 (4.63)	10.92 (4.41)	8.33 (4.87)	
Range	4-40	4-39	6-40		8-50 (7-30)	8-50 (7-25)	14-45 (8-30)	

NO RESULTS OBTAINED FOR AREA 1

TABLE 5

Comparison of 100 Paired Results of Venous Blood
 Samples in Series 2 and Series 3
 $\mu\text{g. Pb}/100 \text{ ml. Blood}$

	<u>All Subjects</u>	<u>Male</u>	<u>Female</u>	<u>Children</u>	
Total	100	41	58	1	
<u>SERIES 2</u>					
Mean	16.39	18.44	15.09	8.00	DUDLEY
Standard Deviation	6.13	6.60	5.36		
Range	4-33	5-33	4-30		ROAD
<u>SERIES 3</u>					HOSPITAL
Mean	21.06	23.73	19.16	22.00	
Standard Deviation	6.14	6.80	4.92		LABORATORY
Range	12-42	13-42	12-31		
Mean	26.40	29.73	23.98	30.00	
Standard Deviation	6.25	5.89	5.42		CITY
Range	15-44	19-44	15-33		ANALYSIS
					LABORATORY

RESULTS OBTAINED ONLY FOR AREA 2

TABLE 5

MEAN DIFFERENCES IN PAIRED COMPARISONS OF 100 VENOUS SAMPLES

From Series 2 and Series 3. $\mu\text{g. Pb}/100 \text{ ml. Blood}$

COMPARISON	No. of Pairs of Results	Mean Difference	Standard Error of Mean Difference	95% Confidence Interval of Mean Difference
Series 2 and 3, Dudley Road	58	4.07	0.91	2.3 5.9
Hospital Results	41	4.80	1.55	1.8 7.8
Children	1	-	-	- -
Females				
Males				
Series 3. Results of Dudley Road Hospital and City Analyst	100	5.34	0.49	4.4 6.3

MEAN DIFFERENCES IN PAIRED COMPARISONS OF 681 VENOUS SAMPLES FROM SERIES 2 AND SERIES 3, AFTER CORRECTION FOR THE MEAN DIFFERENCE OF 5.34 $\mu\text{g. Pb}/100 \text{ ml. Blood}$ BETWEEN LABORATORIES. $\mu\text{g. Pb}/100 \text{ ml. Blood}$

		<u>No. of Pairs of Results</u>	<u>Mean Difference</u>	<u>Standard Error of Mean Difference</u>	<u>95% Confidence Interval of Mean Difference</u>	
<u>Children</u>	Area 1	20	2.61	1.30	0.05	5.2
	Area 2	27	5.77	2.04	1.8	9.8
	Area 3	19	5.66	1.53	2.7	8.7
<u>Female Adults</u>	Area 1	59	3.11	0.97	1.2	5.0
	Area 2	177	3.09	0.56	2.0	4.2
	Area 3	109	3.21	0.69	1.9	4.6
<u>Male Adults</u>	Area 1	49	2.96	1.19	0.64	5.7
	Area 2	128	5.77	0.76	4.3	7.3
	Area 3	93	5.86	0.59	4.7	7.0
<u>All Subjects</u>		681	4.14			

APPENDIX E

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY CONTROL DIVISION
CORBETT-TERWILLIGER AREA LEAD STUDY

SUMMARY REPORT
November 8, 1974

The purpose of this particulate lead study was to determine levels of suspended particulate matter in an area located near a heavily used freeway. The sampling period was for 24 continuous hours, midnight to midnight. Normally, people would not be outside or in a single location for the equivalent exposure period. Sampling, for at least one year, on a random schedule was concluded to be necessary to obtain sufficient data for evaluation.

The Terwilliger area in southwest Portland was chosen as the study site. The study area is near or adjacent to the I-5 freeway where most of the neighborhood lies in a north-south direction. Three stations were located as follows:

1. Kneeland & Kneeland 0305 SW Curry
2. Terwilliger School 6318 SW Corbett
3. 5005 SW Viewpoint Terrace

Terwilliger school was selected as a background station for the area. This site is not free from motor vehicle emissions, but is considered to be representative of locations in proximity, but not directly adjacent to the I-5 freeway.

Kneeland and Kneeland was selected as the east site. This location is adjacent to the convergence of the I-5 off ramp from the Marquam Bridge and I-5 traffic from the city center.

The Viewpoint Terrace site is located on the west end of the Terwilliger corridor near I-5 northbound from the Burlingame District.

Suspended particulate samples were collected from the beginning of August, 1973, through July, 1974. Attached to this summary report are the following data sheets:

1. A sequential listing of the samples collected at each station during the study period.
2. A comparative summary for each of the stations by month.
3. A three-month running average for each station.

4. Graphical representation of the three-month running average compared to a $2.0\mu\text{g}/\text{M}^3$ proposed standard.
5. Traffic count data on I-5, collected near SW Iowa Street, for each day that a sample was collected.

The following is summarized from the 12-month study:

<u>August, 1973 - July, 1974</u>	<u>K & K</u>	<u>T. School</u>	<u>VP Terrace</u>
Maximum Lead Sample	5.72 $\mu\text{g}/\text{M}^3$	3.57 $\mu\text{g}/\text{M}^3$	4.88 $\mu\text{g}/\text{M}^3$
Minimum Lead Sample	0.37 $\mu\text{g}/\text{M}^3$	0.15 $\mu\text{g}/\text{M}^3$	0.32 $\mu\text{g}/\text{M}^3$

Terwilliger school had the lowest recorded level, as was anticipated. Kneeland and Kneeland was comparable to Viewpoint Terrace. The Viewpoint Terrace site had the highest continual three-month running average. On an individual sample basis, Viewpoint Terrace probably has the highest lead particulate deposition rate.

The following comparisons were made in an attempt to determine if meteorological factors had an effect on the lead levels. Unfortunately, the only complete data available is from the Portland Airport Weather Bureau. The Airport meteorological data cannot be expected to be directly applicable to the conditions in the Terwilliger area.

1. Lead deposition rate related to rainfall -- no definite relationship found.
2. Lead deposition rate related to windspeed -- no definite relationship found.
3. Lead deposition rate related to days with no rainfall -- no definite relationship found.
4. Lead deposition rate related to temperature -- no definite relationship found.
5. Lead deposition rate related to amount of rainfall between sample periods -- no definite relationship found.
6. Lead deposition rate related to day of the week -- no definite pattern found.
7. Lead deposition rate with respect to traffic volume on I-5 near SW Iowa Street was tested for correlation using linear regression analysis. At the Viewpoint Terrace site the correlation coefficient was -0.05 indicating no definite pattern found.

CONCLUSIONS

1. From the Terwilliger study it is concluded that the deposition rate is higher for areas adjacent to the freeway and becomes less as the distance from the freeway increases.
2. The gasoline shortage during the early part of the year might explain the decrease in three-month running averages after December, 1973; however, the three-month average ending July, 1974, was lower for all sites. The gasoline supply had become more available by this time.
3. Areas near or adjacent to freeways are exposed to a wide range of ambient air suspended particulate lead concentrations which vary from day-to-day.
4. Present data evaluation does indicate that traffic density is not the only factor which affects lead particulate deposition in any particular area.
5. The study of the Corbett-Terwilliger area shows that on a long-term average basis, monthly, and/or three-month running average the lead particulate exposure rate was not excessive in that area.

RBP:ahc

11-08-74

Department of Environmental Quality
 Air Quality Control Division
 TERWILLIGER AREA LEAD STUDY
 SUSPENDED PARTICULATE SUMMARY

All Values are in Micrograms/m³

MONTH AND DATE OF SAMPLE	KNEELAND & KNEELAND		TERWILLIGER SCHOOL		VIEW POINT TERRACE	
	TSP*	LEAD	TSP*	LEAD	TSP*	LEAD
AUGUST 1973						
8-21	71.0	1.10	51.0	1.28	62.0	2.5
8-23	67.0	0.37	52.0	0.31	60.0	0.32
8-25	40.0	1.12	40.0	1.98	54.0	3.42
8-28	91.0	2.58	57.0	0.23	69.0	0.44
8-30	45.0	1.35	36.0	1.79	47.0	2.64
SUMMARY						
MAXIMUM	91.0	2.58	57.0	1.98	69.0	3.42
AVERAGE	62.8	1.30	47.2	1.12	58.4	1.86
MINIMUM	40.0	0.37	36.0	0.23	47.0	0.32
SEPTEMBER 1973						
9-2	55.0	0.91	54.0	2.53	54.0	4.88
9-5	46.0	1.06	78.0	1.33	85.0	1.06
9-7	105.0	1.60	NO SAMPLE	NO SAMPLE	NO SAMPLE	NO S
9-11	110.0	1.80	93.0	1.28	101.0	3.77
9-13	140.0	1.38	107.0	1.20	82.0	2.15
9-15	133.0	1.14	133.0	0.68	115.0	2.06
9-18	42.0	1.43	32.0	1.67	38.0	2.20
9-20	27.0	0.88	23.0	0.25	26.0	0.63
9-23			19.0	1.18	52.0	1.50
9-30	31.0	0.97	32.0	1.38	33.0	2.36
SUMMARY						
MAXIMUM	140.0	1.80	133.0	2.53	115.0	4.88
AVERAGE	76.6	1.24	63.4	1.28	65.1	2.29
MINIMUM	27.0	0.88	19.0	0.25	26.0	0.63
* "TOTAL SUSPENDED PARTICULATE"						

Department of Environmental Quality
 Air Quality Control Division
 TERWILLIGER AREA LEAD STUDY
 SUSPENDED PARTICULATE SUMMARY

All Values are in Micrograms/m³

MONTH AND DATE OF SAMPLE	KNEELAND & KNEELAND		TERWILLIGER SCHOOL		VIEW POINT TERRACE	
	TSP*	LEAD	TSP*	LEAD	TSP*	LEAD
OCTOBER 1973						
10-8	36.0	1.43	EQ	FAILURE	43.0	2.43
10-13	41.0	2.31	"	"	70.0	2.57
10-18	45.0	1.37	6.	0.31	93.0	2.22
10-24	84.0	1.56	25.	0.45	33.0	0.76
10-30	184.0	5.72	76.	1.59	83.0	2.29
SUMMARY						
MAXIMUM	184.0	5.72	76.	1.59	93.0	2.57
AVERAGE	78.0	2.48	35.7	0.78	64.4	2.05
MINIMUM	36.0	1.37	6.	0.31	33.0	0.76
NOVEMBER 1973						
11-5	39.0	1.81	SAMPLE	VALIDITY	LOST	FILT
11-11	27.0	1.98	19.0	1.27	"	"
11-17	85.0	2.72	61.0	0.24	124.0	3.99
11-23	17.0	0.91	SAMPLE	VALIDITY	15.0	1.15
11-29	68.0	3.26	NO	SAMPLE	50.0	1.93
SUMMARY						
MAXIMUM	85.0	3.26	NOT	SUFFICIENT	124.0	3.99
AVERAGE	47.2	2.14	DATA		63.0	2.30
MINIMUM	17.0	0.91			15.0	1.15

* "TOTAL SUSPENDED PARTICULATE"

Department of Environmental Quality
 Air Quality Control Division
 TERWILLIGER AREA LEAD STUDY
 SUSPENDED PARTICULATE SUMMARY

All Values are in Micrograms/m³

MONTH AND DATE OF SAMPLE	KNEELAND & KNEELAND		TERWILLIGER SCHOOL		VIEW POINT TERRACE	
	TSP*	LEAD	TSP*	LEAD	TSP*	LEAD
DECEMBER 1973						
12-5	71.0	1.99	73.0	3.57	101.0	2.6
12-11	31.0	1.02	65.0	0.54	29.0	0.8
12-17	45.0	2.09	26.0	1.97	38.0	2.4
12-23	59.0	1.90	47.0	2.07	EQ	FAIL
12-29	27.0	0.65	39.0	1.03	51.0	1.0
SUMMARY						
MAXIMUM	71.0	2.09	73.0	3.57	101.0	2.6
AVERAGE	46.6	1.53	50.0	1.84	54.8	1.7
MINIMUM	27.0	0.65	26.0	0.54	29.0	0.8
JANUARY 1974						
1-5	98.0	0.55	159.0	0.16	137.	0.7
1-11	172.0	1.06	159.0	0.44	216.	1.9
1-17	103.0	2.05	49.1	1.87	NO	SAM
1-23	-	-	17.0	0.54	NO	SAM
1-27	26.0	0.79	-	-	NO	SAM
1-29	23.0	0.81	10.0	0.35	-	-
M. up 1-30	-	-	-	-	21.0	N.
SUMMARY						
MAXIMUM	172.0	2.05	159.0	1.87	216.0	-
AVERAGE	84.4	1.05	78.8	0.67	124.7	INCO
MINIMUM	23.0	0.55	10.0	0.16	21.0	DATA

* "TOTAL SUSPENDED PARTICULATE"

Department of Environmental Quality
 Air Quality Control Division
 TERWILLIGER AREA LEAD STUDY
 SUSPENDED PARTICULATE SUMMARY

All Values are in Micrograms/m³

MONTH AND DATE OF SAMPLE	KNEELAND & KNEELAND		TERWILLIGER SCHOOL		VIEW POINT TERRACE	
	TSP*	LEAD	TSP*	LEAD	TSP*	LEAD
FEBRUARY 1974						
4	27.	0.61	29.	1.54	51.	2.14
10	93.	1.24	86.	0.93	104.	1.57
16	16.	0.38	16.	0.63	24.	0.74
22	24.	0.58	27.	1.30	61.	2.17
28	36.	0.94	18.	0.42	26.	0.63
MARCH 1974						
6	-	-	46.	1.45	110.	2.68
12	(14) 26.	(14) 0.82	13.	0.15	18.	0.35
18	171.	1.66	118.	1.07	227.	2.39
24	111.	2.03	90.	0.69	115.	2.98
30	28.	0.56	26.	1.98	34.	0.98
APRIL 1974						
5	48.	1.19	32.	.71	54.	1.46
11	-	-	33.	.72	54.	1.17
17	-	-	109.	1.12	127.	2.24
23	-	-	-	-	70.	1.79
29	-	-	100.	2.16	114.	3.30
MAY 1974						
5	-	-	-	-	-	-
11	-	-	21.	0.64	-	-
17	71.	1.45	50.	1.14	53.	1.46
23	57.	1.18	38.	1.52	47.	1.92
29	48.	0.58	29.	0.89	44.	1.82

Department of Environmental Quality
 Air Quality Control Division
 TE. GER AREA LEAD STUDY
 SUSPENDED PARTICULATE SUMMARY

All Values are in Micrograms/M³

MONTH AND DATE OF SAMPLE	KNEELAND & KNEELAND		TERWILLIGER SCHOOL		VIEW POINT TERRACE	
	TSP*	LEAD	TSP*	LEAD	TSP*	LEAD
JUNE 1974						
4	26.	0.91	20.	0.38	30.	0.59
10	101.	1.37	101.	1.23	110.	2.47
16	98.	0.64	90.	0.51	109.	1.44
22	39.	0.71	36.	0.67	44.	1.98
28	68.	1.13	65.	1.09	-	-
JULY 1974						
4	33.	1.04	32.	.58	35.	1.52
10	38.	1.11	28.	.94	42.	2.27
16	65.	1.24	47.	.79	41.	1.06
22	55.	.54	76.	1.12	51.	1.65
28	58.	.76	66.	.68	71.	1.53

TERWILLIGER LEAD STUDY
SUSPENDED PARTICULATE SUMMARY

All Values are in Micro-Grams/m³

MONTH AND YEAR	KNEELAND AND KNEELAND		No. of Samples	TERWILLIGER SCHOOL		No. of Samples	VIEW POINT TERRACE		No. of Samples
	TSP*	LEAD		TSP*	LEAD		TSP*	LEAD	
AUGUST 1973									
MAXIMUM	91.0	2.58	5	57.0	1.98	5	69.0	3.42	5
AVERAGE	62.8	1.30	"	47.2	1.12	"	58.4	1.86	"
MINIMUM	40.0	0.37	"	36.0	0.23	"	47.0	0.32	"
SEPTEMBER									
MAXIMUM	140.0	1.80	9	133.0	2.53	9	115.0	4.88	9
AVERAGE	76.5	1.24	"	63.4	1.28	"	65.1	2.29	"
MINIMUM	27.0	0.88	"	19.0	0.25	"	26.0	0.53	"
OCTOBER									
MAXIMUM	184.0	5.72	5	76.0	1.59	3	93.0	2.57	5
AVERAGE	78.0	2.48	"	35.7	0.78	"	64.4	2.05	"
MINIMUM	35.0	1.37	"	6.0	0.31	"	33.0	0.70	"
NOVEMBER									
MAXIMUM	85.0	3.26	5	NOT SUFFICIENT DATA		2	124.0	3.99	3
AVERAGE	47.2	2.14	"	(DATA USED FOR YEARLY)		"	63.0	2.36	"
MINIMUM	17.0	0.91	"			"	15.0	1.15	"
DECEMBER									
MAXIMUM	71.0	2.03	5	73.0	3.57	5	101.0	2.61	4
AVERAGE	46.5	1.53	"	50.0	1.84	"	54.3	1.75	"
MINIMUM	27.0	0.65	"	26.0	0.54	"	29.0	0.89	"

TERMILLIGER AREA LEAD STUDY
SUSPENDED PARTICULATE SUMMARY

1974 All Values are in Micrograms/m³

MONTH AND DATE OF SAMPLE	KHEELAND & KHEELAND		TERMILLIGER SCHOOL		VIEW POINT TERRACE	
	TSP*	LEAD	TSP*	LEAD	TSP*	LEAD
JANUARY SUMMARY	172.0	2.05	159.0	1.87	216.0	-
MAXIMUM	84.4	1.05	78.8	0.67	124.7	INCOMPLETE DATA
AVERAGE	23.0	0.55	10.0	0.16	21.0	
MINIMUM						

* "TOTAL SUSPENDED PARTICULATE"

Department of Environmental Quality
 Air Quality Control Division
 TERWILLIGER AREA LEAD STUDY
 SUSPENDED PARTICULATE SUMMARY

MONTH AND YEAR	KNEELAND AND KNEELAND		No. of Samples	TERWILLIGER SCHOOL		No. of Samples	VIEW POINT TERRACE		No. Sam
	TSP*	LEAD		TSP*	LEAD		TSP*	LEAD	
FEBRUARY 1974									
MAXIMUM	93.	1.24	5	86.	1.54	5	104.	2.17	
AVERAGE	39.2	0.75		35.2	0.96		53.2	1.45	
MINIMUM	16.0	0.38		16.	0.42		24.	0.63	
MARCH 1974									
MAXIMUM	171.	2.03	4	118.	1.98	5	227.	2.98	
AVERAGE	84	1.27		58.6	1.07		100.8	1.88	
MINIMUM	26.	0.56		13.	0.15		18.	0.35	
APRIL 1974									
MAXIMUM			1	109.	2.16	4	127.	3.30	
AVERAGE	48.	1.19		68.5	1.18		84.	1.99	
MINIMUM				32.	.71		54.	1.17	
MAY 1974									
MAXIMUM	71.	1.45	3	50.	1.52	4	53.	1.92	
AVERAGE	58.7	1.07		34.5	1.05		48.	1.73	
MINIMUM	49.	0.58		21.	0.64		44.	1.46	
JUNE 1974									
MAXIMUM	101.	1.37	5	101.	1.23	5	110.	2.47	
AVERAGE	66.4	0.95		62.4	0.78		73.3	1.62	
MINIMUM	26.	0.64		20.	0.38		30.	0.59	
JULY 1974									
MAXIMUM	65.	1.24	5	67.	1.12	5	71.	2.21	
AVERAGE	49.8	0.94		48.	0.82		48.	1.60	
MINIMUM	33.	0.54		28.	.58		35.	1.06	

Department of Environmental Quality
 Air Quality Control Division
 TERWILLIGER AREA LEAD STUDY
 3 Month Running Average

MONTH AND YEAR	KNEELAND AND KNEELAND LEAD	No. of Samples	TERWILLIGER SCHOOL LEAD	No. of Samples	VIEW POINT TERRACE LEAD	No. of Samples
<u>1973</u>						
August - October	1.58	19	1.14	17	2.11	19
September - November	1.80	19	1.10	14	2.23	17
October - December	2.04	15	1.30	10	2.03	12
<u>1973-74</u>						
November - January	1.57	15	1.17	12	1.87	9
December - February	1.11	15	1.16	15	1.55	11
<u>1974</u>						
January - March	1.01	14	0.91	15	1.61	12
February - April	1.01	10	1.06	14	1.77	15
March - May	1.18	8	1.10	13	1.62	13
April - June	1.02	9	0.98	13	1.80	12
May - July	0.97	13	0.87	14	1.64	12
10-31-74						

11-7 74

FIGURE I

Running 3-month Averages
August 1973 - July 1974
Lead Particulate $\mu\text{g}/\text{M}^3$
(HV Filter Method)

Pb
 $\mu\text{g}/\text{M}^3$

Kneeland and Kneeland — · — · —
Terwilliger School — - - - -
View Point Terrace — — — —

3.0

2.0

1.0

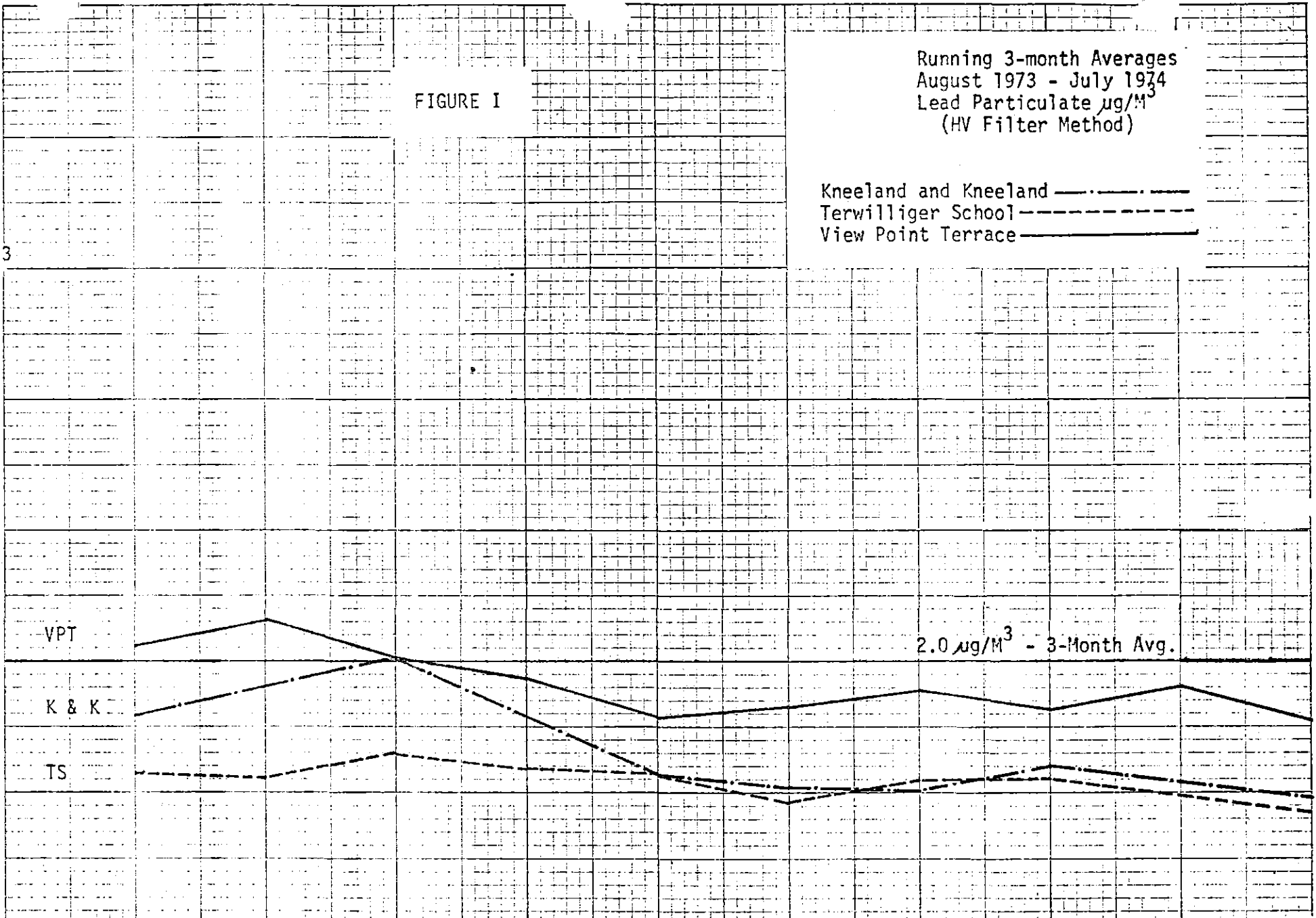
2.0 $\mu\text{g}/\text{M}^3$ - 3-Month Avg.

VPT

K & K

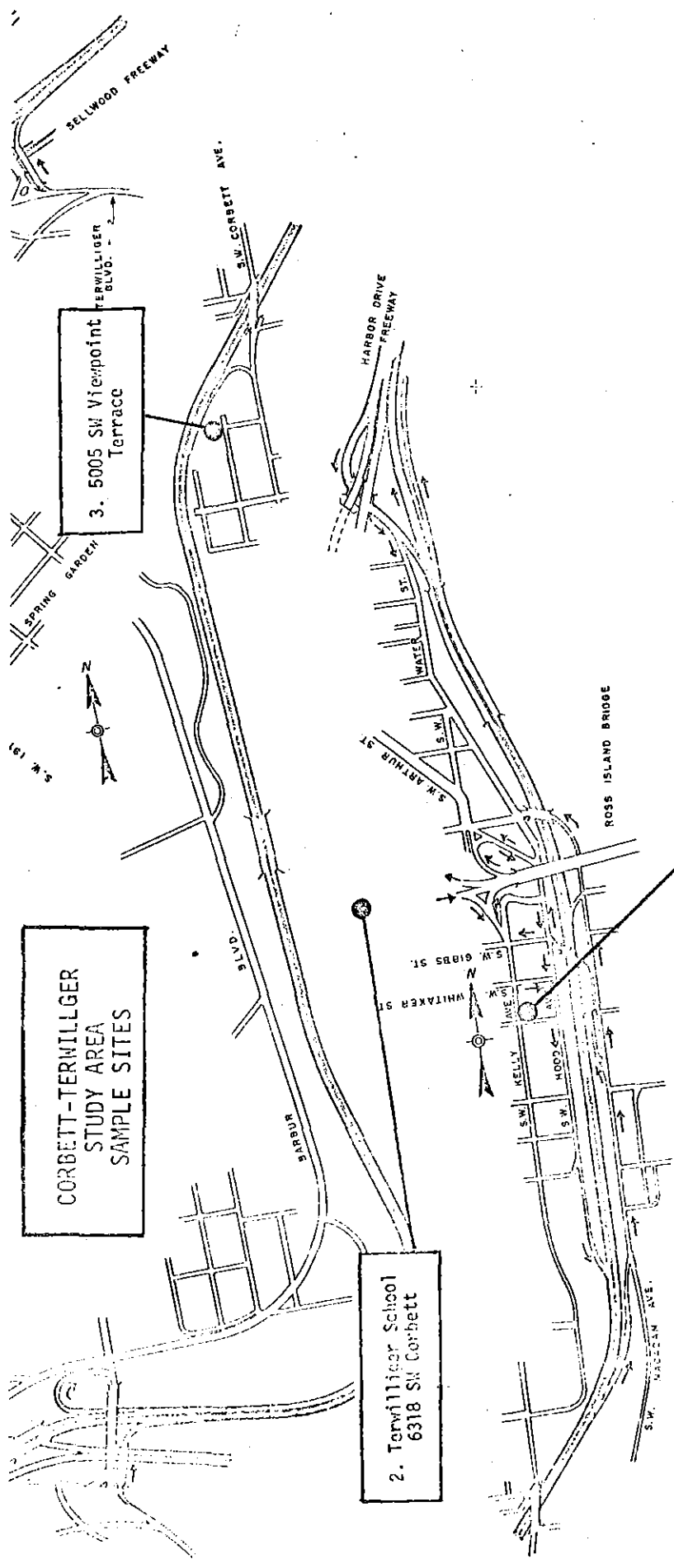
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1973 August September October November December 1974 January February March April May
October November December January February March April May June July



CORBETT-TERWILLIGER AREA LEAD STUDY
TRAFFIC VOLUMES ON I-5 FREEWAY
VICINITY OF S.W. IOWA STREET
24 HR. BOTH DIRECTIONS

August Total 1973		Dec. 1973	Total	April 1974	Total
21	NA	5	76,927	5	83,826
23	87,137	11	76,619	11	78,939
25	69,013	17	77,873	17	77,118
28	85,722	23	43,737	23	75,874
30	90,739	29	47,709	29	76,129
Sept. 1973	Total	Jan. 1974	Total	May 1974	Total
2	54,493	5	45,337	5	53,963
5	83,272	11	69,729	11	63,492
7	92,402	17	70,830	17	88,119
11	81,831	23	70,080	23	82,438
13	83,454	27	40,631	29	83,318
15	69,185	29	71,054		
18	81,755	30	71,854	June 1974	Total
20	81,745				
23	53,779	Feb. 1974	Total	4	82,203
30	56,495			10	82,290
Oct. 1973	Total	4	69,875	16	62,232
8	80,450	10	39,983	22	64,114
13	62,130	16	46,649	28	91,621
18	82,409	22	71,919		
24	81,605	28	70,153	July 1974	Total
30	80,509	March 1974	Total	4	52,078
Nov. 1973	Total			10	85,641
5	74,873	6	NA	16	83,116
11	53,560	12	NA	22	84,892
17	63,515	18	NA	28	NA
23	68,108	24	50,862		
29	78,246	30	58,493		



CORBETT-TERWILLIGER
STUDY AREA
SAMPLE SITES

3. 5005 SW Viewpoint
Terrace

2. Terwilliger School
6318 SW Corbett

1. Kneeland & Kneeland
0305 SW Curry

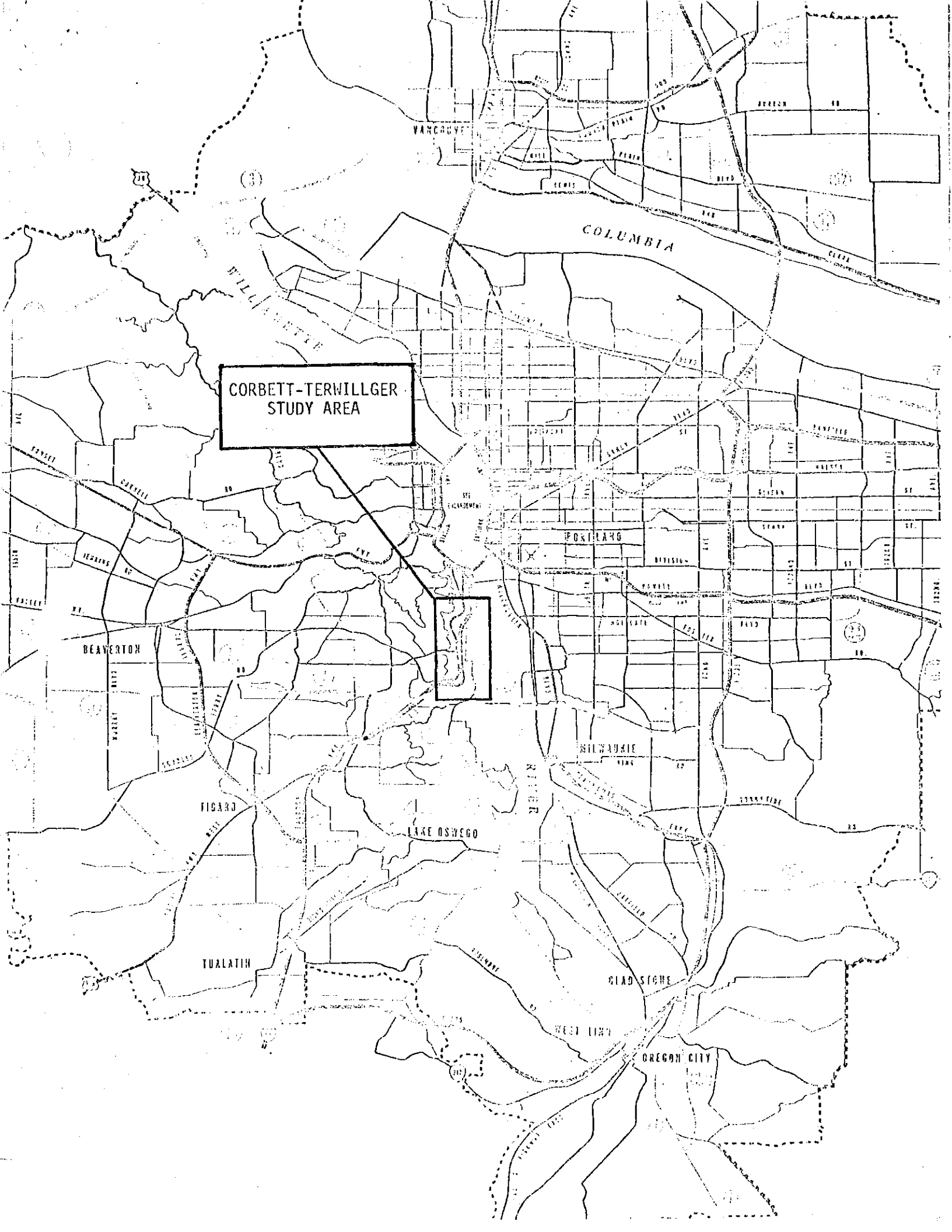
F3 - PORTLAND - SALEM FREEWAY (US 99)

1. Kneeland & Kneeland
0305 SW Curry

2. Terwilliger School
6318 SW Corbett

3. 5005 SW Viewpoint
Terrace

CORBETT-TERWILLIGER
STUDY AREA
SAMPLE SITES



CORBETT-TERWILLGER
STUDY AREA

APPENDIX F

A PRELIMINARY MODEL OF THE HUMAN ASSIMILATION OF LEAD AEROSOLS
FROM GASOLINE COMBUSTION

W. Brian Crews
Department of Mechanical Engineering

Michael Truffer
Department of Zoology

University of California, Davis

The purpose of this research is to evaluate the potential human health hazard of lead anti-knock additives in gasoline by the use of simulation techniques.

Since its introduction into gasoline in 1923, lead has been found in the atmosphere in increasingly large amounts. At present, urban areas may have concentrations exceeding $20 \mu\text{g}/\text{m}^3$, roughly 200 times the lead content of rural air (Council, 1971). These high concentrations of atmospheric lead have increased the body burden of this toxic metal in persons inhabiting urban areas (Working Group, 1965; Thomas, et al, 1967).

There appears to be no beneficial function of lead in the human body, yet large doses of the metal may cause the suppression of red blood cell production, deactivation of some enzyme activity, intestinal colic, spontaneous abortion, and mental retardation (Project Clean Air, 1970; Hickey, 1971).

Two simulation models have been developed and coupled in order to evaluate the potential health hazard of aerosol lead. The first model consists of a very simple solution to the mass continuity equation. Given inert, rather long residence time aerosols over large homogeneous area sources, the equation can be reduced to a one dimensional box model:

$$\bar{c} = \frac{\bar{s}\ell}{\bar{u}\bar{h}} \quad (1)$$

(Crews, 1973). In the case of lead, \bar{c} represents the average monthly atmospheric concentration in $\mu\text{g}/\text{m}^3$, \bar{s} is the discontinuous average monthly source function of lead in $\text{g}/\text{m}^2\text{-month}$, \bar{u} is the average monthly resultant wind velocity in m/month , \bar{h} is the average monthly inversion base height in meters, and ℓ represents the length of a side of the control volume over the urban area. Using a source function as supplied by the Air Pollution Control District at Los Angeles (Profile, 1971), the simple model has been compared to actual atmospheric lead measurements for San Diego and Los Angeles. The results are displayed in Figure 1.

Projections to 1989 have been made for Los Angeles given two hypotheses:

- 1) There will be no change in the lead levels of gasoline in the future, and
- 2) All gasoline will be low lead by the end of 1974.

The results are displayed in Figure 2 where it appears that the California Air Resources Board limit of $1.5 \mu\text{g}/\text{m}^3$ for a 30-day average may be violated in the winter even with all low leads.

The worst case output of the urban aerosol model -- gasoline consumption continuing to rise as indicated and lead anti-knock levels not decreasing -- has been used as one input to the preliminary human lead assimilation model with lead ingested with food as the other input (Figure 3). The transfer coefficients for the linear reservoir model were obtained from the literature on the transport and storage of lead and its radioactive isotopes in man or laboratory animals (Kehoe, 1940; Hursh, et al, 1969; Booker, 1969; Task group, 1966; Kehoe, 1964;

Westerman, 1964; Landaw, 1970). Attention has been focused on the kinetics of small dosages of lead, so that the linear interpretation of the transfer coefficients seems reasonable (Castellino and Aloj, 1964).

The preliminary assimilation model has been crudely verified by inputting constant levels of lead and comparing the model response to dose-response data from a variety of laboratory and field studies (Figure 4). As a result of these tests, the model appears to reflect the kinetics of lead in the human body.

Even though body burdens would be slightly elevated, the results of the worst case coupling, as mentioned previously, imply that atmospheric lead aerosols produced from the combustion of leaded gasolines may not pose a significant public health hazard to urban inhabitants in the future. Various researchers have concluded that the toxic threshold of lead is about 40 $\mu\text{g}/100$ gm whole blood in children (California Dept. of Public Health, 1967) and is from 60 to 80 $\mu\text{g}/100$ gm in adults (Working Group, 1965; Smith, 1964). The preliminary, and admittedly aggregated, model shows blood lead levels reaching approximately 27 $\mu\text{g}/100$ gm in the worst case situation of the 50 year simulation of a "person" living in the Los Angeles Basin (Figure 5).

Considerable caution should be exercised in evaluating the results of this preliminary work. The urban aerosol model projects an average lead aerosol concentration for the entire Los Angeles Basin. Realistically, wide variations occur in the lead content of air within the basin. Lead concentrations near freeways may exceed 20 $\mu\text{g}/\text{m}^3$ and cause elevated body burdens of those exposed to this environment (Thomas, et al, 1967). Also, there are considerable variations in individual response to the

same aerosol concentration (Goldsmith and Hexter, 1967). This implies that toxic effects may develop in certain individuals, even though the average exposure to average concentrations by the average individual may not be hazardous. There is also the possibility that body burdens of lead well below suggested toxic threshold levels of 40-80 $\mu\text{g}/100\text{ gm}$ may produce yet-to-be discovered undesirable effects in the human.

The preliminary results of this study indicate that the California Air Resources Board limit of $1.5\ \mu\text{g}/\text{m}^3$ for a 30 day average may be slightly conservative, while a $10\ \mu\text{g}/\text{m}^3$ limit as proposed by some members of the industrial community may be inadequate to protect public health (Stopps, 1968). The authors suggest that research into the epidemiological effects of atmospheric lead be accelerated to more precisely define the effects of this metal as a function of chronic exposure at different aerosol concentrations. Certainly, models similar to those presented should be used in the development and assessment of environmental control programs.

Acknowledgment: Funds provided by the National Science Foundation
through RANN Grant GI-27.

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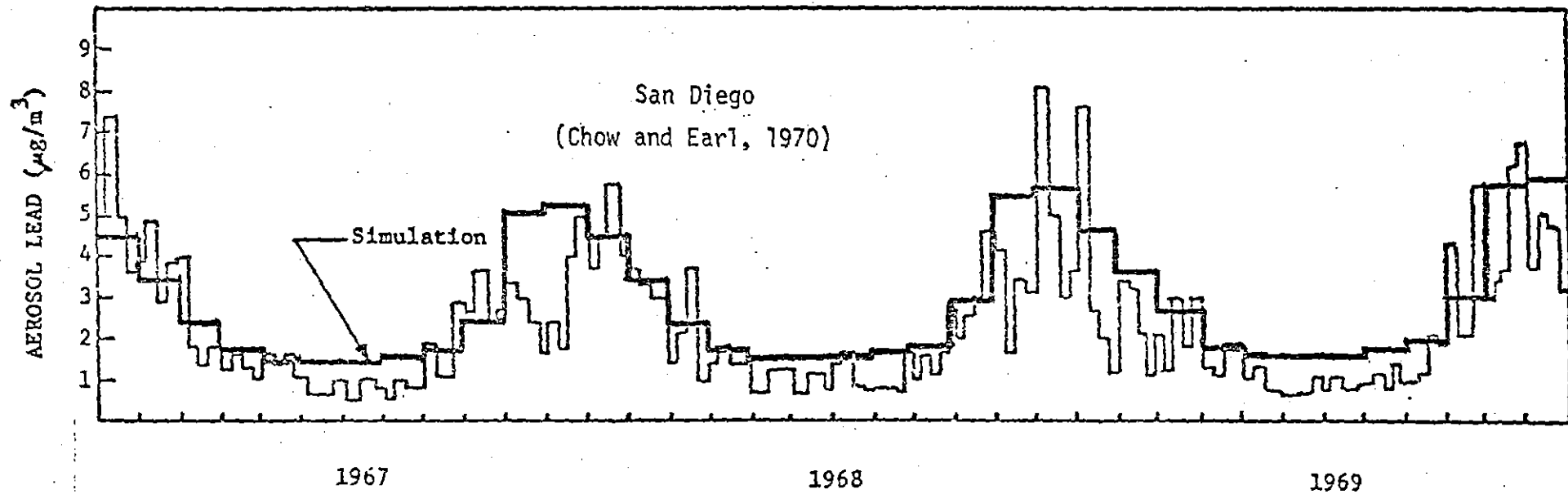
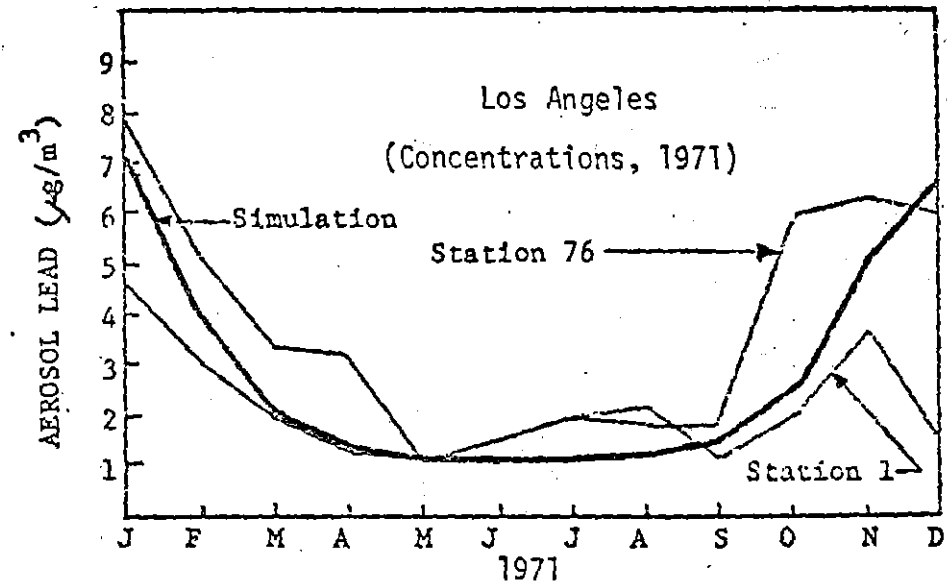
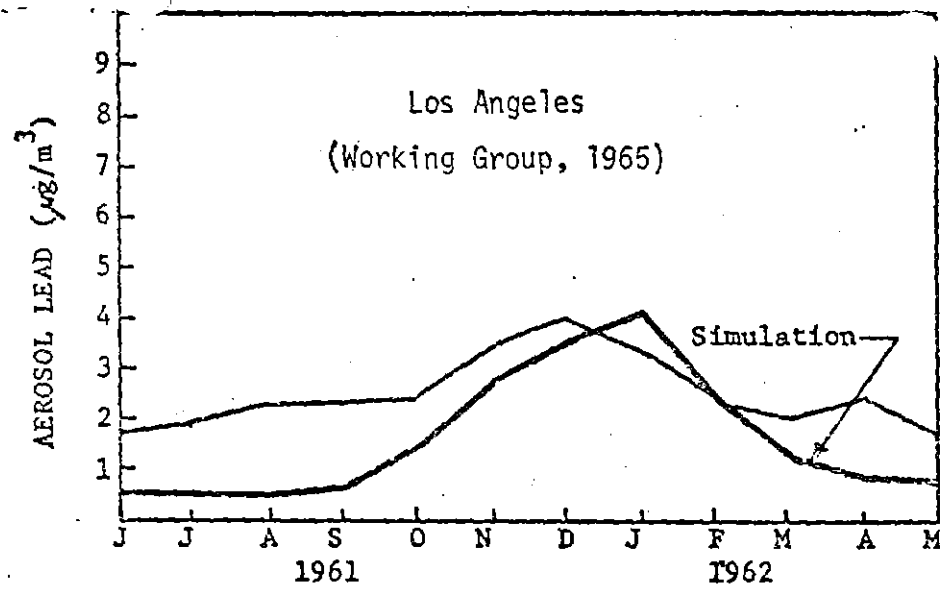


Figure 1. Model versus Actual Atmospheric Lead Data for Los Angeles and San Diego.

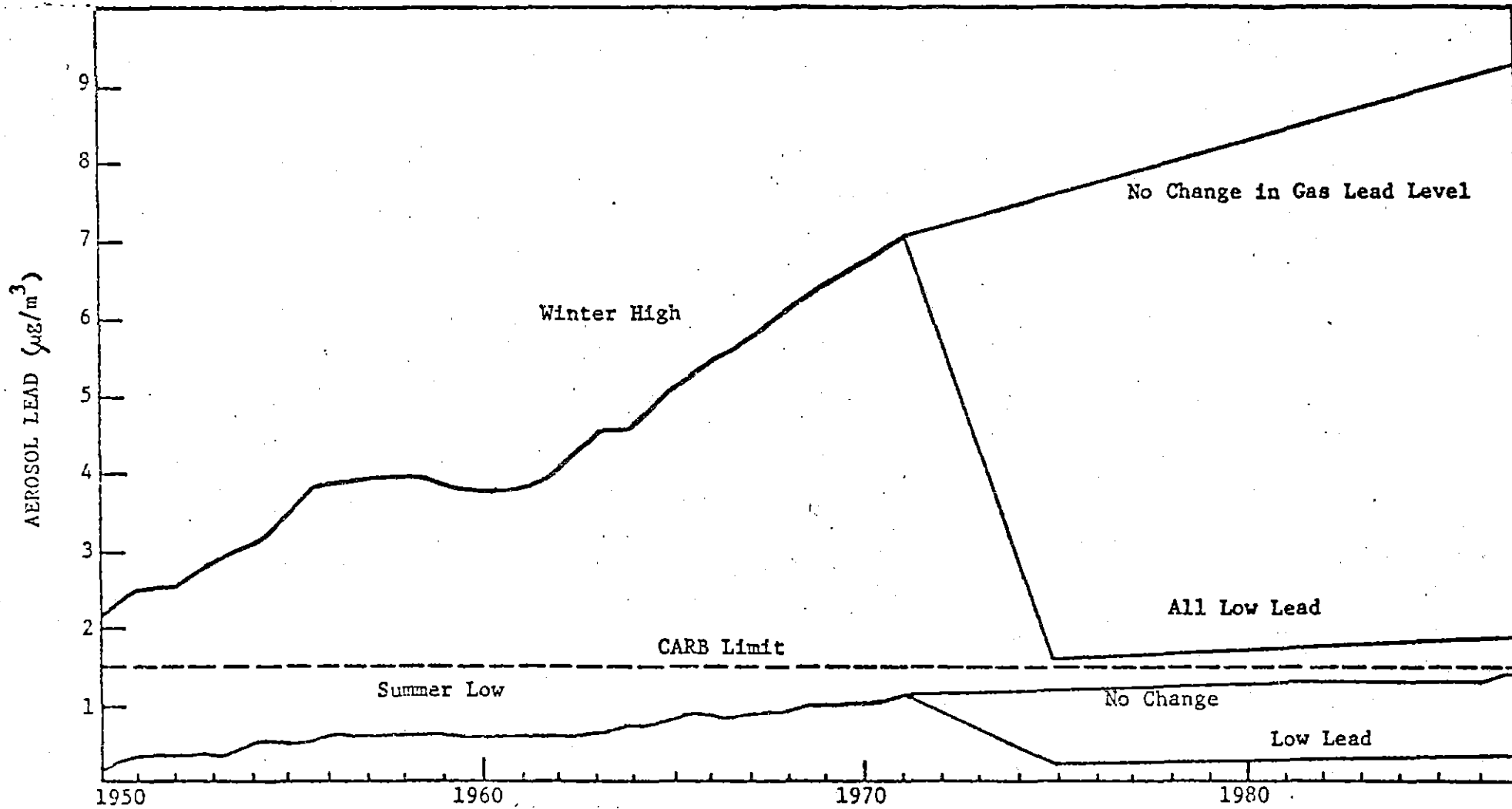


Figure 2. Projection of Atmospheric Lead Levels in Los Angeles.

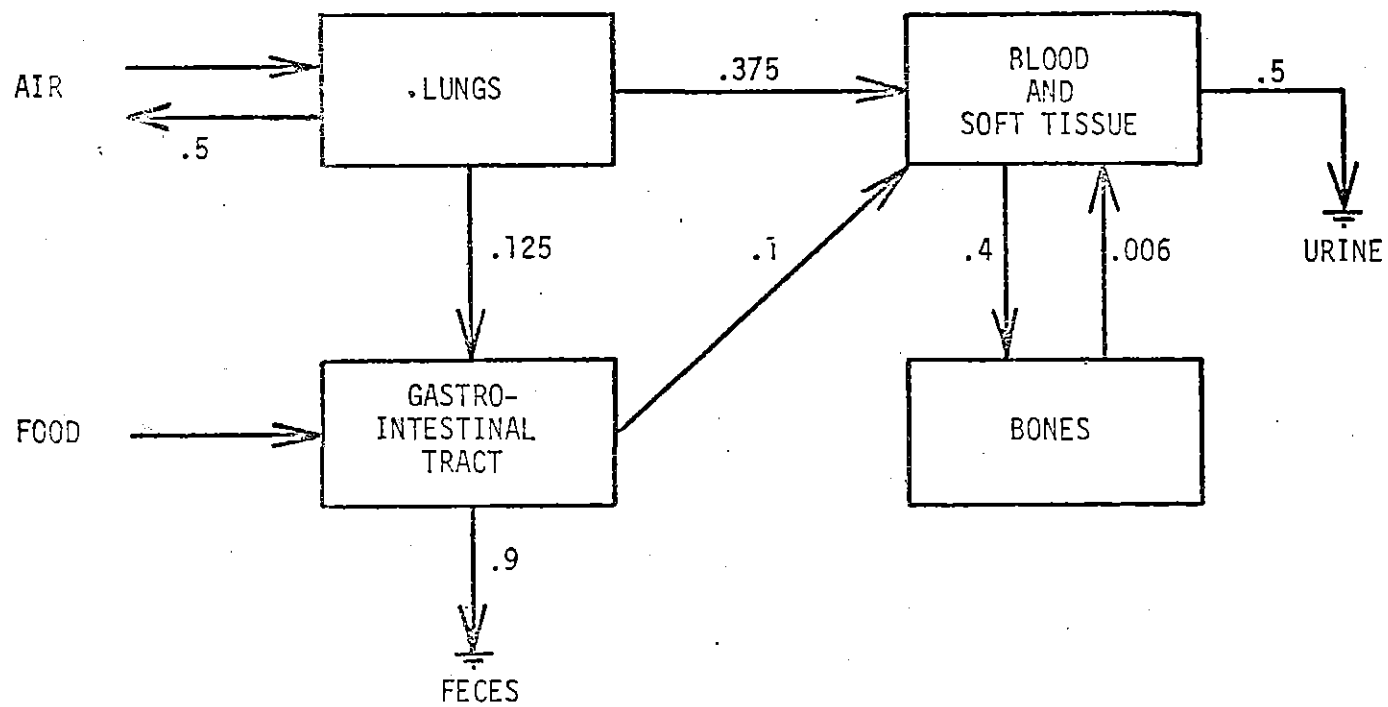


Figure 3. Preliminary Model of Lead Transport in a Human.

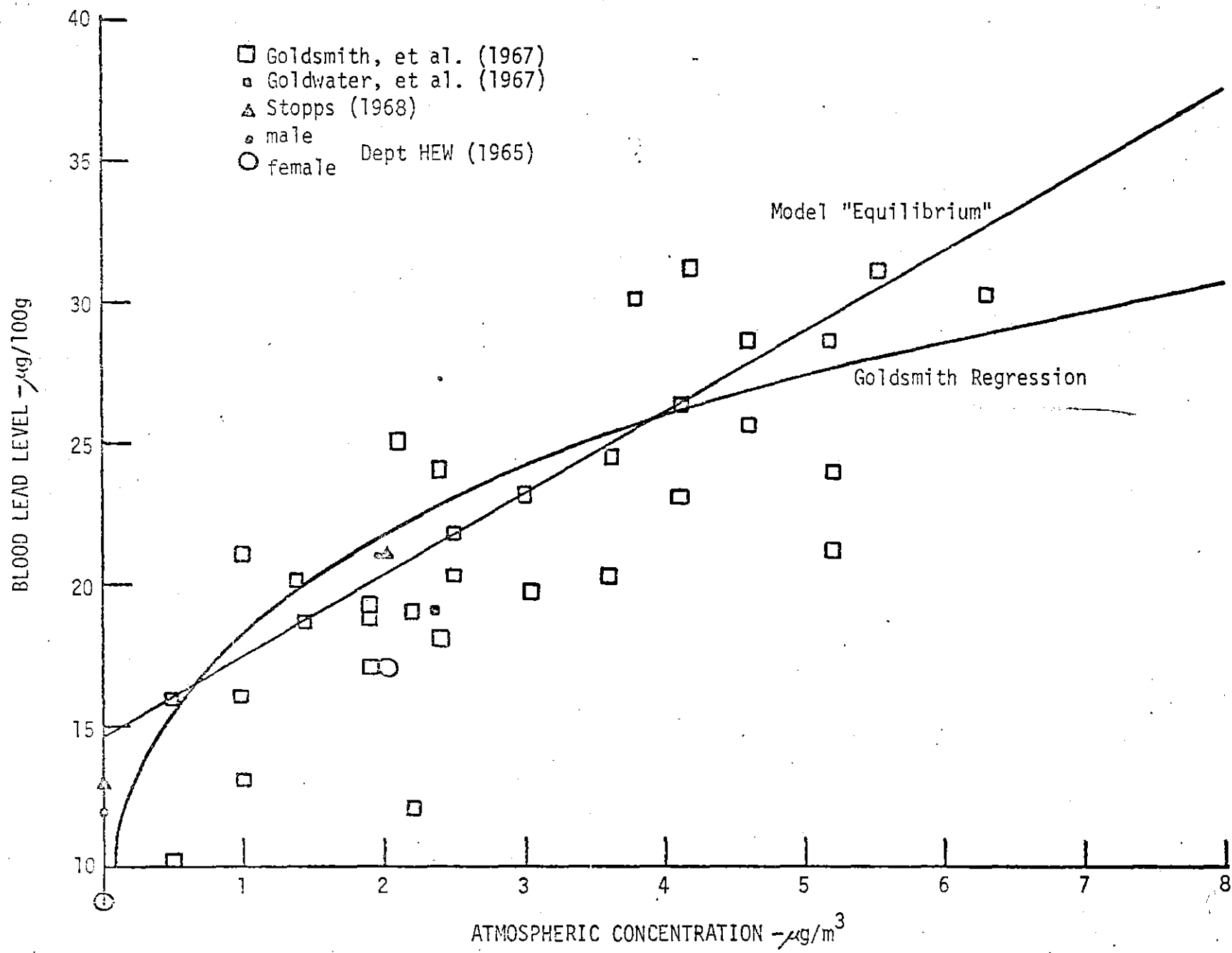


Figure 4. Model Equilibrium versus Atmospheric Lead Concentrations.

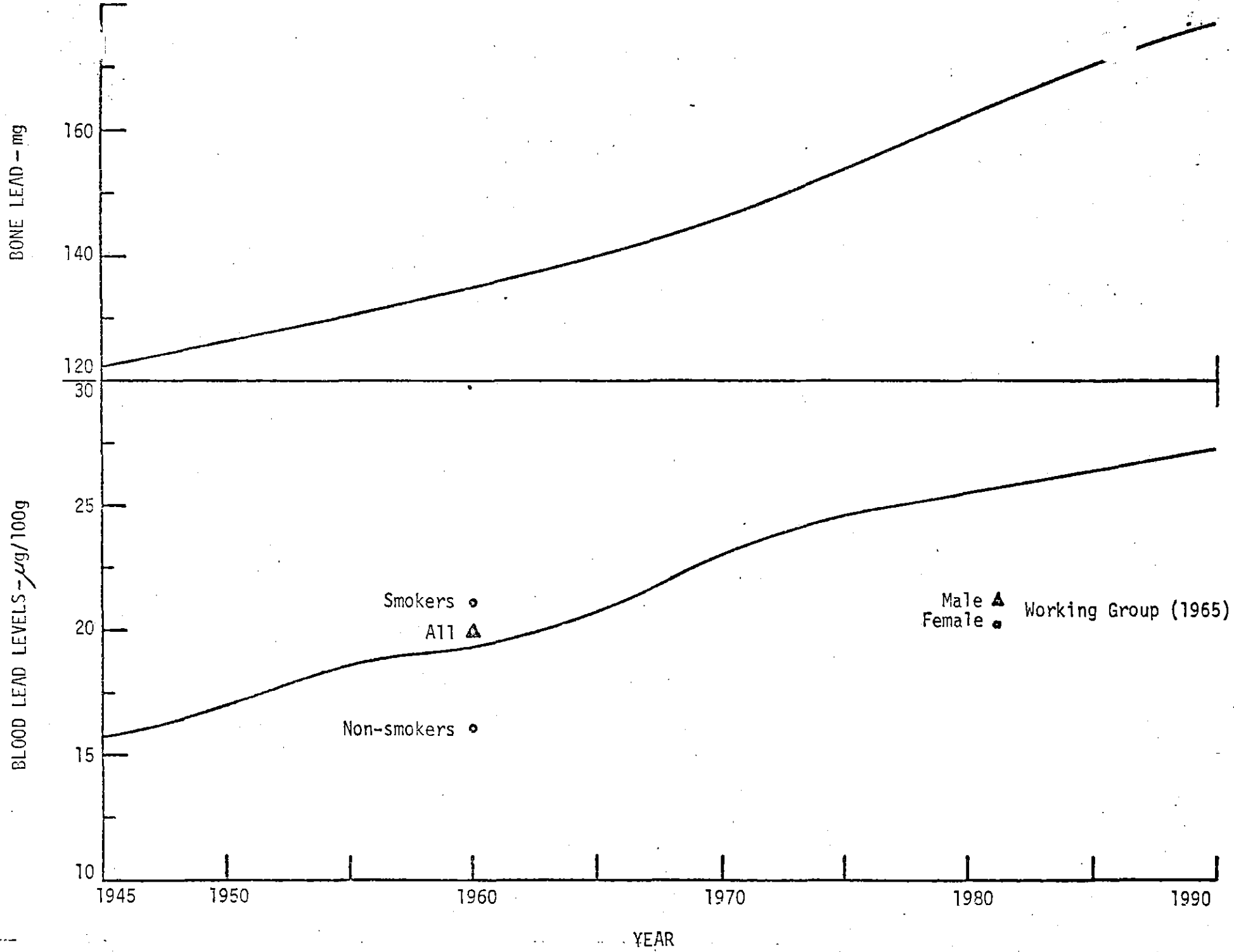


Figure 5. Model Lead Levels for Persons in Los Angeles - Given No Change in Gasoline Lead Levels.

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Tel: (503) 227-3157

November 19, 1974

Environmental Quality Commission

RE: November 22, 1974 hearing:
Ambient Air Standard for Lead

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

R E C E I V E D

NOV 20 1974

OFFICE OF THE DIRECTOR

Honorable Members of the Commission:

On behalf of the Petitioners in this matter, ENUF, CCA, OEC, STOP, Sierra Club (Columbia Chapter), Louis and Ruth Brent, Donald and Val Cobb, Clifford and Judi Allen, Jerry and Helen Virning, and Mike and Leslie Hoffman, I submit the following comments regarding the November 14, 1974 recommendations of the Department of Environmental Quality.

DEQ's position is that numerous lead studies, due to poor testing techniques, uncontrolled variables, and other factors, have failed to establish that an ambient air level of lead greater than two micrograms per cubic meter, or any particular level for that matter, is dangerous to health; that other states have adopted a standard of five; that state-wide testing in Oregon has established that a standard of five would not be exceeded; and, therefore, a standard of five should be adopted.

This reasoning, in our opinion, starts from a false premise and shows a callous disregard to public policy of this state and to the public good. It assumes that proponents of a standard ought to prove that a health hazard in fact exists, and, by reference to the fact that a standard of five would not be exceeded anywhere in the state, indicates that DEQ is not at all interested in having any lead standard to enforce.

No one argues that lead in the air we breathe has any beneficial effect. All concede that lead is a toxic substance. The only dispute is over how much is needed before human health is endangered. Under these circumstances, the burden of proof properly is on those opposing the Petitioner's proposed standard of two to establish that no significant portion of the population would face a risk to health by such levels. This has not been done for the simple reason that the sum total of all the studies conducted is inconclusive. Nevertheless, some of the studies indicate the need for a standard of two.

To quote the Oregon Legislature, "the Oregon goal for pure air quality is the achievement of an atmosphere with no detectable adverse effect from motor vehicle air pollution on health, safety, welfare and the quality of life and property." ORS 468.365(4)..

Further, "the emission of pollutants from motor vehicles is a significant cause of air pollution in many portions of this state." ORS 368.365(1).

This Commission, itself, has designated freeways and expressways in urban areas as air contramination sources (340 OAR 20-050, 20-055), and requires the "highest and best practicable treatment and control" of pollutants from such sources which are constructed subsequent to June 1, 1970 (340 OAR 20-001).

The Federal Clean Air Act requires Oregon to pursue a nondegradation policy in relation to areas not now defiled by air pollutants. The right of the people of this state to expect and require that their servants will protect and maintain the purity of their air is a natural right inherent in the social compact itself.

The DEQ has recommended that all these policies be disregarded. Where relatively little lead now exists, DEQ would have you allow a 150 percent increase so that lead blood levels known to be dangerous will be present. It is not known by what reasoning the protectors of the public welfare arrived at such a conclusion. If air is clean and dangerless even from inconclusive studies?

DEQ, by its May 15, 1974 submission to this Commission (which, incidentally, recommended a standard of two), established that no area outside of Portland had a ambient lead level greater than or equal to two, and that only three sites in the Portland area exceeded two. (Table 3, 5/15/74 DEQ Report). Why, then, adopt a standard allowing a level of five to be generated? It would be different if lead were a neutral element, but, in fact, lead is toxic and of no beneficial use in the air. This being the case, there is no reason to allow an increase in the ambient level of the poison.

It should also be noted that DEQ has not outlined any enforcement guidelines for the standard it proposes. Petitioners request that the proposed "Roadway Rules" and "Regulations For Air Purity Along Roadways" filed with the Commission by Petitioners on May 2, 1973, be adopted as is. A copy thereof is enclosed for your quick reference.

Very truly yours,

Charles J. Merten

CJM:pam
Enclosure

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

COMMITTEE TO END NEEDLESS URBAN)
FREEWAYS; COALITION FOR CLEAN AIR;)
OREGON ENVIRONMENTAL COUNCIL;)
SENSELESS TRANSPORTATION OPTIONS FOR)
PEOPLE; COLUMBIA GROUP OF THE PACIFIC)
NORTHWEST CHAPTER OF THE SIERRA CLUB;)
LOUIS and RUTH BRENT; DONALD and VAL)
COBB; CLIFFORD and JUDE ALLEN; JERRY)
and HELEN VITRIG; and MIKE and)
LESLIE HOFFMAN,)

Petitioners.)

PETITION FOR PROMULGATION
OF RULES AND REGULATIONS

The petitioners, hereinafter described, hereby request that the following rules and regulations be forthwith adopted and promulgated by the Environmental Quality Commission:

1.

ROADWAY RULES

1. No person or persons, including state or local agencies, departments, commissions, boards, or governments shall construct, within any urban area of this state, any roadway, without first providing the EQC with reasonable assurances, supported by factual data, that the operation of said roadway, will not violate the regulations of the EQC regarding air purity standards along roadways.

2. Upon receipt of such assurances, the EQC will, based upon the supporting data, the expertise of the DEQ, and such further information, including public comment, as it might desire, make its own independent judgment as to whether the operation of such roadway will violate the regulations of the EQC regarding air purity along roadways. No such roadway

shall be constructed without an affirmative determination by the EQC that said regulations will not be violated by the operation of such roadway.

3. For the purposes of these rules:

(a) "roadway" means any road, highway, expressway, or freeway providing surface transit

(b) "operation of a roadway " means the functional use of a roadway by motor vehicles, other vehicles, or other means of surface transit

(c) "urban area" means (1) any city with a population in excess of 50,000; and (2) the metropolitan area of any city and the adjoining area within five miles of its boundaries, if the total combined area has a population in excess of 50,000.

II.

REGULATIONS FOR AIR PURITY ALONG ROADWAYS

In addition to any other applicable rule, regulation, or standard, any roadway or segment thereof constructed after January 1, 1974 in any urban area of this state shall be so designed and constructed that for the following fifteen years of operation:

1. The ambient air concentration of lead at points six feet immediately above the midline of said roadway shall not exceed levels which may pose a hazard to human health for the users thereof; and

2. The ambient air concentration of lead at any point within 1000 feet of the edge of said roadway shall not exceed two micrograms per cubic meter averaged on a monthly basis.

III.

FACTS SUPPORTING PETITION

Petitioners allege the following to be fact:

1. Lead is hazardous to human health when ingested or breathed;
2. Adult human beings have an average intake of lead from food and drink, which are relatively unavaoidable sources, of 320 micrograms per day; about 10% of this amount, or 32 micrograms per day, are retained in the body;
3. Approximately 184,316 tons of lead per year are emitted into the air above the continental United States. Of this amount, approximately 181,000 tons are produced by gasoline combustion. Most of said combustion occurs in the engines of motor vehicles.
4. Of the lead inhaled from the ambient air during the breathing process, approximately 37% is absorbed by the body.
5. The concentration of lead in soils within 100 feet of roadways has been found to be 250-280 times that occurring naturally.
6. Urban area residents have, today, high concentrations of lead in their bodies in relation to suburban and rural residents;
7. Ambient air concentrations of lead in excess of two micrograms per cubic meter pose a threat to human health.
8. Recent discoveries by local health authorities in Portland, Oregon indicate that children who live along freeways in Portland have abnormally high, and potentially hazardous, levels of lead in their bodies, and that no apparent cause for the same exists other than inhalation of lead from the ambient air along said freeways.

9. The federal government has not taken effective measures to reduce the lead level of gasoline so as to reduce the ambient air concentration of lead below two micrograms per cubic meter. Contrary to popular belief, neither the EPA nor any other federal agency has banned, or has proposed to ban, lead from gasoline. EPA has proposed regulations which, commencing January 1, 1975 and ending January 1, 1978, will reduce the lead content in gasoline from its present levels to 1.25 grams per gallon. Even with such reductions, however, mathematical calculations for planned roadways in Portland, Oregon result in lead concentrations in excess of two micrograms per cubic meter along said roadways.

10. The only practicable and effective way to protect residents living within 1000 feet of roadways from the hazard of lead poisoning is to design, construct, and operate roadways so as not to exceed an ambient air lead concentration of two micrograms per cubic meter averaged on a monthly basis.

11. No agency of the State of Oregon has to-date adopted ambient air standards of lead concentration.

IV.

PROPOSITIONS OF LAW

Petitioners will rely upon the following legal propositions:

1. They are interested persons and/or represent interested persons within the meaning of ORS 183.390 and 34 OAR 11-015.

2. It is the policy of the State of Oregon to abate the sources and levels of air pollution which existed on

August 9, 1971, and to prevent air pollution that is new in relation to that date. ORS 449.770.

3. The Oregon Legislature has found that emissions of pollutants from motor vehicles is a significant cause of air pollution in many portions of the state and that the control and elimination of such pollutants are of prime importance for the protection and preservation of the public health, safety, and well-being. ORS 449.951.

4. The EQC may regulate, limit, control, or prohibit motor vehicle operation and traffic as necessary for the control of air pollution which presents imminent and substantial danger to the health of persons. ORS 449.747.

5. The EQC may adopt air purity standards for any geographical area of the state. ORS 449.760 (7), 449.785, 449.800.

6. The EQC may classify air contamination sources according to levels and types of emissions and other characteristics which cause or tend to cause or contribute to air pollution; and may require its prior approval for the construction of air contamination sources. ORS 449.707(1), 449.712.

7. Pursuant to ORS 449.712 and 449.760, the EQC has designated freeways and expressways in urban areas as air contamination sources. 340 OAR 20-050, 20-055.

8. The highest and best practicable treatment and control of pollutants from air contamination sources constructed after June 1, 1970 is required. 340 OAR 20-001.

V.

PETITIONERS

The petitioners are:

1. COMMITTEE TO END NEEDLESS URBAN FREEWAYS (ENUF),

a nonprofit, unincorporated association whose members are residents of Multnomah County, Oregon and who live in the path of, and/or near thereto, the proposed I-205 freeway. The projected lead concentrations near said proposed freeway exceed two micrograms per cubic meter averaged on a quarterly basis.

2. COALITION FOR CLEAN AIR, is an association whose members live in urban areas of the States of Oregon and Washington. Said organization has as one of its primary purposes the control and abatement of air pollution within the State of Oregon.

3. THE OREGON ENVIRONMENTAL COUNCIL, an Oregon nonprofit corporation, and whose purpose is the protection and enhancement of Oregon's environment, including the quality of its air. The OEC has 2,000 individual members, many of whom live in urban areas of the state.

4. SENSIBLE TRANSPORTATION OPTIONS FOR PEOPLE (STOP), a nonprofit Oregon organization whose primary purpose is to advance a balanced transportation system for the people of Oregon and to provide alternative modes of transit to the automobile for the reason that, inter alia, the automobile is a major source of air pollution in this state. Many of STOP's members live in urban areas of the State and near proposed roadways therein.

5. THE COLUMBIA GROUP OF THE PACIFIC NORTHWEST CHAPTER OF THE SIERRA CLUB, an unincorporated association of persons who, inter alia, seek to preserve the quality of life

of the state and a livable urban environment. Many of the Chapter's members live in urban areas of the State.

6. LOUIS and RUTH BRENT, husband and wife, residents of Multnomah County, Oregon, who live at 9937 N. E. Alton, within 250 feet of the proposed I-205 freeway.

7. DONALD and VAL COBB, husband and wife, residents of Multnomah County, Oregon, who live at 3910 N. E. 99th, within 250 feet of the proposed I-205 freeway.

8. CLIFFORD and JUDI ALLEN, husband and wife, residents of Multnomah County, Oregon, who live at 4007 N. E. 99th, within 500 feet of the proposed I-205 freeway.

9. JERRY and HELEN VIRNIG, husband and wife, residents of Multnomah County, Oregon, who live at 9529 N. E. Campaign, within 500 feet of the proposed I-205 freeway.

10. MIKE and LESLIE HOFFMAN, husband and wife, residents of Multnomah County, Oregon, who live at 9444 N. E. Mason Street, within 1000 feet of the proposed I-205 freeway.

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ENVIRONMENTAL QUALITY COMMISSION

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RONALD M. SOMERS
The Dalles

KESSLER R. CANNON
Director

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. G, November 22, 1974, EQC Meeting

Consideration for Adoption of Proposed Rules Pertaining to Indirect Sources

Background

The existing Parking Facilities and Highways in Urban Areas regulation was adopted by the Environmental Quality Commission on January 24, 1972, as part of the Clean Air Act Implementation Plan for Oregon. The Environmental Protection Agency reviewed that rule and determined that the rule was not comprehensive enough to meet the requirements promulgated for Indirect Sources.

In an effort to comply with the Environmental Protection Agency's requirements and to clarify the intent of the original regulation, the Department has completed a revised rule.

A public hearing was held June 24, 1974, to receive testimony on the proposed revised rule, dated May 20, 1974. At that hearing extensive comments were received. As a result of that hearing, the staff redrafted the proposed rule, dated August 21, 1974, sent copies to interested parties and requested informal comments be submitted to the Department by September 16, 1974. The rule was again amended and dated September 25, 1974, and a second public hearing was held October 29, 1974, to receive testimony on that proposed rule.

The final revision of the proposed rule is attached (Appendix A) and is hereby submitted to the Commission for consideration.

Discussion

A copy of the Hearings Officer's report of the October 29, 1974 public hearing is attached (Appendix B) and is considered to be a complete and accurate account of the testimony received. Therefore, this report will not attempt to re-address all of the testimony received, but will discuss the points that the staff feels should be addressed further.

The principal points initially made by the Environmental Protection Agency are considered by the Department in revising the rule to meet the requirements for indirect sources are: 1) regulations and procedures must apply state-wide; 2) rule requirements must apply to other traffic generating sources as well as highways and parking facilities; 3) specific provisions must be made for indirect sources proposals to be made available for public review and comment; and 4) the rules must "set forth legally enforceable procedures for preventing construction or modification of an indirect source if such construction or modification will result in a violation of applicable portions of the control strategy or will interfere with attainment or maintenance of a national standard."

Many of the suggested changes made by the Environmental Protection Agency and others have been adopted in the final draft of the proposed regulation. However, several points have not been adopted for inclusion in the rule and need to be addressed at this time.

The major point of contention raised in testimony to this regulation is the justification for review of parking facilities of 50 spaces. The Department has conducted an analysis (Appendix C) of the construction applications reviewed by the Department through September 1974 under the existing parking and highway regulations. The results indicate that a significant number of parking spaces constructed in the Portland metropolitan area are contained in lots of less than 250 parking spaces. The Department concludes that in order to adequately control air contaminants related to indirect sources, control the proliferation of long term vehicle parking and thereby discourage the unnecessary use of the automobile and promote the development of adequate mass transit systems, the review of parking facilities containing 50 or more parking spaces must be conducted in the geographical areas specified in this rule. The data and conclusions of that analysis may be found in the attached memorandum.

The working agreement referred to by the Oregon State Highway Division is recognized by the Department as a necessary and useful supplement to these rules. However, the Department concludes that the agreement should be developed as a guideline document by which these rules can be implemented and should not be included as part of the rule. The Department's staff will continue to work with the Oregon State Highway Division's staff to finalize and adopt the formal working agreement.

The Oregon State Highway Division was further concerned with delegation to the Regional Authorities the review and approval of inter-regional highway projects. It is the current opinion of the Department that jurisdiction over these facilities will be retained by the DEQ.

In order to satisfy Environmental Protection Agency's requirements that all adopted regional parking and circulation plans must be approved by the Environmental Protection Agency, it is the intent of the Department to submit as revisions to the State's Implementation Plan all parking and circulation plans approved by the Department.

The Department feels that many concerns expressed by opponents and proponents of these rules can be most adequately addressed in guidelines developed and adopted subsequent to the adoption of these rules. It is the intent of the Department to draft guidelines which will contain policies, procedures to allow for the orderly implementation of this rule, a sample construction approval application and a notice of completion form and present them to the Environmental Quality Commission at the earliest possible date after adoption of this rule as guidelines for the Indirect Source Rule.

Director's Recommendation

It is the recommendation of the Director that the Environmental Quality Commission repeal OAR, Chapter 340, Section 20-050 through 20-070 and adopt in lieu thereof Rules for Indirect Sources and Maintenance of Air Quality Standards, Section 20-100 through 20-135 dated November 12, 1974, attached.



KESSLER R. CANNON
Director

RLV:h

11/13/74

APPENDIX A

PROPOSED RULE

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY CONTROL DIVISION

November 12, 1974

PROPOSED

RULES FOR INDIRECT SOURCES AND MAINTENANCE OF AIR QUALITY STANDARDS

OAR, Chapter 340, Sections 20-050 through 20-070 are repealed and Sections 20-100 through 20-135 are adopted in lieu thereof.

20-100 POLICY

The Commission finds and declares Indirect Sources to be air contamination sources as defined in ORS 468.275. The Commission further finds and declares that the regulation of Indirect Sources is necessary to control the concentration of air contaminants which result from Motor Vehicle Trips and/or Aircraft Operations associated with the use of Indirect Sources.

20-105 JURISDICTION AND DELEGATION

The Commission finds that the complexity or magnitude of Indirect Sources requires state-wide regulation and assumes or retains jurisdiction thereof. The Commission may, however, when any Regional Authority requests and provides evidence demonstrating its capability to carry out the provisions of these rules relating to Indirect Sources, authorize and confer jurisdiction upon such Regional Authority to perform all or any of such provisions within its boundary until such authority and jurisdiction shall be withdrawn for cause by the Commission.

20-110 DEFINITIONS

- (1) "Aircraft Operations" means any aircraft landing or takeoff.
- (2) "Airport" means any area of land or water which is used or intended for use for the landing and takeoff of aircraft, or any appurtenant areas, facilities, or rights-of-way such as terminal facilities, parking lots, roadways, and aircraft maintenance and repair facilities.
- (3) "Associated Parking" means a parking facility or facilities owned, operated and/or used in conjunction with an Indirect Source.
- (4) "Average Daily Traffic" means the total traffic volume during a given time period in whole days greater than one day and less than one year divided by the number of days in that time period, commonly abbreviated as ADT.

- (5) "Commence Construction" means to begin to engage in a continuous program of on-site construction or on-site modifications, including site clearance, grading, dredging, or landfilling in preparation for the fabrication, erection, installation or modification of an indirect source. Interruptions and delays resulting from acts of God, strikes, litigation or other matters beyond the control of the owner shall be disregarded in determining whether a construction or modification program is continuous.
- (6) "Commission" means the Environmental Quality Commission.
- (7) "Department" means the Department of Environmental Quality.
- (8) "Director" means director of the Department or Regional Authority and authorized deputies or officers.
- (9) "Highway Section" means a highway of substantial length between logical termini (major crossroads, population centers, major traffic generators, or similar major highway control elements) as normally included in a single location study or multi-year highway improvement program.
- (10) "Indirect Source" means a facility, building, structure, or installation, or any portion or combination thereof, which indirectly causes or may cause mobile source activity that results in emissions of an air contaminant for which there is a state standard. Such Indirect Sources shall include, but not be limited to:
 - (a) Highways and roads.
 - (b) Parking facilities.
 - (c) Retail, commercial and industrial facilities.
 - (d) Recreation, amusement, sports and entertainment facilities.
 - (e) Airports.
 - (f) Office and Government buildings.
 - (g) Apartment, condominium developments and mobile home parks.
 - (h) Educational facilities.
- (11) "Indirect Source Construction Permit" means a written permit in letter form issued by the Department or the Regional Authority having jurisdiction, bearing the signature of the Director, which authorizes the permittee to Commence Construction of an Indirect Source under construction and operation conditions and schedules as specified in the permit.
- (12) "Mobile Source" means self-propelled vehicles, powered by internal combustion engines, including but not limited to automobiles, trucks, motorcycles and aircraft.

- (13) "Off-street Area or Space" means any area or space not located on a public road dedicated for public use.
- (14) "Parking Facility" means any building, structure, lot or portion thereof, designed and used primarily for the temporary storage of motor vehicles.
- (15) "Parking Space" means any Off-street Area or Space below, above or at ground level, open or enclosed, that is used for parking one motor vehicle at a time.
- (16) "Person" means individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the federal government and any agencies thereof.
- (17) "Population" means that population estimate most recently published by the Center for Population Research and Census, Portland State University, or any other population estimate approved by the Department.
- (18) "Regional Authority" means a regional air quality control authority established under the provisions of ORS 468.505.
- (19) "Regional Parking and Circulation Plan" means a plan developed by a city, county or regional planning agency, the implementation of which assures the maintenance of the state's ambient air quality standards.
- (20) "Regional Planning Agency" means any planning agency which has been recognized as a substate-clearinghouse for the purposes of conducting project review under the United States Office of Management and Budget Circular Number A-95, or other governmental agency having planning authority.
- (21) "Reasonable Receptor and Exposure Sites" means locations where people might reasonably be expected to be exposed to air contaminants generated in whole or in part by the Indirect Source in question. Location of ambient air sampling sites and methods of sample collection shall conform to criteria on file with the Department of Environmental Quality.
- (22) "Vehicle Trip" means a single movement by a motor vehicle which originates or terminates at or uses an Indirect Source.

20-115 INDIRECT SOURCES REQUIRED TO HAVE INDIRECT SOURCE CONSTRUCTION PERMITS

- (1) The owner, operator or developer of an Indirect Source identified in subsection 20-115(2) of this section shall not Commence Construction of such a source after December 31, 1974 without an approved Indirect Source Construction Permit issued by the Department or Regional Authority having jurisdiction.
- (2) All Indirect Sources meeting the criteria of this subsection relative to type, location, size and operation are required to apply for an Indirect Source Construction Permit:
 - (a) The following sources in or within five (5) miles of the municipal boundaries of a municipality with a Population of 50,000 or more, including but not limited to Portland, Salem and Eugene:
 - (i) Any Parking Facility or other Indirect Source with Associated Parking being constructed or modified to create new or additional parking (or Associated Parking) capacity of 50 or more Parking Spaces.
 - (ii) Any Highway Section being proposed for construction with an anticipated annual Average Daily Traffic volume of 20,000 or more motor vehicles per day within ten years after completion, or being modified so that the annual Average Daily Traffic on that Highway Section will be increased to 20,000 or more motor vehicles per day or will be increased by 10,000 or more motor vehicles per day within ten years after completion.
 - (b) Except as otherwise provided in this section, the following sources within Clackamas, Lane, Marion, Multnomah or Washington counties:
 - (i) Any Parking Facility or other Indirect Source with Associated Parking being constructed or modified to create new or additional parking (or Associated Parking) capacity of 500 or more Parking Spaces.
 - (ii) Any Highway Section being proposed for construction with an anticipated annual Average Daily Traffic volume of 20,000 or more motor vehicles per day within ten years after completion, or being modified so that the annual Average Daily Traffic on that Highway Section will be 20,000 or more motor vehicles per day, or will be increased by 10,000 or more motor vehicles per day, within ten years after completion.

- (c) Except as otherwise provided in this section, the following sources in all areas of the state:
 - (i) Any Parking Facility or other Indirect Source with Associated Parking being constructed or modified to create new or additional parking (or Associated Parking) capacity of 1,000 or more Parking Spaces.
 - (ii) Any Highway Section being proposed for construction with an anticipated annual Average Daily Traffic volume of 50,000 or more motor vehicles per day within ten years after completion, or being modified so that the annual Average Daily Traffic on that Highway Section will be 50,000 or more motor vehicles per day, or will be increased by 25,000 or more motor vehicles per day, within ten years after completion.
- (d) Any Airport being proposed for construction with projected annual Aircraft Operations of 50,000 or more within ten years after completion, or being modified in any way so as to increase the projected number of annual Aircraft Operations by 25,000 or more within 10 years after completion.
- (5) Where an Indirect Source is constructed or modified in increments which individually are not subject to review under this section, and which are not part of a program of construction or modification in planned incremental phases approved by the Director, all such increments commenced after January 1, 1975 shall be added together for determining the applicability of this rule.
- (6) An Indirect Source Construction Permit may authorize more than one phase of construction, where commencement of construction or modification of successive phases will begin over acceptable periods of time referred to in the permit; and thereafter construction or modification of each phase may be begun without the necessity of obtaining another permit.

20-120 ESTABLISHMENT OF AN APPROVED REGIONAL PARKING AND CIRCULATION PLAN(S) BY A CITY, COUNTY OR REGIONAL PLANNING AGENCY

- (1) Any city, county or Regional Planning Agency may submit a Regional Parking and Circulation Plan to the Department or to the Regional Authority having jurisdiction for approval. Such a plan shall include, but not be limited to:
 - (a) Legally identifiable plan boundaries.

- (b) Reasonably uniform identifiable grids where applicable.
 - (c) Total parking space capacity allocated to the plan area.
 - (d) An emission density profile for each grid or plan.
 - (e) Other applicable information which would allow evaluation of the plan such as, but not limited to, scheduling of construction, emission factors, and criteria, guidelines or ordinances applicable to the plan area.
- (2) The Department or Regional Authority having jurisdiction shall hold a public hearing on each Regional Parking and Circulation Plan submitted, and on each proposed revocation or substantial modification thereof, allowing at least thirty (30) days for written comments from the public and from interested agencies.
 - (3) Upon approval of a submitted Regional Parking and Circulation Plan, the plan shall be identified as the approved Regional Parking and Circulation Plan, the appropriate agency shall be notified and the plan used for the purposes and implementation of this rule.
 - (4) The appropriate city, county or Regional Planning Agency shall annually review an approved Regional Parking and Circulation Plan to determine if the plan continues to be adequate for the maintenance of air quality in the plan area and shall report its conclusions to the Department or Regional Authority having jurisdiction.
 - (5) The Department or Regional Authority having jurisdiction shall initiate a review of an approved Regional Parking and Circulation Plan if it is determined that the Regional Parking and Circulation Plan is not adequately maintaining the air quality in the plan area.

20-125 INFORMATION AND REQUIREMENTS APPLICABLE TO INDIRECT SOURCE(S) CONSTRUCTION PERMIT APPLICATIONS WHERE AN APPROVED REGIONAL PARKING AND CIRCULATION PLAN IS ON FILE

- (1) Application Information Requirements:
 - (a) Parking Facilities and Indirect Sources Other Than Highway Sections:
 - (i) A completed application form;
 - (ii) A map showing the location of the site;
 - (iii) A description of the proposed and prior use of the site;
 - (iv) A site plan showing the location of Associated Parking areas, points of motor vehicle ingress and egress to and from the site and Associated Parking;

- (v) A ventilation plan for subsurface and enclosed parking;
- (vi) A written statement from the appropriate planning agency that the Indirect Source in question is consistent with an approved Regional Parking and Circulation Plan or any adopted transportation plan for the region.
- (vii) A reasonable estimate of the effect the project has on total parking spaces approved for any specific grid area and Regional Parking and Circulation Plan area.

(b) Highway Section(s):

- (i) Items (i) through (iii) of subsection 20-125(1)(a).
 - (ii) A written statement from the appropriate planning agency that the Indirect Source in question is consistent with an approved Regional Parking and Circulation Plan and any adopted transportation plan for the region.
 - (iii) A reasonable estimate of the effect the project has on total vehicle miles travelled within the Regional Parking and Circulation Plan Area.
- (2) Within 15 days after the receipt of an application for a permit or additions thereto, the Department or Regional Authority having jurisdiction shall advise the owner or operator of the Indirect Source of any additional information required as a condition precedent to issuance of a permit. An application shall not be considered complete until the required information is received by the Department or Regional Authority having jurisdiction.

20-129 INFORMATION AND REQUIREMENTS APPLICABLE TO INDIRECT SOURCE(S) CONSTRUCTION PERMIT APPLICATION WHERE NO APPROVED REGIONAL PARKING AND CIRCULATION PLAN IS ON FILE

(1) Application information requirements:

- (a) For Parking Facilities and other Indirect Sources with Associated Parking, other than Highway Sections and Airports, with planned construction resulting in total parking capacity for 1000 or more vehicles, the following information shall be submitted:
 - (i) Items (i) through (v) of subsection 20-125(1)(a).
 - (ii) Subsection 20-125(2) shall be applicable.
 - (iii) Measured or estimated carbon monoxide and lead concentrations at Reasonable Receptor and Exposure Sites. Measurements shall be made prior to construction and estimates shall be made for the first, tenth and twentieth years after the Indirect Source and Associated Parking are completed or fully operational. Such estimates shall be made for average and peak operating conditions.

- (iv) Evidence of the compatibility of the Indirect Source with any adopted transportation plan for the area.
 - (v) An estimate of the effect of the operation of the Indirect Source on total vehicle miles traveled.
 - (vi) An estimate of the additional residential, commercial and industrial developments which may occur as the result of the construction and use of the Indirect Source. This shall also include an air quality impact assessment of such development.
 - (vii) Estimates of the effect of the operation and use of the Indirect Source on traffic patterns, volumes, and flow in, on or within one-fourth mile of the Indirect Source.
 - (viii) An estimate of the average daily Vehicle Trips, detailed in terms of the average daily peaking characteristics of such trips, and an estimate of the maximum Vehicle Trips, detailed in one hour and eight hour periods, generated by the movement of people to and from the Indirect Source in the first, tenth and twentieth years after completion.
 - (ix) A description of the availability and type of mass transit presently serving or projected to serve the proposed Indirect Source. This description shall only include mass transit operating within 1/4 mile of the boundary of the Indirect Source.
 - (x) A description of any emission control techniques which shall be used to minimize any adverse environmental effects resulting from the use of the Indirect Source.
- (b) For Parking Facilities and other Indirect Sources with Associated Parking, other than Highway Sections and Airports, with planned construction of parking capacity for 50 to 1000 vehicles; the following information shall be submitted:
- (i) Items (i) through (v) of subsection 20-125(1)(a).
 - (ii) Subsection 20-125(2) shall be applicable. Such additional information may include such items as (iii) through (x) of subsection 20-129(1)(a).
- (c) For Airports, the following information shall be submitted:
- (i) Items (i) through (v) of subsection 20-125(1)(a).
 - (ii) Subsection 20-125(2) shall be applicable.
 - (iii) A map showing the topography of the area surrounding and including the site.
 - (iv) Evidence of the compatibility of the Airport with any adopted transportation plan for the area.
 - (v) An estimate of the effect of the operation of the Airport on total vehicle miles traveled.

- (vi) Estimates of the effect of the operation and use of the Airport on traffic patterns, volumes, and flow in, on or within one-fourth mile of the Airport.
 - (vii) An estimate of the average and maximum number of Aircraft Operations per day by type of aircraft in the first, tenth and twentieth years after completion of the Airport.
 - (viii) Expected passenger loadings in the first, tenth and twentieth years after completion.
 - (ix) Measured or estimated carbon monoxide and lead concentrations at Reasonable Receptor and Exposure Sites. Measurements shall be made prior to construction and estimates shall be made for the first, tenth and twentieth years after the Airport and Associated Parking are completed or fully operational. Such estimates shall be made for average and peak operating conditions.
 - (x) Alternative designs of the Airport, ie. size, location, parking capacity, etc., which would minimize the adverse environmental impact of the Airport.
 - (xi) An estimate of the additional residential, commercial and industrial development which may occur within 3 miles of the boundary of the new or modified Airport as the result of the construction and use of the Airport.
 - (xii) An estimate of the area-wide air quality impact analysis for carbon monoxide, photochemical oxidants, nitrogen oxides and lead particulate. This analysis would be based on the emissions projected to be emitted from mobile and stationary sources within the Airport and from mobile and stationary source growth within 3 miles of the boundary of the Airport. Projections should be made for the first, tenth and twentieth years after completion.
 - (xiii) A description of the availability and type of mass transit presently serving or projected to serve the proposed Airport. This description shall only include mass transit operating within 1/4 mile of the boundary of the Airport.
- (d) For Highway Sections, the following information shall be submitted:
- (i) Items (i) through (iii) of Subsection 20-125(1)(a).
 - (ii) Subsection 20-125(2) shall be applicable.
 - (iii) A map showing the topography of the Highway Section and points of ingress and egress.
 - (iv) The existing average and maximum daily traffic on the Highway Section proposed to be modified.
 - (v) An estimate of the maximum traffic levels for one and eight hour periods in the first, tenth and twentieth years after completion.

- (vi) An estimate of vehicle speeds for average and maximum traffic volumes in the first, tenth and twentieth years after completion.
- (vii) A description of the general features of the Highway Section and associated right-of-way.
- (viii) An analysis of the impact of the Highway Section on the development of mass transit and other modes of transportation such as bicycling.
- (ix) Alternative designs of the Highway Section, ie. size, location, etc., which would minimize adverse environmental effects of the Highway Section.
- (x) The compatibility of the Highway Section with an adopted comprehensive transportation plan for the area.
- (xi) An estimate of the additional residential, commercial and industrial development which may occur as the result of the construction and use of the Highway Section, including an air quality assessment of such development.
- (xii) Estimates of the effect of the operation and use of the Indirect Source on major shifts in traffic patterns, volumes, and flow in, on or within one-fourth mile of the Highway Section.
- (xiii) An analysis of the area-wide air quality impact for carbon monoxide, photochemical oxidants, nitrogen oxides and lead particulates in the first, tenth and twentieth years after completion. This analysis would be based on the change in total vehicle miles traveled in the area selected for analysis.
- (xiv) The total air quality impact (carbon monoxide and lead) of maximum and average traffic volumes. This analysis would be based on the estimates of an appropriate diffusion model at Reasonable Receptor and Exposure Sites. Measurements shall be made prior to construction and estimates shall be made for the first, tenth and twentieth years after the Highway Section is completed or fully operational.
- (xv) Where applicable and requested by the Department, a Department approved surveillance plan for motor vehicle related air contaminants.

20-130 ISSUANCE OR DENIAL OF INDIRECT SOURCE CONSTRUCTION PERMITS

- (1) Issuance of an Indirect Source Construction Permit shall not relieve the permittee from compliance with other applicable provisions of the Clean Air Act Implementation Plan for Oregon.
- (2) Within 20 days after receipt of a complete permit application, the Department or Regional Authority having jurisdiction shall:
 - (a) Issue 20 day notice and notify the Administrator of the Environmental Protection Agency, appropriate newspapers and any interested person(s) who has requested to receive such notices in each region

in which the proposed Indirect Source is to be constructed of the opportunity for written public comment on the information submitted by the applicant, the Department's evaluation of the proposed project, the Department's proposed decision, and the Department's proposed construction permit where applicable.

- (b) Make publicly available in at least one location in each region in which the proposed Indirect Source would be constructed, the information submitted by the applicant, the Department's evaluation of the proposed project, the Department's proposed decision, and the Department's proposed construction permit where applicable.
- (3) Within 60 days of the receipt of a complete permit application, the Department or Regional Authority having jurisdiction shall act to either disapprove a permit application or approve it with possible conditions.
- (4) Conditions of an Indirect Source Construction Permit may include, but are not limited to:
 - (a) Posting transit route and scheduling information.
 - (b) Construction and maintenance of bus shelters and turn-out lanes.
 - (c) Maintaining mass transit fare reimbursement programs.
 - (d) Making a car pool matching system available to employees, shoppers, students, residents, etc.
 - (e) Reserving parking spaces for car pools.
 - (f) Making parking spaces available for park-and-ride stations.
 - (g) Minimizing vehicle running time within parking lots through the use of sound parking lot design.
 - (h) Ensuring adequate gate capacity by providing for the proper number and location of entrances and exits and optimum signalization for such.
 - (i) Limiting traffic volume so as not to exceed the carrying capacity of roadways.
 - (j) Altering the level of service at controlled intersections.
 - (k) Obtaining a written statement of intent from the appropriate public agency(s) on the disposition of roadway improvements, modifications and/or additional transit facilities to serve the individual source.
 - (l) Construction and maintenance of exclusive transit ways.

- (m) Providing for the collection of air quality monitoring data at Reasonable Receptor and Exposure Sites.
 - (n) Limiting facility modifications which can take place without re-submission of a permit application.
 - (o) Completion and submission of a Notice of Completion form prior to operation of the facility.
- (5) An Indirect Source Construction Permit may be withheld if:
- (a) The Indirect Source will cause a violation of the Clean Air Act Implementation Plan for Oregon.
 - (b) The Indirect Source will delay the attainment of or cause a violation of any state ambient air quality standard.
 - (c) The Indirect Source causes any other Indirect Source or system of Indirect Sources to violate any state ambient air quality standard.
 - (d) The applicable requirements for an Indirect Source Construction Permit application are not met.
- (6) Any owner or operator of an Indirect Source operating without a permit required by this rule, or operating in violation of any of the conditions of an issued permit shall be subject to civil penalties and/or injunctions.
- (7) Nothing in this section shall preclude a Regional Authority authorized under Section 20-105 from setting the permit conditions for areas within its jurisdiction at levels more stringent than those detailed in Sections 20-100 through 20-135.
- (8) If the Department shall deny, revoke or modify any Indirect Source Construction Permit, it shall issue an order setting forth its reasons in essential detail.

20-135 PERMIT DURATION

- (1) An Indirect Source Construction Permit issued by the Department or a Regional Authority having jurisdiction shall remain in effect until modified or revoked by the Department or such Regional Authority.
- (2) The Department or Regional Authority having jurisdiction may revoke the permit of any Indirect Source operating in violation of the construction, modification or operation conditions set forth in its permit.

- (3) An approved permit may be revoked without a hearing if construction or modification is not commenced within 18 months after receipt of the approved permit; and, in the case of a permit granted covering construction or modification in approved, planned incremental phases, a permit may be revoked as to any such phase as to which construction or modification is not commenced within 18 months of the time period stated in the initial permit for the commencing of construction of that phase. The Director may extend such time period upon a satisfactory showing by the permittee that an extension is justified.

PROPOSED RULE SHOWING CHANGES

DEPARTMENT OF ENVIRONMENTAL QUALITY

CHAPTER 340, Oregon Administrative Rules

Division 2

AIR POLLUTION CONTROL

Proposed

RULES FOR INDIRECT SOURCES AND MAINTENANCE OF AIR QUALITY STANDARDS

OAR, Chapter 340, Sections 20-050 through 20-070 are repealed and Sections 20-100 through 20-135 are adopted in lieu thereof.

20-100 POLICY. The Commission finds and declares Indirect Sources to be air contamination [contaminant] sources as defined in ORS 468.275 [because by reason of their existence and use air contaminants are emitted into the atmosphere]. The Commission further finds and declares that the regulation of Indirect Sources is necessary to control the concentration of air contaminants which result from Motor Vehicle Trips and/or Aircraft Operations associated with the use of Indirect Sources.

20-105 JURISDICTION AND DELEGATION. The Commission finds that the complexity or magnitude of Indirect Sources requires state-wide regulation and assumes or retains jurisdiction thereof. The Commission may, however, when any Regional Authority requests and provides evidence demonstrating its capability to carry out the provisions of these rules relating to Indirect Sources, authorize and confer jurisdiction upon such Regional Authority to perform all or any of such provisions within its boundary until such authority and jurisdiction shall be withdrawn for cause by the Commission.

20-110 DEFINITIONS.

(1) "Aircraft Operations" means any aircraft landing or takeoff.

(2) [(1)] "Airport" means any area of land or water which is used or intended for use for the landing and takeoff of aircraft, or any appurtenant areas, facilities, or rights-of-way such as terminal facilities, parking lots, roadways, and aircraft maintenance and repair facilities.

(3) [(2)] "Associated Parking" means a parking facility or facilities owned, operated and/or used in conjunction with an Indirect Source.

(4) [(3)] "Average Daily Traffic" means the total traffic volume during a given time period in whole days greater than one day and less than one year divided by the number of days in that time period, commonly abbreviated as ADT.

(5) [(4)] "Commence Construction" means to begin to engage in a continuous program of on-site construction or on-site modifications, including site clearance, grading, dredging, or landfilling in preparation for the fabrication, erection, installation or modification of an indirect source. Interruptions and delays resulting from acts of God, strikes, litigation or other matters beyond the control of the owner shall be disregarded in determining whether a construction or modification program is continuous.

(6) [(5)] "Commission" means the Environmental Quality Commission.

(7) [(6)] "Department" means the Department of Environmental Quality.

(8) [(7)] "Director" means director of the Department or Regional Authority and authorized deputies or officers.

(9) [(8)] "Highway Section" means a highway of substantial length between logical termini (major crossroads, population centers, major traffic generators, or similar major highway control elements) as normally included in a single location study or multi-year highway improvement program.

(10) [(9)] "Indirect Source" means a facility, building, structure, or installation, or any portion or combination thereof, which indirectly causes or may cause mobile source activity that results in emissions of an air contaminant for which there is a state standard. Such Indirect Sources shall include, but not be limited to:

- (a) Highways and roads.
- (b) Parking facilities.
- (c) Retail, commercial and industrial facilities.
- (d) Recreation, amusement, sports and entertainment facilities.
- (e) Airports.
- (f) Office and Government buildings.
- (g) Apartment, condominium developments [buildings] and mobile home [trailer] parks.
- (h) Educational facilities.

(11) [(10)] "Indirect Source Construction Permit" means a written permit in letter form issued by the Department or the Regional Authority having jurisdiction, bearing the signature of the Director, which authorizes the permittee to Commence Construction of an Indirect Source under construction and operation conditions and schedules as specified in the permit.

[(11)] "Landing-Takeoff Cycle" (LTO Cycle) means any aircraft taxi idle, takeoff, climbout, approach and landing, and taxi-idle.)

(12) "Mobile Source" means self-propelled vehicles, powered by internal combustion engines, including but not limited to automobiles, trucks, motor-cycles and aircraft.

(13) "Off-street Area or Space" means any area or space not located on a public road dedicated for public use.

(14) [(13)] "Parking Facility" means any building, structure, lot or portion thereof, designed and used primarily for the temporary storage of motor vehicles.

(15) "Parking Space" means any Off-street Area or Space below, above or at ground level, open or enclosed, that is used for parking one motor vehicle at a time.

(16) [(14)] "Person" means individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the federal government and any agencies thereof.

(17) [(15)] "Population" means that population estimate most recently published by the Center for Population Research and Census, Portland State University[.], or any other population estimate approved by the Department.

(18) [(16)] "Regional Authority" means a regional air quality control authority established under the provisions of ORS 468.505.

(19) [(17)] "Regional Parking and Circulation Plan" means a plan developed by a city, county or regional planning agency, the implementation of which assures the maintenance of the state's ambient air quality standards.

(20) [(17)] "Regional Planning Agency" means any planning agency which has been recognized as a substate-clearinghouse for the purposes of conducting project review under the United States Office of Management and Budget Circular Number A-95, or other governmental agency having planning authority.

(21) [(19)] "Reasonable Receptor and [or] Exposure Sites" means locations where people might reasonably be expected to be exposed to air contaminants[.] generated in whole or part by the Indirect Source in question. Location of ambient air sampling sites and methods of sample collection shall conform to criteria on file with the Department of Environmental Quality.

(22) [(20)] "Vehicle Trip" means a single movement by a motor vehicle which originates or terminates at or uses an Indirect Source.

20-115 INDIRECT SOURCES REQUIRED TO HAVE INDIRECT SOURCE CONSTRUCTION PERMITS.

(1) The owner, operator[,], or developer [or builder] of an Indirect Source identified in subsection 20-115(2) of this section shall not Commence Construction of such a source after December 31, 1974 without an approved Indirect Source Construction Permit issued by the Department or Regional Authority having jurisdiction.

(2) All Indirect Sources meeting the criteria of this subsection relative to type, location, size and operation are required to apply for an Indirect Source Construction Permit:

(a) The following [S]sources in, or within five (5) miles of, the municipal boundaries of a municipality with a Population of 50,000 or more, including but not limited to Portland, Salem and Eugene:

(i) Any Parking Facility or other Indirect Source with Associated Parking being constructed or modified to create new or additional parking (or Associated Parking) capacity of 50 or more [spaces] Parking Spaces.

(ii) Any Highway Section being proposed for construction with an anticipated annual Average Daily Traffic volume of 20,000 or more motor vehicles per day within ten years after completion, or being modified so that the annual Average Daily Traffic on that Highway Section will be increased to 20,000 or more motor vehicles per day or will be increased by 10,000 or more motor vehicles per day within ten years after completion.

(b) Except as otherwise provided in this section, the following sources within Clackamas, Lane, Marion, Multnomah or Washington counties:

(i) Any Parking Facility or other Indirect Source with Associated Parking being constructed or modified to create new or additional parking (or Associated Parking) capacity of 500 or more Parking Spaces.

(ii) Any Highway Section being proposed for construction with an anticipated annual Average Daily Traffic volume of 20,000 or more motor vehicles per day within ten years after completion, or being modified so that the annual Average Daily Traffic on that Highway Section will be 20,000 or more motor vehicles per day, or will be increased by 10,000 or more motor vehicles per day, within ten years after completion.

(c) Except as otherwise provided in this section, the following sources in all areas of the state:

(i) Any Parking Facility or other Indirect Source with Associated Parking being constructed or modified to create new or additional parking (or Associated Parking) capacity of 1,000 or more Parking Spaces.

(ii) Any Highway Section being proposed for construction with an anticipated annual Average Daily Traffic volume of 50,000 or more motor vehicles per day within ten years after completion, or being modified so that the annual Average Daily Traffic on that highway Section will be 50,000 or more motor vehicles per day, or will be increased by 25,000 or more motor vehicles per day, within ten years after completion.

(d) Any Airport being proposed for construction with projected annual Aircraft Operations [LTO Cycles] of 50,000 or more within ten years after completion, or being modified in any way so as to increase the projected number of annual Aircraft Operations [LTO Cycles] by 25,000 or more within 10 years after completion.

(5) Where an Indirect Source is constructed or modified in increments which individually are not subject to review under this section, and which are not part of a program of construction or modification in planned incremental phases approved by the Director, all such increments commenced after January 1, 1975 shall be added together for determining the applicability of this [section] rule.

(6) An Indirect Source Construction Permit may authorize more than one phase of construction, where commencement of construction or modification of successive phases will begin over acceptable periods of time referred to in the permit; and thereafter construction or modification of each phase may be begun without the necessity of obtaining another permit.

20-120 ESTABLISHMENT OF AN APPROVED REGIONAL PARKING AND CIRCULATION PLAN(S) BY A CITY, COUNTY OR REGIONAL PLANNING AGENCY.

(1) Any city, county or Regional Planning Agency may submit a Regional Parking and Circulation Plan to the Department or to the Regional Authority having jurisdiction for approval. Such a plan shall include, but not be limited to:

- (a) Legally identifiable plan boundaries.
- (b) Reasonably uniform identifiable grids where applicable.
- (c) Total parking space capacity allocated to the plan area.
- (d) An emission density profile for each grid or plan.

(e) Other applicable information which would allow evaluation of the plan such as, but not limited to, scheduling of construction, emission factors, and criteria, guidelines or ordinances applicable to the plan area.

(2) The Department or [and] Regional Authority having jurisdiction shall hold a public hearing on each Regional Parking and Circulation Plan submitted, and on each proposed revocation or substantial modification thereof, allowing at least thirty (30) days for written comments from the public and from interested agencies.

(3) Upon approval of a submitted Regional Parking and Circulation Plan, the plan shall be identified as the approved Regional Parking and Circulation Plan, the appropriate agency shall be notified and the plan used for the purposes and implementation of this rule.

(4) The appropriate city, county or Regional Planning Agency shall annually review an approved Regional Parking and Circulation Plan to determine if the plan continues to be adequate for the maintenance of air quality in the plan area and shall report its conclusions to the Department or Regional Authority having jurisdiction.

(5) The Department or Regional Authority having jurisdiction shall initiate a review of an approved Regional Parking and Circulation Plan if it is determined that the Regional Parking and Circulation Plan is not adequately maintaining the air quality in the plan area.

NOTE: Former sections 20-125 and 20-127 have been combined. New section 20-125 follows (there is no section 20-127).

20-125 INFORMATION AND REQUIREMENTS APPLICABLE TO INDIRECT SOURCE(S) CONSTRUCTION PERMIT APPLICATIONS WHERE AN APPROVED REGIONAL PARKING AND CIRCULATION PLAN IS ON FILE.

(1) Application Information Requirements:

(a) Parking Facilities and Indirect Sources other than Highway Sections:

- (i) A completed application form;
- (ii) A map showing the location of the site;
- (iii) A description of the proposed and prior use of the site;
- (iv) A site plan showing the location of Associated Parking areas, points of motor vehicle ingress and egress to and from the site and Associated Parking;
- (v) A ventilation plan for subsurface and enclosed parking;
- (vi) A written statement from the appropriate planning agency that the Indirect Source in question is consistent with an approved Regional Parking and Circulation Plan and any adopted transportation plan for the region;
- (vii) A reasonable estimate of the effect the project has on total parking spaces approved for any specific grid area and Regional Parking and Circulation Plan area.

(b) Highway Section(s):

- (i) Items (i) through (iii) of subsection 20-125(1)(a);
- (ii) A written statement from the appropriate planning agency that the Indirect Source in question is consistent with an approved Regional Parking and Circulation Plan and any adopted transportation plan for the region;
- (iii) A reasonable estimate of the effect the project has on total vehicle miles travelled within the Regional Parking and Circulation Plan area;

(2) Within 15 days after the receipt of an application for a permit or additions thereto, the Department or Regional Authority having jurisdiction shall advise the owner or operator of the Indirect Source of any additional information required as a condition precedent to issuance of a permit. An application shall not be considered complete until the required information is received by the Department or Regional Authority having jurisdiction.

20-129 INFORMATION AND REQUIREMENTS APPLICABLE TO INDIRECT SOURCE(S) CONSTRUCTION PERMIT APPLICATION WHERE NO APPROVED REGIONAL PARKING AND CIRCULATION PLAN IS ON FILE.

(1) Application information requirements:

(a) For Parking Facilities and other Indirect Sources with Associated Parking, other than Highway Sections and Airports, with planned construction resulting in total parking capacity for [parking capacity of] 1000 or more vehicles, the following information shall be submitted:

- (i) Items (i) [(a)] through (v) [(e)] of subsection 20-125(1)(a).
- (ii) Subsection 20-125(2) shall be applicable.
- (iii) Measured or estimated carbon monoxide and lead concentrations at Reasonable Receptor and Exposure Sites. Measurements shall be made prior to construction and estimates shall be made for the first, tenth and twentieth years after the Indirect Source and Associated Parking are completed or fully operational. Such estimates shall be made for average and peak operating conditions.
 - [(iv) Alternative designs of the Indirect Source, i.e. size, location, parking capacity, etc., which would minimize the adverse environmental impact of the Indirect Source.]
 - [(iv) [(v)] Evidence of the compatibility of the Indirect Source with any adopted transportation plan for the area.
 - [(v) [(vi)] An estimate of the effect of the operation of the Indirect Source on total vehicle miles traveled.
 - [(vi) [(vii)] An estimate of the additional residential, commercial, and industrial developments which may occur as the result of the construction and use of the Indirect Source. This shall [would] also include an air quality impact assessment of such development.
 - [(vii) [(viii)] Estimates of the effect of the operation and use of the Indirect Source on traffic patterns, volumes, and flow in, on or within one-fourth mile of the Indirect Source.
 - [(viii) [(ix)] An estimate of the average daily Vehicle Trips, detailed in terms of the average daily peaking characteristics of such trips, and an estimate of the maximum Vehicle Trips, detailed in one hour and eight hour periods, generated by the movement of people to and from the Indirect Source in the first, tenth and twentieth years after completion.

(ix) [(x)] A description of the availability and type of mass transit presently serving or projected to serve the proposed Indirect Source. This description shall only include mass transit operating with 1/4 mile of the boundary of the Indirect Source.

(x) [(xi)] A description of any emission control techniques which shall [will] be used to minimize any adverse environmental effects resulting from the use of the Indirect Source.

(b) For Parking Facilities and other Indirect Sources with Associated Parking, other than Highway Sections and Airports, with planned construction of parking capacity for [parking capacity of] 50 to 1000 vehicles; the following information shall be submitted:

(i) Items (i) [(a)] through (v) [(e)] of subsection 20-125(1)(a).

(ii) Subsection 20-125(2) shall be applicable. Such additional information may include such items as (iii) through (x) [(xi)] of subsection 20-129(1)(a).

(c) For Airports[:]; the following information shall be submitted:

(i) Items (i) [(a)] through (v) [(e)] of subsection 20-125(1)(a).

(ii) Subsection 20-125(2) shall be applicable.

(iii) A map showing the topography of the area surrounding and including the site.

(iv) Evidence of [T]the compatibility of the Airport [Indirect Source] with any adopted transportation plan for the area.

(v) An estimate of the effect of the operation of the Airport [Indirect Source] on total vehicle miles traveled.

[(vi) An estimate of the additional residential, commercial and industrial development which may occur as the result of the construction and use of the Indirect Source, including air quality assessment of such development.]

(vi) [(vii)] Estimates of the effect of the operation and use of the Airport [Indirect Source] on traffic patterns, volumes, and flow in, on or within one-fourth mile of the Airport [Indirect Source].

(vii) [(viii)] An estimate of the average and maximum number of Aircraft Operations [LTO Cycles] per day by type of aircraft in the first, tenth [fifth] and twentieth [tenth] years after completion of the Airport.

(viii) [(ix)] Expected passenger loadings in the first, tenth [fifth] and twentieth [tenth] years after completion.

(ix) [(x)] Measured or estimated carbon monoxide and lead concentrations at Reasonable Receptor and Exposure Sites. Measurements shall be made prior to construction and estimates shall be made for the first, tenth and twentieth years after the Airport [Indirect Source] and Associated Parking are completed or fully operational. Such estimates shall be made for average and peak operating conditions.

(x) [(xi)] Alternative designs of the Airport [Indirect Source], i.e. size, location, parking capacity, etc., which would minimize the adverse environmental impact of the Airport [Indirect Source].

(xi) [(xii)] An estimate of the additional residential, commercial and industrial development which may occur within 3 miles of the boundary of the new or modified Airport as the result of the construction and use of the Airport.

(xii) [(xiii)] An estimate of the area-wide air quality impact analysis for carbon monoxide, photochemical oxidants, nitrogen oxides and lead particulate. This analysis would be based on the emissions projected to be emitted from mobile and stationary sources within the Airport and from mobile and stationary source growth within 3 miles of the boundary of the Airport. Projections should be made for the first, tenth [fifth] and twentieth [tenth] years after completion.

(xiii) [(xiv)] A description of the availability and type of mass transit presently serving or projected to serve the proposed Airport [Indirect Source]. This description shall only include mass transit operating within 1/4 mile of the boundary of the Airport [Indirect Source].

(d) For Highway Sections, the following information shall be submitted: [in addition to a completed application form:]

(i) Items (i) [(a)] through (iii) [(c)] of subsection 20-125(1) (a).

(ii) Subsection 20-125(2) shall be applicable.

(iii) A map showing the topography of the Highway Section and points of ingress and egress.

[(iv) An estimate of the average and maximum traffic levels for one, eight and 24 hour periods in the first, fifth and tenth years after completion.]

(iv) The existing average and maximum daily traffic on the Highway Section proposed to be modified.

[(v) The average and maximum daily traffic on a Highway Section proposed to be modified.]

(v) An estimate of the maximum traffic levels for one and eight hour periods in the first, tenth and twentieth years after completion.

(vi) An estimate of vehicle speeds for average and maximum traffic volumes in the first, [fifth and] tenth and twentieth years after completion.

(vii) A description of the general features of the Highway Section and associated right-of-way.

(viii) An analysis of the impact of the Highway Section on the development of mass transit and other modes of transportation such as bicycling.

(ix) Alternative designs of the Highway Section [Indirect Source], i.e. size, location, [parking capacity,] etc., which would minimize adverse environmental effects of the Highway Section [Indirect Source].

(x) The compatibility of the Highway Section [Indirect Source] with an adopted comprehensive transportation plan for the area.

[(xi) An estimate of the effect of the operation of the Indirect Source on total vehicle miles traveled within the corridor in which the Indirect Source is located.]

(xi) [(xii)] An estimate of the additional residential, commercial and industrial development which may occur as the result of the construction and use of the Highway Section [Indirect Source], including an air quality assessment of such development.

(xii) [(xiii)] Estimates of the effect of the operation and use of the Indirect Source on major shifts in traffic patterns, volumes, and flow in, on or within one-fourth mile of the Highway Section [Indirect Source].

(xiii) [(xiv)] An analysis of the area-wide air quality impact for carbon monoxide, photochemical oxidants, nitrogen oxides and lead particulates[.] in the first, tenth and twentieth years after completion.

This analysis would be based on the change in total vehicle miles traveled in the area selected for analysis.

(xiv) [(xv)] The total air quality impact (carbon monoxide and lead) of maximum and average traffic volumes. This analysis would be based on the estimates of an appropriate diffusion model at Reasonable Receptor and Exposure Sites. Measurements shall be made prior to construction and estimates shall be made for the first, tenth and twentieth years after the Highway Section is completed or fully operational.

(xv) [(xvi)] Where applicable and requested by the Department, a Department approved surveillance plan for motor vehicle related air contaminants.

20-130 ISSUANCE OR DENIAL OF INDIRECT SOURCE CONSTRUCTION PERMITS.

(1) Issuance of an Indirect Source Construction Permit shall not relieve the permittee from compliance with other applicable provisions of the Clean Air Act Implementation Plan for Oregon.

(2) Within 20 days after receipt of a complete permit application, the Department or Regional Authority having jurisdiction shall:

(a) Issue 20 day notice and notify the Administrator of the Environmental Protection Agency, appropriate newspapers and any interested person(s) who has requested to receive such notices in each region in which the proposed Indirect Source is to be constructed of the opportunity for written public comment on the information submitted by the applicant, the Department's evaluation of the proposed project, the Department's proposed decision[.], and the Department's proposed construction permit where applicable.

(b) Make publicly available in at least one location in each region in which the proposed Indirect Source would be constructed[,] the information submitted by the applicant, the Department's evaluation of the proposed project, the Department's proposed decision, and the Department's proposed construction permit where applicable. [information pertinent to the project application.]

(3) Within 60 days of the receipt of a complete permit application, the Department or Regional Authority having jurisdiction shall act to either disapprove a permit application or approve it with possible conditions.

(4) Conditions of an Indirect Source Construction Permit may include, but are not limited to:

[(a) Minimizing vehicle running time within parking lots through the use of sound parking lot design.]

(a) Posting transit route and scheduling information.

[(b) Ensuring adequate gate capacity by providing for the proper number and location of entrances and exits and optimum signalization for such.]

(b) Construction and maintenance of bus shelters and turn-out lanes.

[(c) Limiting traffic volume so as not to exceed the carrying capacity of roadways significantly affected by the Indirect Source.]

(c) Maintaining mass transit fare reimbursement programs.

[(d) Altering the level of service at controlled intersections significantly affected by the Indirect Source.]

(d) Making a car pool matching system available to employes, shoppers, students, residents, etc.

[(e) Construction and maintenance of bus shelters and turn-out lanes.]

(e) Reserving parking spaces for car pools.

(f) Making parking spaces available for park-and-ride stations.

[(g) Reserving parking spaces for car pools.]

(g) Minimizing vehicle running time within parking lots through the use of sound parking lot design.

[(h) Posting transit route and scheduling information.]

(h) Ensuring adequate gate capacity by providing for the proper number and location of entrances and exits and optimum signalization for such.

[(i) Maintaining mass transit fare reimbursement programs.]

(i) Limiting traffic volume so as not to exceed the carrying capacity of roadways.

[(j) Construction and maintenance of exclusive transit ways.]

(j) Altering the level of service at controlled intersections.

[(k) Making a car pool matching system available to employes, shoppers, students, residents, etc.]

(k) Obtaining a written statement of intent from the appropriate public agency(s) on the disposition of roadway improvements, modification and/or additional transit facilities to serve the individual source.

[(l) Obtaining a written statement of intent from the appropriate public agency(s) on the disposition of roadway improvements and/or additional transit facilities to serve the individual source.]

(l) Construction and maintenance of exclusive transit ways.

(m) Providing for the collection of air quality monitoring data at Reasonable Receptor and Exposure Sites.

(n) Limiting facility modifications which can take place without resubmission of a permit application.

(o) Completion and submission of a Notice of Completion form prior to operation of the facility.

(5) An Indirect Source Construction Permit may be withheld if [shall not be granted if]:

(a) The Indirect Source will cause a violation of the Clean Air Act Implementation Plan for Oregon.

(b) The Indirect Source will delay the attainment of or cause a violation of any state ambient air quality standard.

(c) The Indirect Source causes any other Indirect Source or system of Indirect Sources to violate any state ambient air quality standard.

(d) The applicable requirements for an Indirect Source Construction Permit application are not met.

(6) Any owner or operator of an Indirect Source operating without a permit required by this rule, or operating in violation of any of the conditions of an issued permit shall be subject to civil penalties and/or injunctions.

(7) Nothing in this section shall preclude a Regional Authority authorized under section 20-105 from setting the permit conditions for areas within its jurisdiction at levels more stringent than those detailed in sections 20-100 through 20-135.

(8) If the Department shall deny, revoke or modify any Indirect Source Construction Permit, it shall issue an order setting forth its reasons in essential detail.

20-135 PERMIT DURATION.

(1) An Indirect Source Construction Permit issued by the Department or a Regional Authority having jurisdiction shall remain in effect until modified or revoked by the Department or such Regional Authority.

(2) The Department of Regional Authority having jurisdiction may revoke the permit of any Indirect Source operating in violation of the construction, modification or operation conditions set forth in its permit.

(3) An approved permit may be revoked without a hearing if construction or modification is not commenced within 18 months after receipt of the approved permit[.]; and, in the case of a permit granted covering construction or modification in approved, planned incremental phases, a permit may be revoked as to any such phase as to which construction or modification is not commenced within 18 months of the time period stated in the initial permit for the commencing of construction on that phase. The Director may extend such time period upon a satisfactory showing by the permittee that an extension is justified.

APPENDIX B



DEPARTMENT OF ENVIRONMENTAL QUALITY

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TOM McCALL
GOVERNOR

KESSLER R. CANNON
Director

To: Environmental Quality Commission
From: Hearings Officer
Subject: Rulemaking Hearing on Indirect Sources and
Maintenance of Air Quality Standards

Background

Following an initial hearing on proposed rules for indirect sources and maintenance of air quality standards on Monday, June 24, 1974, extensive revision of the proposed rules took place. It became appropriate to give the revised proposals wide distribution and again call for hearing.

This second hearing was held Tuesday, October 29, 1974 before DEQ Deputy Director Ronald L. Myles. Thomas Guilbert, who had been the hearings officer for the previous hearing, and who had been scheduled to preside over this one, had left the employ of DEQ and was not available to conduct the hearing.

Indirect sources (previously referred to as "complex sources") of air pollution are those sources where air contaminants do not emit from a single point or collection of fixed points. Such sources principally include structures or areas (such as highways, airports, parking lots and parking structures) that attract moving sources of pollution (such as motor vehicles and aircraft).

In 1972, when the Environmental Quality Commission (EQC) adopted Oregon's Clean Air Act Implementation Plan, EQC adopted OAR, Chapter 340, Sections 20-050 through 20-070, entitled Parking Facilities and Highways in Urban Areas. The Environmental Protection Agency (EPA) subsequently found that those rules failed to meet the requirements of federal regulations since they



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"do not set forth legally enforceable procedures for preventing construction or modification of an indirect source if such construction or modification will result in a violation of applicable portions of the control strategy or will interfere with attainment or maintenance of a national standard."

40 CFR 52.1982, 39 Fed. Reg. 7283 (February 25, 1974).

This statement by the EPA particularized the application of 40 CFR 51.18 (38 Fed. Reg. 15834, June 18, 1973) to Oregon. That section requires that all state implementation plans contain adequate legal authority to conduct review of air contaminant sources which may indirectly result in an increase in the ambient air of air contaminants emitted by motor vehicles and aircraft.

Essentially, the revised, proposed rules define indirect sources required to have indirect source construction permits, and delineate those requirements, information, and procedures to be applied in seeking such permits.

The October 29 hearing was held in the Public Service Building auditorium in Portland, Oregon beginning at 9:07 a.m. The record was held open for written comments through Tuesday, November 5, 1974.

Summary of Oral Testimony

It had been assumed by many that the scheduled hearing would proceed for quite some time on October 29. While many people were present at the start of the hearing, only four people during the initial half hour came forth to testify. Their testimony, as indicated below, was brief.

There being no further witnesses to testify, the hearing was adjourned for all but written testimony at 9:25 a.m. Thereafter, in the following hour, other witnesses drifted in with the intention of testifying. Finding the oral presentation period adjourned, these delivered written testimony to the hearing officer or expressed their intent to do so within the established period.

Lee Riley, representing Glen Odell Consulting Engineers of Portland, read into the record a letter from F. Glen Odell. In substance, the letter asked for the deletion from the rules of the requirement for projecting the impact of sources on ambient air lead concentrations (Sections 20-129 (1) (a)

(iii), (c) (xiii), and (d) (xv)). Reasons expressed included absence of applicable federal standards, lack of technical agreement on the relationship of automobile emissions and ambient air lead, and eventual alleviation of any existing problems by the federal lead-in-gasoline reduction program. Aside from this recommendation, Mr. Odell was supportive of the rules.

Herbert Althouse, First Union Management, Mall 205, spoke to portions of an October 18, 1974 letter from Mr. Bruce H. Anderson of Coons, Cole & Anderson, attorneys at law in Eugene, Oregon, while affirming the entire content of the letter. The portion Mr. Althouse read into the record pertains to Section 20-100 of the proposed rules. It argues that shopping centers do not constitute an air contaminant source as defined in ORS 468.275, that such shopping centers should not be required to obtain an indirect source construction permit, and that the Commission should demonstrate the basis for the conclusion that regulation of shopping center construction is necessary to control the concentration of air contaminants at one or more reasonable receptor sites on the shopping center premises. (Remainder of Mr. Anderson's comments are included below under "Summary of Written Testimony".)

Douglas P. Sowles, representing the Association of General Contractor's environmental committee, made the single request that the reference to "builder" in Section 20-115 (1) be stricken from the paragraph. The reference makes the owner, operator, developer or builder responsible for obtaining indirect source construction permits. Mr. Sowles argues the permit responsibility should always be that of the owner, operator or developer, and further that the reference might suggest the need for a builder to obtain a permit even when the party for whom he is doing the work has already obtained the permit.

Norm Edmisten of the Oregon Operations Office of the U.S. Environmental Protection Agency testified that EPA was generally satisfied with the proposed rules but required more time to make written comment. He agreed to abide by the November 5, 1974 cut-off date for receipt of written testimony.

Summary of Written Testimony

Bruce H. Anderson, Coos, Cole & Anderson, attorneys at law, Eugene submitted a letter introduced in oral testimony by Herbert Althouse (above). In addition to the testimony presented by Mr. Althouse, Mr. Anderson cites a number of other changes he would have the Commission make in the proposed rules.

He - would remove a reference to combinations of indirect sources on the grounds a developer should not be responsible for the impact of indirect sources other than his (Section 20-110(9));

- argues that operational conditions should not be part of the permit, objecting to DEQ or regional authorities presuming to dictate daily operating conditions, such as through inclusion of construction schedules in the original permit (Section 20-110 (10));

- asked for additional language to increase specificity in identifying and using receptor or exposure sites (Section 20-110 (19));

- seeks 500 (as opposed to 50) and 1,000 (as opposed to 500) parking spaces as the minimums requiring permit applications (Section 20-115 (2) (a) (i) and (b) (i));

- sees need to clarify provisions that might suggest existing, as well as proposed, parking facilities are included (Section 20-129 (1) (a) & (b));

- seeks reasonable opportunity for applicant to rebut adverse comment from the public (Section 20-130);

- finds Section 20-130 (4) (c) & (d) confusing and beyond the control of the developer; (f), (i), and (j) unconstitutional; and (k) needing clarification with regard to making car pool systems available;

- wants rewording of Section 20-130 to insure denial or revocation of permits are based on specific reasons for actions, not conclusions;

- suggests wording to recognize and approve phased-in construction (Sections 20-135 (3), 20-110 (4), and 20-115); and

- suggests wording to make no further permit applications necessary, once granted, unless applicant seeks to modify his indirect source or has his permit revoked (Section 20-135 (1)).

F. Glen Odell's letter is covered above in Lee Riley's oral testimony (page 2).

Donald L. Jones, executive secretary, League of Oregon Cities, seeks a DEQ commitment to consult with local governments

prior to making a determination that a proposed indirect source may not be constructed or may be constructed only if modified. With regard to city street projects (Section 20-120), he asks for a "working agreement" similar to one between DEQ and the Oregon State Highway Division (see page 10). Two provisions in Section 20-130, -- one limiting traffic volume (c), the other altering level of service at controlled inter-sections (d) -- he says may be difficult or impossible for a city to meet due to legal and budgetary constraints. In the same Section, he finds item (1), which calls for obtaining a written statement of intent from appropriate public agencies, may run up against city charters containing remonstrance provisions (against proposed public improvements) that make binding written commitments from a city an impossibility.

Mr. Jones, under Section 20-130 (5), raises an issue of a proposed street project in Eugene (presumably at 30th and Hilyard) which, if constructed, would violate air quality standards initially, but thereafter would improve air quality in Eugene. He maintains this Section would preclude issuing permits to projects, in effect, with short-term violations in favor of long-term better air quality.

Mr. Jones questions the propriety of DEQ being able to modify or revoke a permit, thereby affecting subsequent construction costs (Section 20-135 (1)). His point is that applicant decisions, based on cost factors known at time of construction, might not be made with prior knowledge of DEQ subsequently added cost factors.

Finally, Mr. Jones wonders whether implicit in the authority to revoke a permit of any indirect source includes the ability to close the facility to further public use (Section 20-135 (2)). The answer to that is contained in Section 20-130 (6) which provides for civil penalties and/or injunctions.

Hugh McKinley, city manager, City of Eugene, opposes delegation of jurisdiction to regional authorities (Section 20-105) and the right of such authorities to impose more restrictive conditions (Section 20-130 (7)). He is not clear as to whether "associated parking" includes "covered parking", but feels covered parking should not be included (Section 20-110 (2)). The definition of "reasonable receptor or exposure sites" (19), he says, does not clearly outline the impact on the EugeneSpringfield metropolitan area to reveal the financial burdens on local governments.

Mr. McKinley takes exception to the "50 spaces or more" minimum for parking facility permits (which, he says, departs from the intention of EPA), the "within 5 miles of municipal boundary" requirement (which instead should agree with the urban service area), and the treatment of phased in construction projects (Subsection 5). He is concerned with proliferation of 49 space parking facilities, and the inability to "crystal ball" future parking requirements in phased construction programs.

Section 20-129 leaves Mr. McKinley in question as to city fiscal burdens in providing monitoring and other studies data. He questions leaving the decision to staff personnel as to how many requirements to impose on indirect sources. He questions whether an environmental impact statement (EIS) for a federal project shouldn't be sufficient as a substitute for highway project requirements in these rules. And he says the airport requirements are "overabundant."

Finally, Mr. McKinley raises the Section 20-130 (5) question of initial air quality violations for a project that accomplishes long-term air quality goals. The EIS for the 30th and Hilyard project indicates worsening of air quality within the first year or two but improvement by 1982, says Mr. McKinley. The EIS also shows the "no build" alternative would result in greater pollution levels than the proposed widening project. As does Mr. Jones (above), Mr. McKinley concludes the Section is therefore overly restrictive.

Fred VanNatta, executive officer, Oregon State Home Builders Association, begins his testimony with a series of questions designed to "clarify the record" along with a reiteration of a request to the DEQ to provide the "data used to develop the 50-space standard incorporated in these rules." The questions pertain to the possible combinations and types of entity that might qualify as indirect sources requiring application for permits. The inclusion of Section 20-110 (9), which identifies indirect sources but includes the phrase "but not limited to", indicates the scope of the types of entity that may qualify as indirect sources. Whether in fact a particular combination of circumstances causes an apparent indirect source from being considered as such (i.e. not meeting the implicit or explicit purpose of these rules) is, this officer finds, a matter for the Commission to consider as operating policy within the rules (per ORS 468.015) and not a matter for the rules themselves.

As to data substantiating the 50-space standard, these proposed rules and many rules already in effect contain minimum and maximum limits for the purpose of practical administration, along with other criteria used to justify such figures -- if any. The present rules talk to "50,000 population," to sources "in or within five miles," to Average Daily traffic volume of 20,000 or more motor vehicles, and so on. Having defined "indirect source" and having declared indirect sources to be air contaminant sources (Section 20-100), the rules in Section 20-115 proceed to define the extent to which such sources will be considered. Presumably, therefore, the 50 space minimum of Section 20-115 (2) (a) (i) is the lowest number of spaces practically administered at the state level for municipalities of 50,000 population or more. Similarly, the federal government might conclude that 1,000 spaces is the minimum it can deal with effectively on an administration basis. To assume, therefore, that 1,000 spaces represents the true minimum at which air pollution occurs, or that such a federal minimum inherently meets the air quality needs of Oregon, is fatuous.

At a time when testing individual motor vehicles for emissions is recognized as pertinent to reducing air pollution, certainly any number, one or greater, of parking spaces for such vehicles is appropriately considered. The number 50, for whatever other data used in selecting it, can be considered as a practical lower limit, given the anticipated number of such applications, the processing time, the social, economic, and political factors associated with urban growth and development, as well as the potential air pollution impact of 50 times one motor vehicle emitting air pollution.

Mr. VanNatta requests the technical basis for Section 20-100 (the policy statement) and 20-105 (jurisdiction and delegation). In addition to the citing of ORS 468.275 in Section 20-100, this officer finds it sufficient to refer to ORS 468.280 (the statutory policy) and ORS 468.295 (which speaks to what the EQC may do by rule as to air purity and air quality standards). For purposes of this rulemaking, no technical basis is found by this officer to be required.

Delegation to regional authorities, particularly the authorization to those authorities to adopt more restrictive standards, is opposed. While what the rules propose is in keeping with provisions of ORS 468.535, and considerable precedence exists, Mr. VanNatta charges the result will be "confusion, lack of uniformity, and more restrictive standards which escalate housing costs."

Mr. VanNatta feels the definitions of "associated parking," "parking facility" and "trailer park" can be broadly construed. This, again, is consistent with the removal of any limiting factor in Section 20-110(9) which extends the types of entity covered to all those meeting the definition of "indirect source."

Under Section 20-115, Mr. VanNatta makes a strong plea in opposition to the 50-space standard, arguing essentially the burden of costs (but producing no admissible evidence to support his claim). He further suggests "the way to avoid costly litigation over these standards is to simply exempt all parking relating to residential dwelling units, both single and multifamily." It is perhaps sufficient to remind Mr. VanNatta that the proposed rules, if adopted, come under ORS 468.345 which provides for variances for specific persons or class of persons should the Commission find strict compliance is inappropriate for reasons cited in that statute.

Mr. VanNatta feels Section 20-125 (2) cuts off appeal to the Commission if the Department rules "additional information" is needed. (The application, under the proposed rules, is not considered complete until the required information is received.) This officer finds the subsection consistent with ORS 468.065 (3) which allows for requiring "such other reasonable information as it considers necessary to determine the eligibility of the applicant for the permit."

Under Section 20-129 (1) (iv), Mr. VanNatta opposes the requirement for "alternative designs" to be submitted. This officer finds it conceivable that in some instances such alternatives might not exist. The wording of this Section does not allow for such possibility, and the Department is requested to consider the need for additional words that provide for such possibility if it exists.

Mr. VanNatta would have Subsections (e) through (k) of Section 20-130 (4) stricken from the list of conditions. He accepts the remaining conditions only "if they are necessary because the 'indirect source' would cause the air quality basin to violate the standards." He further argues the need for a citizen to reasonably be able to predict the likelihood of obtaining a permit. It should be noted Section 20-130 (4) says the listed conditions "may include, but are not limited to:". Striking some conditions from the list would therefore not preclude their being used. The conditions themselves are appealable. The conditions are presumed to be used

consistent with Mr. VanNatta's expressed justification above. Finally, inclusion of all the conditions (described by Mr. VanNatta as a "horror list") presumably aids the citizen in his ability to predict the likelihood of receiving a permit.

Section 20-130 (5) (b) can be read, says Mr. VanNatta, in such manner as to preclude the issuance of any permit for an indirect source which, he indicates, inherently will "delay the attainment of" any state ambient air quality standard. The language of the Subsection is indeed unequivocal, but may be so to meet federal requirements. The Department is nevertheless asked to consider the reasonableness of adding a modifier to invalidate a reading that precludes any indirect source permit from being issued.

Finally, Mr. VanNatta finds the standards for "modifying or revoking" a permit unclear. ORS 468.070, which covers denial, modification, suspension or revocation of permits, provides both clarity and justification. The presence of this statute does not apparently deter lenders from financing structures under DEQ permits.

Wally Hibbard, representing the Oregon State Highway Division, says the Division would accept Section 20-130 (5) subject to two conditions: that DEQ take immediate steps to bring all existing indirect sources into compliance, and that DEQ provide certifications to applicants of consistency with the Clean Air Act and the absence of existing indirect sources in violation with the ambient air quality standards. The conditions are duly noted but are not germane to this proceeding. ORS 468.280(2) (air pollution control policy) requires the program for the control of air pollution to "be undertaken in a progressive manner" but does not require coincidental commencement with existing sources.

Mr. Hibbard raises the same question brought by Messrs. Jones (page 5) and McKinley (page 6) with regard to short-term ambient violations in return for meeting long-term air quality needs.

He demands that, for each condition placed in a permit, DEQ fully document the reason for the condition, its effect in minimizing adverse impacts, and the consistency of the condition with adopted land use and transportation plans, in a detailed report to the applicant within 60 days of a complete permit application. Short of this, the Highway Division

says it should be left to decide on how to bring an indirect source within standards with DEQ only insuring compliance with standards.

The Highway Division opposes considering lead particulate in the rules until DEQ adopts an ambient standard for lead.

It also points to the lack of recognition in the proposed rules of a "working agreement" being finalized at this time (October 29) between DEQ and the Highway Division. This officer does not pretend knowledge of any agreement but notes that the proposed rules if adopted would have the effect of law, whereas agreements generally do not have such effect. The appropriateness of the contents of the alleged agreement, since the DEQ is apparently one of the parties to the agreement, has inherently been left to the DEQ which drafted the proposed rules. But the inclusion of an agreement per se, unless the intent is to preserve the agreement as a rule, appears inappropriate.

Mr. Hibbard raises the question as to when, how, and to what extent these rules, if put into effect, would apply to projects in progress. The proposed rules, as they stand, make clear that all indirect source projects for which construction has not commenced on or before December 31, 1974 must comply (Section 20-115 (1)).

Mr. Hibbard wants DEQ and not regional authorities to have review responsibilities (Section 20-105) to consider overriding state-wide significance of projects. He would have Average Daily Traffic (ADT) use the total of a year's traffic divided by the number of days in the year (Section 20-110 (3)). He would add a definition of "construction," though this officer suggests the definition of "Commence Construction" (Section 20-110 (4)) is sufficient. He suggests the issue of population estimates (Section 20-110 (15)) is getting complicated, but the Section clearly identifies which estimate to use. He would delete a portion of Section 20-110 (19) for lack of a set of criteria referenced therein, although the reference notes where the criteria is to be found.

He suggests deletion of Section 20-127 (1) (b) (iii) on the grounds of difficulty to reliably determine the effects of a project on total vehicle miles travelled within an area. He calls excessive a requirement for 18 different traffic data sets under Section 20-129 (1) (d) (iv), then says (v) should be deleted since it is covered in (iv).

Finally, Mr. Hibbard says the criteria for modifying or revoking a permit should be spelled out and serve as the only reasons for such action. (Section 20-135). ORS 468.070, this officer believes, serves this end.

Mary Ann Donnell, president of the Oregon Environmental Council, asks, under Section 20-120 (parking and circulation plans), what means and to what extent monitoring is intended in (4) for the annual review, and against what data base. She raises essentially the same question with regard to (5). Under Section 20-129 (1) (a) (iii), she asks if provision is made for follow-up on pre-construction pollution measurements. Section 20-130 (4) (m) indicates there can be. In Section 20-129 (1) (a) (v) she suggests adding proposed transportation plans to adopted ones with regard to evidence of compatibility, because of the long process of formulating and processing transit plans. She calls for provision, as a condition under Section 20-130 (4), of parking and paths for bicycles and motorcycles as incentives for these modes. (The conditions of (4) are not limited to those recited.)

Steve Hawes, legislative director of the Oregon Association of Realtors, proposes limiting the application of the rules to large residential and commercial developments having 500 or more parking spaces. His reasons basically are the impact and cost to Oregon families and the "insurmountable bureaucratic load" the volume of applications and data represent for the Department.

He asks for consideration of the rules to past, as well as future, developments to provide equity in regulation and to provide effective monitoring based on all source emission data.

Mr. Hawes calls for the coordinating of regional planning agency approval with the established line of responsibility under SB 100 (Land Conservation and Development). In essence, he says, a "Regional Planning Agency" (as defined in Section 20-110 (17)) could submit and have approved its own indirect source plan without regard to the coordination intent of SB 100.

Finally, Mr. Hawes suggests that all permits issued, modifications and revocations made be placed in the deed records of the property subject to the permit or action. To this point he argues that limiting types of emission based upon proposed development of property is limiting the use of the land available to its owner. This limitation, he says,

is as direct as a restrictive covenant to a purchaser of a new home in a subdivision. Only by recording such actions in the deed records, he concludes, can title companies be assured of the information on the use restrictions contained in the permits.

Chairman Fred Stefani and Commissioner Thomas D. Telford of the County of Clackamas Board of Commissioners, with reference to Section 20-129's highway facility provisions (d), ask why an Environmental Assessment Statement can't be acceptable to DEQ in lieu of the data specified. The Commissioners also say that new highway facilities can improve air quality in areas where standards are exceeded, yet not bring the areas into compliance as a result. They would amend Section 20-130 (5) to allow for highway facilities and improvements that improve air quality.

Daniel M. Uman, director of the Department of Environmental Services for Multnomah County, asks if Section 20-110 (9) (b) "parking facilities" includes drive-in movies. (It can be so construed, but (d) covers such "entertainment facilities" as well.) He asks if railroad yards and docks are covered under (e). (The subsection referenced covers "airports;" but (c), "retail, commercial and industrial facilities," would apply in addition to the fact that Section 20-110 (9) is not limited to those indirect sources cited). Mr. Uman suspects (g) assumes "condominiums are strictly multiple dwelling unit structures. (No grounds for such assumption are evident.) He then suggests inclusion of subdivisions or developments of over 20 dwelling units, or possibly 6 units per acre. Again, the focus of these rules is on sources which indirectly cause or may cause mobile source activity that results in emissions of an air contaminant for which there is a state standard (Section 20-110 (9)). No dwelling or other fixed structure by itself is presumed to be an indirect source. With regard to dwelling units, the associated parking, regardless of dwelling unit occupancy, is the determining factor with regard to these rules.

M. Gregg Smith, administrator of the Housing Division, Oregon Department of Commerce, expresses concern about the 50 parking space rule (Section 20-115 (2) (a)). He translates this Section as requiring a permit from any apartment facility of 33 or more units. The concern of the Housing Division is to provide adequate shelter at a reasonable cost for modest-income Oregonians, and this requirement, he says, will

unnecessarily add to the cost of housing by slowing up construction and adding red tape to an already cumbersome process. He would change this Section to apply to parking facilities of 1,000 or more spaces unless there is conclusive proof that parking in and around medium-sized residential complexes is a significant contaminant source.

Clifford V. Smith, Jr., regional administrator, Region X, U.S. Environmental Protection Agency, Seattle, Washington, calls for "three necessary modifications to the regulation proposed by the DEQ to ensure its acceptability as a replacement for the federal regulation" (40 CFR 52.1982 (b)). One is the unacceptability to EPA of the deletion of "Aircraft operations" from the August 21, 1974 draft of these rules and the substitution of the definition for "Landing - Take-off Cycle" (LTO Cycle) (Section 20-110 (11)). In essence, the State's criteria under these rules would not bring facilities under review that have less than 50,000 LTO cycles per year as required by the federal criteria.

Second, EPA finds the procedures, information and requirements under Sections 20-120 and 20-129 (related to DEQ approvals of regional plans directly or via planning agencies) circumvents EPA review and approval. "It is inappropriate for the State of Oregon to determine what is compatible with federal regulation, a determination implicit in approval, without EPA concurrence, of a regional plan," says Dr. Smith. He then proposes an alternative to submission of plans: "to provide in the indirect source regulation, for EPA review and approval, the criteria for approving a regional plan."

Third, in Section 20-130 (2) (a), he suggests the following additions (underlined): "Issue 20 day...of the opportunity for written public comment on the information submitted by the owner or operator, the Agency's analysis of the proposed project's effect on ambient air quality and the Department's proposed decision."

Likewise, he suggests Section 20-130 (2) (b) should read: "Make publicly available...constructed, the information submitted by the applicant, the Agency's analysis of the proposed project's effect on ambient air quality and the Department's proposed decision."

The above changes are proposed by EPA to cover that information on which the public should have opportunity to comment.

EPA notes that supplementary material, indicating the basis for determining which classes of facilities are to be

reviewed, is required by 40 CFR 51.18 (f), but this material can accompany the adopted rules when submitted to EPA.

EPA provides some further suggestions:

- Inclusion of a definition of "parking space" which EPA goes on to define as "any area or space below, above, or at ground level, open or enclosed, on-street or off-street, that is used for parking one motor vehicle at a time." (Submitted as useful in determining accurate numbers of spaces submitted in a plan.) (Section 20-110).

- Inclusion of a definition of "corridor" (used in Section 20-129 (1) (d) (xi)), perhaps defined as a distance from the center line or right of way. (Section 20-110).

- Addition of words in Section 20-129 (1) (c) (x) to make second sentence read: "Measurements shall be made prior to construction and estimates shall be made for the first year... fully operational." This is to make the requirements for airports consistent with those for parking lots (Section 20-129 (1) (a) (iii)) and for highways (Section 20-129 (1) (d) (xv)).

Finally, Dr. Smith, as a point of information germane here, notes that any EPA final approval action will state that the regulation's applicability to lead is not included. (Section 110 of the Clean Air Act only directs EPA to control six criteria pollutants, of which lead is not one.) This does not preclude Oregon from including lead criteria; such expansion of requirements simply exceeds the purview of the federal act.

Summary Analysis

Items Proposed for Further Consideration

To simplify consideration of the detailed input to the public hearing by witnesses, the following index is submitted. It excludes those items for which this officer believes no further consideration is appropriate (i.e. sufficiency of comment made previously in this report, response believed to be self-evident, or issues addressed not considered germane).

Clarification of the issues noted below can be found by referring to the appropriate witness reports in the preceding pages.

<u>Section</u>	<u>Issue</u>	<u>Witness</u>
20-100 (Policy)	argues shopping centers not air contaminant source per ORS 468.275	Althouse
20-105 (Jurisdiction)	opposition to inclusion of regional authority delegation -- overriding statewide considerations	McKinley VanNatta Hibbard
20-110 (Definitions)		
(3)	define "Average Daily Traffic" as total of year's traffic divided by number of days in year	Hibbard
(9)	remove "combination thereof" as developer should not be held responsible for impacts other than his own	Anderson
(11)	"Landing-Takeoff Cycle" unacceptable substitute for "Aircraft operations"-- does not provide for less than 50,000 LTOs as required by federal regs.	Smith (EPA)
(18)	Allows circumvention of intent of SB 100	Hawes
(+)	"Aircraft operations" to permit review of less than 50,000 LTOs per federal regs.	Smith (EPA)
(+)	"Parking space" to aid determination of actual spaces applied for	Smith (EPA)
(+)	"Corridor" as used in Section 20-129 (1) (d) (xi)	Smith (EPA)

<u>Section</u>	<u>Issue</u>	<u>Witness</u>
20-115 (Permits Required)		
(1)	remove "builder" - not responsible, and possible double permit requirement	Sowles
(2) (a) (i)	50-space requirement too low	McKinley
	- burden of costs	Anderson
	- impact and cost to families	VanNatta
	- insurmountable bureaucratic load	Hawes
	- adds to housing costs by slowing construction, adding red tape	Hawes
(2) (b) (i)	500-space too low	Smith (HD)
20-120 (Plans)	fails to include EPA review, approval	Anderson
(4)	does not reveal extent of monitoring	Smith (EPA)
(5)	does not reveal extent of monitoring	Donnell
20-125 (Application Requirements)	(no entries)	Donnell
20-127 (Requirements Plan on File)		
(1) (b) (iii)	effect of project on total vehicle miles travelled in plan area too difficult to reliably determine	Hibbard
20-129 (Requirements - no Plan)	fails to include EPA review, approval undetermined fiscal burdens on city in providing monitoring and other studies	Smith (EPA)
(1) (a)	applies to existing facilities too?	McKinley
(1) (a) (iii)	eliminate lead requirements (no federal standards, lack of technical agreement on relationships, federal lead-in-gas program will do the job)	Anderson
(1) (a) (iv)	recognize possibility no alternative designs may exist or be possible	Riley
(1) (a) (v)	would add proposed plans as well, recognizing time plans are in process for approval	Hibbard

<u>Section</u>	<u>Issue</u>	<u>Witness</u>
(1) (b)	applies to existing facilities too?	Anderson
(1) (c) (x)	addition of words to make "airport" requirements consistent with parking lots (20-129(1) (a) (iii) and highways (20-129(1) (d) (xv)	Smith (EPA)
(1) (c) (xiii)	See above for (1) (a) (iii)	Riley
(1) (d)	Can Environmental Assessment Statement be used in lieu of provisions?	Stefani, Telford McKinley
(1) (d) (iv)	18 different traffic data sets considered too much a requirement	Hibbard
(1) (d) (xv)	See above for (1) (a) (iii)	Riley
20-130 (Issue or Deny)	wants reasonable opportunity for applicant to rebut adverse public comment	Anderson
	wants dismissal or revocation based on specific reasons for actions, not conclusions	Anderson
(2) (a)	seeks added language to provide needed information for public comment	Smith (EPA)
(2) (b)	same as (2) (a)	Smith (EPA)
(4) (c)	confusing, beyond developer control difficult or impossible to administer by city due to legal, budgetary constraints	Anderson Jones
(4) (d)	same as (4) (c)	
(4) (f)	called unconstitutional	Anderson
(4) (i)	called unconstitutional	Anderson
(4) (j)	called unconstitutional	Anderson
(4) (k)	needs clarifying as to what's required	Anderson
(4) (l)	written statement of intent can come up against city charter remonstance that precludes binding commitments	Jones
(5)	allow for highways with short-term violations but long term air quality improvement	Jones McKinley
	allow for highways that improve air quality but do not bring area into compliance	McKinley

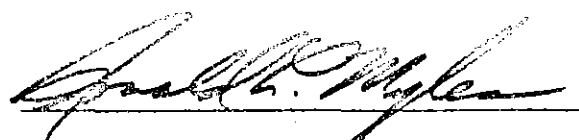
<u>Section</u>	<u>Issue</u>	<u>Witness</u>
20-130 (5) (b)	unequivocal language may preclude issuance of <u>any</u> permit	VanNatta
(7)	objects to permitting regional authority to be more restrictive than DEQ	VanNatta
20-135 (Duration) (1)	ability to modify or revoke permits adds unanticipated cost factors that might have precluded applicant committing to construction provision should be added making no further permit applications needed, once original issued, save cases of modification or revocation	Jones Anderson
No Section Reference:	All permits issued, modifications and revocations should be placed in deed records of property subject to permit	Hawes
	DEQ should consult with local government prior to determination of denial or required modification	Jones

This report, along with the above index, have been turned over to DEQ for review and consideration. Many of the items raise potential points of challenge which, if not sufficiently considered in the rule-making, will presumably have to be coped with in the interpretation and application of the rules once adopted.

This officer finds the most serious of these considerations to be those items proposed by the Environmental Protection Agency (because they speak to the rules meeting federal requirements), and the unequivocal language in Section 20-130 (5) (b) (because of possible court interpretation when used as a means of trying to stop a permit's issuance).

Some of the issues raised are obviously self-serving, but should be considered and may be honored if found not in conflict with the underlying purpose of these rules. Others, this officer believes, are potentially helpful to the Commission and the Department in reducing problems of interpretation.

This report is submitted in compliance with OAR Chapter 340, 11-030 this thirteenth day of November, 1974.



Ronald L. Myles
Presiding Officer

APPENDIX C



State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

To: HMP

Date: November 13, 1974

From: RLV, RMJ

Subject: Review of Size Classes of Parking Facilities Approved in the Portland Metropolitan Area

We have completed a review and evaluation of parking facilities approved so far in the Portland area. A series of tables and bar graphs have been prepared and are attached as follows:

- Table 1 - Summary of Parking Facilities by Class (number of spaces)
- Table 2 - Percent of Total Parking Facility Applications - Facilities Less than 1,000 Spaces (class interval 250 spaces)
- Figure 1 Distribution of Total Number of Spaces by Class (class interval 50 spaces)
- Figure 2 Distribution of Total Number of Spaces by Class (class interval 250 spaces)
- Figure 3 Cumulative Distribution of Total of Parking Spaces by Class (class interval 50 spaces, lot size less than 1,000 spaces)
- Figure 4 Distribution of Total Number of Parking Spaces by Class (class interval 250 spaces)
- Figure 5 Distribution of Total of Parking Lots by Class (class interval 50 spaces, lots with less than 1,000 spaces)
- Figure 6 Cumulative Distribution of Total of Parking Lots by Class (class interval 250 spaces)

The following general conclusions may be drawn:

1. Parking facilities with less than 1,000 spaces represent 94% of the total applications and over 50% of the total spaces.
2. Parking facilities with less than 500 spaces represent almost 90% of the total applications and nearly 40% of the total spaces.
3. Parking facilities with less than 250 spaces represent nearly 75% of the total applications and nearly 25% of the total spaces.
4. Parking facilities with less than 100 spaces represent 40% of the total applications and about 8% of the total spaces.
5. It is impossible with present information to determine the number of parking facilities constructed with less than 50 spaces. Indications are that a substantial number of these facilities may have been completed.
6. Although an accurate tabulation of parking facilities existing in the area prior to our regulations is not presently available, indications from the limited information we have are that a majority of these facilities had less than 500 spaces.

MEMO - Review of Size Classes of Parking Facilities Approved in the Portland Metropolitan Area

November 13, 1974

Page 2

SUMMARY:

Based on the attached data, it is evident that the number of parking spaces constructed in lots ranging in size from 50-250 spaces in the Portland Metropolitan area represent a significant (about 23%) portion of the total spaces reviewed for construction.

We feel that in order to adequately evaluate the impact of indirect sources in the metropolitan areas, these smaller facilities should remain under review by the Department.

Only a few applications are anticipated for proposed facilities of more than 1,000 spaces, even considering applications statewide. The number of applications for facilities with more than 250 spaces within the metropolitan counties but outside the 5-mile limitation will probably also be limited. It is felt that little difficulty or delay in processing will be caused by the continuing evaluation of lots of 50 or more spaces within the 5-mile radius of major cities.

ahe
Attachments

TABLE 2

PERCENT OF TOTAL PARKING FACILITY APPLICATIONS
PARKING FACILITIES LESS THAN 1,000 SPACES

<u>Facility Size Class, number of spaces</u>	<u>Percent of Total Lots</u>		<u>Percent of Total Spaces</u>	
	<u>This Class</u>	<u>Cumulative</u>	<u>This Class</u>	<u>Cumulative</u>
0 - 249	72.9	72.9	23.2	23.2
250 - 499	14.6	87.5	15.0	33.1
500 - 749	4.7	92.2	9.6	46.9
750 - 999	1.5	93.8	3.9	50.8

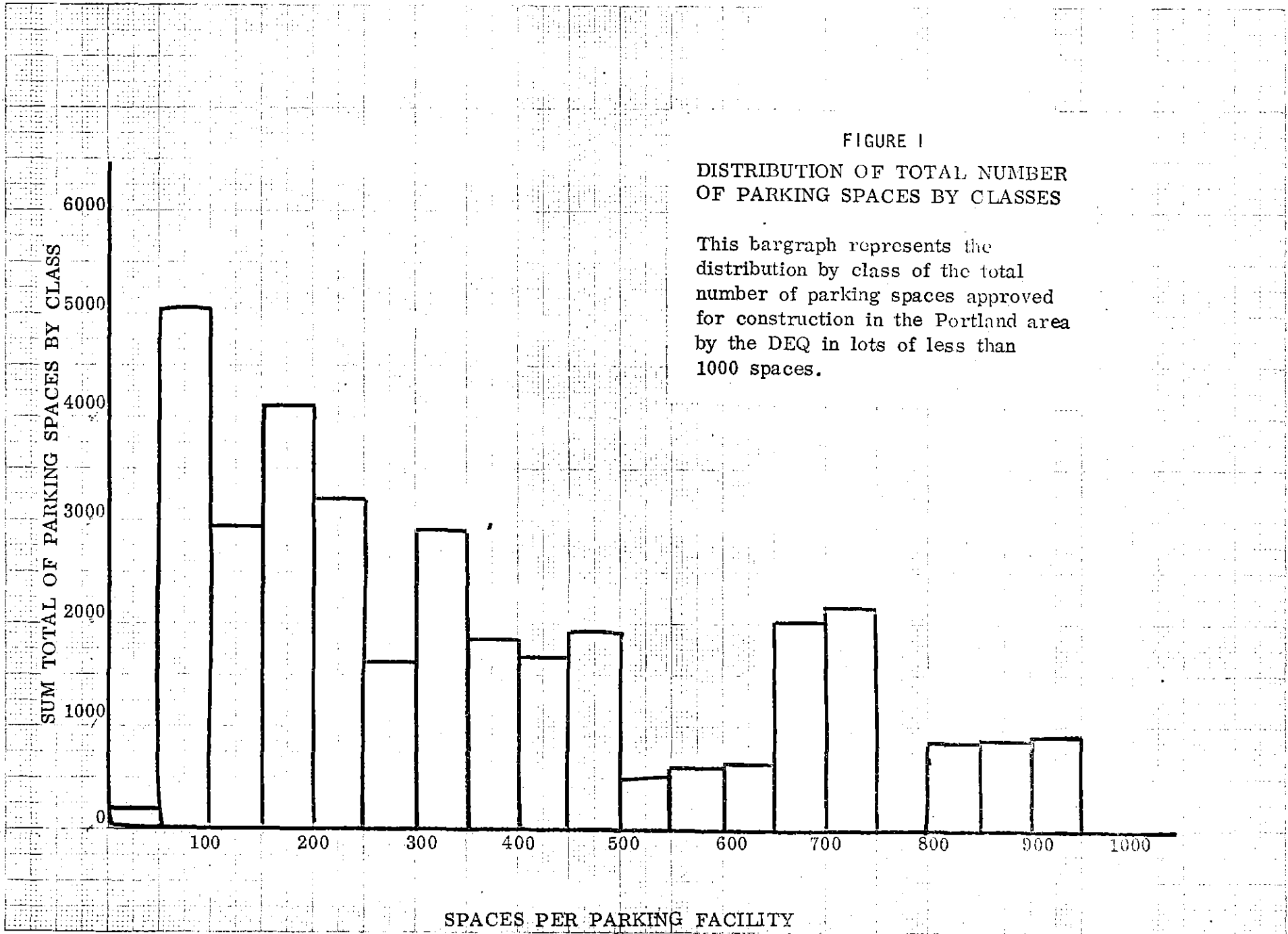


FIGURE 1
DISTRIBUTION OF TOTAL NUMBER
OF PARKING SPACES BY CLASSES

This bargraph represents the distribution by class of the total number of parking spaces approved for construction in the Portland area by the DEQ in lots of less than 1000 spaces.



ENVIRONMENTAL QUALITY COMMISSION

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KESSLER R. CANNON
Director

To: Environmental Quality Commission

From: Director

Subject: Agenda Item H , November 22, 1974, EQC Meeting

Petition to Adopt Oregon Administrative Rules, Chapter 340, Section 20-048, Establishing Rules for the Prevention of Significant Deterioration of Air Quality. The Petitioners are Oregon Student Public Interest Research Group (OSPIRG) and the Northwest Environmental Defense Center (NEDC)

The above cited petition was received by the Director, with a letter dated October 28, 1974 which was signed by Dr. John Ullman, OSPIRG Staff Scientist. Both are attached in Appendix A.

The letter requests within the time set in Oregon Revised Statutes 183.390 the Environmental Quality Commission give notice of intended action on this matter.

The petition states:

"3. The enjoyment of areas of the State of Oregon having clean air by members of the board of directors of petitioners', as well as by other citizens of the State of Oregon, is adversely affected by the failure of the Environmental Quality Commission to adopt rules to protect air which is not polluted to the secondary standards of The Clean Air Act Amendments of 1970 (Public Law 91-604).

4. ORS 468.305 mandates the Department of Environmental Quality to develop a means for preventing the pollution of air in areas where pollution does not now exist, but may exist in the future. The DEQ has not adopted a plan for the prevention of degradation of air which is not now polluted. Failure to adopt such a plan in the five years since ORS 468.305 was promulgated in 1969 constitutes a violation of this law."



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Background

The Environmental Protection Agency proposed rules for the "Prevention of Significant Air Quality Deterioration" in the Federal Register Volume 38, No. 135, July 16, 1973. In the Federal Register, the EPA included a historical and background discussion, a portion of which is quoted below:

"Notice is hereby given that the Administrator of the Environmental Protection Agency (EPA) intends to issue regulations setting up a mechanism for preventing significant deterioration of air quality in areas where air pollution levels currently are below the national ambient air quality standards (40 CFR Part 50)...."

"...Publication of this notice is related to a suit filed May 24, 1972, in which the Sierra Club and other groups sought a declaratory judgment and injunction requiring the Administrator to disapprove all State implementation plans which did not contain procedures for preventing significant deterioration in any portion of any state where air quality is superior to national standards. On May 30, 1972, the District Court for the District of Columbia granted the plaintiffs' motion for a preliminary injunction and issued a preliminary injunction requiring the Administrator, within four months thereafter, to review all State plans and "disapprove any portion of a State plan which fails to effectively prevent significant deterioration of existing air quality." The preliminary injunction also required the Administrator to promulgate regulations "as to any State plan which he finds, on the basis of his review, either permits the significant deterioration of existing air quality in any portion of the State or fails to take the measures necessary to prevent such significant deterioration." On November 1, 1972, the decision of the District Court was affirmed by the U. S. Court of Appeals for the District of Columbia Circuit on the basis of an opinion filed by the District Court on June 2, 1972. Subsequently, the U. S. Supreme Court stayed the effect of the District Court's decision pending its consideration and disposition of the case on application for a writ of certiorari. On June 11, 1973, the Supreme Court, by an equally divided court, affirmed the judgment of the Court of Appeals; no opinion was issued...."

"...In EPA's view, there has been no definitive judicial resolution of the issue whether the Clean Air Act requires prevention of significant deterioration of air quality. When the issue was presented to the Supreme Court, the Court was equally divided. The Court's action had the effect of permitting to stand the judgment of the Court of Appeals for the District of Columbia Circuit, which was entered in the procedural content of the issuance of a preliminary injunction.

In the absence of a definitive judicial decision on the issue, the Administrator adheres to the view that Section 110 of the Clean Air

Act requires EPA to approve State implementation plans that will attain and maintain the national ambient air quality standards, and that the Act does not require EPA or the States to prevent significant deterioration of air quality. The proposed alternative regulations set forth herein would establish a mechanism for preventing significant deterioration pursuant to the preliminary injunction issued by the District Court."

"Public Policy Issue

The question raised by the Sierra Club suit was a legal issue, ie. interpretation of the language and legislative history of the Clean Air Act. Thus, the Courts were asked to determine that the Act requires the Administrator to ensure that State implementation plans will not permit significant deterioration of air quality. What the courts were not asked to determine is what constitutes significant deterioration and exactly how it will be prevented.

A national policy of preventing significant deterioration, however defined and implemented, will have a substantial impact on the nature, extent, and location of future industrial, commercial and residential development throughout the United States. It could affect the utilization of the Nation's mineral resources, the availability of employment and housing in many areas, and the cost of producing and transporting electricity and manufactured goods. Without implying any judgment as to the general acceptability of any of the effects of a "no significant deterioration" policy, the Administrator believes that they are potentially so far-reaching that the question of how such a policy should be defined and implemented cannot properly be addressed, much less decided, on narrow legal grounds..."

"Conceptual Issues

Section 109 of the Clean Air Act requires the Administrator to establish national primary ambient air quality standards "to protect the public health" and national secondary ambient air quality standards, "to protect the public welfare from any known or anticipated adverse effects," including, as specified by section 302(h), "effects on soils, water, crops, vegetation, man-made materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being." Such national standards must be based on air quality criteria which, under section 108, must "reflect the latest scientific knowledge, useful in indicating the kind and extent of all identifiable effects on public health and welfare which may be expected from the presence (of air pollutants) in the ambient air, in varying quantities." Thus, standard-setting under section 109 is necessarily limited to demonstrable or predictable adverse effects which can be quantitatively related to pollutant concentrations in the ambient air.

The basis for preventing significant deterioration therefore lies in a desire to protect aesthetic, scenic, and recreational values, particularly in rural areas, and in concern that some air pollutants may have adverse effects that have not been documented in such a way as to permit their consideration in the formulation of national ambient air quality standards. Pending the development of adequate scientific data on the kind and extent of adverse effects of air pollutant levels below the secondary standards, significant deterioration must necessarily be defined without a direct quantitative relationship to specific adverse effects on public health and welfare. It should be emphasized that defining significant deterioration in this way does not imply a judgment by EPA on the question of whether it is sound public policy to define "deterioration" as any increment above existing air pollution levels and to attempt to define "significant" deterioration in the absence of documentation on the adverse effects thereof. Furthermore, it is possible, indeed probable, that even when there are additional data, it will be evident that there are levels below which some of the pollutants covered by national standards do not have effects that can be considered adverse to public health and welfare.

To the extent that the Act provides any basis for defining significant deterioration, it does so only in section 101(b)(1), which declares that one of the purposes of the Act is "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population". Additional guidance is available from the legislative history; specifically, the Report of the Senate Committee on Public Works (Report No. 91-1196, dated September 17, 1970) contained the following statement:

In areas where current air pollution levels are already equal to, or better than, the air quality goals, the Secretary should not approve any implementation plan which does not provide, to the maximum extent practicable, for the continued maintenance of such ambient air quality.

Though the Report also suggested that it might be possible to prevent all deterioration, it is apparent that the measures necessary for that purpose would bring growth and development virtually to a standstill in many areas and therefore are incompatible with the protecting the "productive capacity" of the Nation's population.

Clearly, it is not within the province of EPA, under either the Clean Air Act or any other statute, to impose limitations on the Nation's growth. Neither the Sierra Club nor any of the States or organizations that filed amicus curiae briefs with the Supreme Court in support of the Sierra Club's position argued that the District Court's preliminary injunction means that EPA must limit economic growth, as such, in order to prevent significant deterioration of air quality. To the contrary, it was agreed that growth could and would continue, albeit with the restrictions necessary to prevent significant deterioration.

The Sierra Club, for example, made the following statement:

The development of rural areas will not be prevented by a prohibition against significant deterioration of air quality. Such a prohibition on its face does not prevent all increases in pollution. If the best available technological developments are utilized and if numerous pollution producing sources are not concentrated in one place, most industry can enter clean areas without causing significant deterioration. (p.94)...."

On August 27, 1974 the EPA proposed rules for "Prevention of Significant Air Quality Deterioration" after considering of public testimony on the July 16, 1973 proposal. The following portions are quoted from that publication.

"Originally Proposed Alternatives

In the July 16, 1973, notice of proposed rulemaking (38 FR 18936), the Administrator proposed four alternative plans to prevent significant deterioration of air quality. These plans were intended to define the range of reasonable approaches to the problem and stimulate discussion on appropriate courses of action. The four proposed alternative plans were:

Air Quality Increment Plan - This plan would have prevented significant deterioration of air quality through application of a single nation-wide incremental increase in concentrations of total suspended particulate (TSP) and sulfur dioxide (SO₂) over those levels which existed in 1972. The sizes of the increments were selected to balance reasonable economic growth with minimal environmental deterioration.

Emission Limitation Plan - This plan would have limited total emissions of TSP and SO₂ over a relatively large area and indirectly prevented the significant deterioration of air quality. This plan offered some flexibility to States to distribute emissions throughout the area over which the emissions were to be limited.

Local Definition Plan - This plan would have prevented significant deterioration by requiring local determination, on a case-by-case basis, of the significance of the air quality impact of major new sources. This plan recognized the variability between areas and called for a subjective decision making procedure to be implemented at the local level.

Area Classification Plan - This plan called for the establishment of "zones" of different allowable incremental increases in TSP and SO₂. "Zone I" allowed for a very small incremental increase which would permit almost no new heavy industrial growth using current technology. "Zone II" used the same increment as in the Air Quality Increment Plan and allowed for what the Administrator considered a reasonable mix of well planned and sited construction. The plan also included provisions wherein individual areas could experience deterioration up to the national standards. At the time of proposal the Administrator recognized that this plan appeared to be superior to the others.

All four proposed plans would have been implemented through a preconstruction review of sixteen specified source categories to determine whether or not these sources would cause a violation of the constraints of each plan. Also each plan called for application of best available control technology on all new sources covered by the regulations."

"Conceptual Considerations

In the notice of proposed rulemaking, attention was drawn to the fact that any plan to prevent significant deterioration of air quality might have a major influence on land use patterns in many areas of the country. The development of proper land use planning to ensure protection of the environment is one of the most important tasks yet to be undertaken. Comprehensive land use planning is a complex process including many variables, only one of which is air quality. Development of land use plans in which air quality represents a single overriding criterion is not, in the Administrator's judgment, a desirable course of action for most areas. The regulation proposed below are therefore designed to inject consideration of air quality as one of many constraints on land use decisions, but not to mandate land use decisions based solely on air quality. In this regard, the "significance" of any air quality deterioration is defined in terms of the proper and desired use of an area as well as the magnitude of pollutant concentrations. The intent is not to restrict or prohibit economic growth, but rather to ensure that desirable growth is planned and managed in a manner which will minimize adverse impacts on the environment.

As was pointed out in the initial proposed rulemaking, determination of that level of deterioration which constitutes "significant" deterioration is basically a subjective decision, because the primary and secondary National Ambient Air Quality Standards are required to be protective of all known adverse effects on public health and welfare in a nationwide context. Response to the initial proposed rulemaking confirmed that consideration of varying social, economic, and environmental factors in different areas would result in varying definitions of what constitutes significant deterioration. None of the information received during the public comments period would enable the Administrator to justify any but a subjective method for defining when increases in the concentration of pollutants become "significant". Strong sentiment was expressed at public hearings, in written comments, and during consultations that States and localities should be given the maximum degree of flexibility in making judgments as to when increases in concentrations become "significant", because the judgments must be based on considerations which vary from locality to locality."

The publication also discussed technical considerations, summary of regulations and specific comments, etc. The following section appears applicable to the issue before the Commission.

"Discussion of Additional Public Comments

Substantial public comment was received suggesting that the proper course of action would be to request legislative relief from the Congress, i.e., remove from the Clean Air Act the basis for the Court's finding of a requirement to prevent significant deterioration of air quality. Congressional debate and consideration of this issue is currently underway, and will continue; however, the Courts have ordered the Administrator to prevent significant deterioration under the Clean Air Act as presently enacted, and the regulations proposed herein are intended to accomplish that objective in a manner which is in the best interest of the public.

Substantial public comment was also received indicating that additional pollutants (specifically the "automotive pollutants") should be included in the regulations. After careful consideration of the arguments, the Administrator has concluded that ongoing programs are adequate to prevent any significant deterioration due to sources of carbon monoxide, hydrocarbons or nitrogen oxides for the following reasons:

First, the Federal Motor Vehicle Emission Standards are expected to result in sizeable reductions in emissions of those pollutants on an area-wide basis for many years into the future.

Second, a basic requirement for sources under the enclosed concept is the application of Best Available Control Technology (BACT). This level of technology is already required on automobiles in order to comply with the Motor Vehicle Emission Standards, and further actual area-wide emission reductions under the enclosed regulations would be impractical.

Third, carbon monoxide has no identifiable or noticeable effects at concentration levels below the current standards. Unlike TSP and SO₂ it has no observable esthetic impact. Since there are no suspected effects at levels below the standards, it is not reasonable to consider those levels to be "significant."

Fourth, hydrocarbons and oxides of nitrogen are precursors to photochemical oxidants and nitrogen dioxide, but the transformation from the former to the latter takes place over a relatively long time period. It is possible for local concentrations of vehicular activity to result in increased localized emissions of hydrocarbons and oxides of nitrogen, but by the time these emissions are transformed into photochemical oxidants and nitrogen dioxide, the resultant pollutants would be dispersed over a wide area. The motor vehicle emission standards are intended to reduce area-wide concentrations of these pollutants, and no area-wide significant deterioration is expected to result from localized increased vehicular activity....."

The current proposal of EPA allows the State to submit to the EPA Administrator designated areas of the State Class I, Class II or Class III. Class I would apply to areas in which practically any change in air quality would be considered significant; Class II applies to areas in which deterioration normally accompanying moderate well controlled growth would be insignificant; and Class III applies to those areas in which deterioration up to national standards would be considered insignificant.

The following incremental increase limitation in pollution concentration over baseline air quality concentration were published. (Oregon ambient air standards have been added.)

Pollutant	Class I ug/m ³	Class II ug/m ³	Oregon Ambient Air Standard ug/m ³
Particulate matter			
Annual geometric mean	2	10	60
24 hour maximum	10	30	150 not more than once per year
Sulfur dioxide			
Annual arithmetic mean	2	15	60
24 hour maximum	5	100	260 not more than once per year
3 hour maximum	25	700	1300 not more than once per year

A copy of Sierra Club vs. Ruckelshaus, Civ. A. No. 1031-72, United States District Court, District of Columbia, June 2, 1972, and the two Federal Registers are attached in Appendix B.

Following the promulgation in the Federal Register on August 27, 1974, the Department submitted comments to the Administrator concerning the proposed rules. The submission is attached as Appendix C.

Comments

1. One of the repeated comments the Department receives in discussing significant deterioration is that the issue of defining what "significant" deterioration is that it will ultimately, at the federal level, be defined by Congress or the Courts.

2. The area consideration has not been addressed directly on the petition. The staff is under the impression that many persons consider the significant deterioration issue applicable to small areas. The EPA approach is on a larger scale. Quoting from the August 27, 1974 Federal Register, "the terminology has been changed from "zoning" to

"classification" to avoid confusion with conventional zoning concepts. Under conventional practices, a zone is a relatively small area (eg. a city block or a portion of a county). An area classified under the regulations herein initially would be a much larger area, often consisting of, as a minimum, several large counties. Initial classification of smaller individual areas does not appear feasible because of carryover of pollution from one small area to another could not be adequately controlled."

3. In adopting the Oregon Clean Air Act Implementation Plan (TOCAAP) to meet requirements of the Federal Clean Air Act as Amended December 1970, the Commission considered the policy objectives of ORS 449.765 now ORS 468.280. Public Hearings were held throughout the State, the plan was amended, adopted by the Commission, submitted by the Governor and approved by EPA.

- a. The plan on page 2-10a states "the new rule will provide an important criteria in evaluating proposals for new sources. The final sentence, which relates specifically to clean areas of the state, is particularly directed toward the prevention of significant degradation of air quality in such areas." The rule referred to has been codified as OAR Chapter 340, Section 20-001 Highest and Best Practicable Treatment and Control Required.
- b. Rules have been adopted for Wilderness Areas, OAR Chapter 340, Subdivision 3, Environmental Standards for Wilderness Areas beginning with Section 13-005.

4. Some concern has been expressed that in state border areas Significant Deterioration rules may not be effective unless both states designate border areas under the same or similar classification and under similar rules. The Department testimony to EPA concerning the latest EPA proposed rule included the following comment, "We urge EPA to establish objective criteria, applicable nationwide, for designation of Class 3 areas." (See Appendix C for the complete testimony.)

5. The petition proposes division of the state where air quality is better than the secondary federal standard into two "zones" similar to the area "classification" proposed by EPA, and in addition proposes maximum allowable emission limitations by air contaminant by State Air Quality Control Regions (SAQCR). These regions would assumably have boundaries different than Federal Air Quality Control Regions or other Special Control Areas, OAR Chapter 340, Section 25-105 and OAR Chapter 340, Section 21-010.

6. EPA has concluded that fairly significant sources could be located in Area Classification or Zone 2 and still meet the incremental increase limitation in pollution concentration over baseline air quality concentration, ie, for the 24 hour maximum for sulfur dioxide of 100 ug/m³ and particulate matter of 30 ug/m³.

In a number of instances the petitioner's second limitation "The maximum allowable emissions for a SAQCR" would be more restrictive. For example, if it is assumed Morrow County is Classified or Zoned 2, the allowable emissions in the Morrow County Region would be: (Morrow County Area is 2065 square miles and 1971 emissions for particulate was 354 tons per year and 1971 emissions for sulfur oxides was 155 tons per year.)

Particulate limitations by petitioners Section 20.098.3, Emission Ceiling (a) Particulates:

$$\begin{aligned} 3 \text{ tons/mi times } 2065 \text{ sq. miles} &= 6195 \text{ tons/year or} \\ 120\% \text{ of } 354 \text{ tons per year} &= 425 \text{ tons/year (limiting)} \end{aligned}$$

Hence allowable increase is 71 tons per year.

Sulfur Oxide Limitation by petitioners, Section 20-048.3, Emission Ceiling (b), Sulfur Oxides:

$$\begin{aligned} 10 \text{ tons/year times } 2065 &= 20,650 \text{ tons per year or} \\ 120\% \text{ of } 155 \text{ tons/year} &= 186 \text{ tons/year (limiting)} \end{aligned}$$

Hence allowable increase is 31 tons per year.

The above limitations would not allow a significant source using highest and best practical treatment such as a coal fired power plant to locate in Morrow County.

Under adoption, the rules will provide additional administrative restrictions the Department must consider in implementation of air quality control.

Action Since Receipt of the Petition

1. The Department has issued a letter of notification to all persons in accordance with OAR, Chapter 340, Section 11-045. See Appendix D.

2. The Attorney General's Office has submitted a letter regarding Compliance with ORS 468.305. (See Appendix E.)

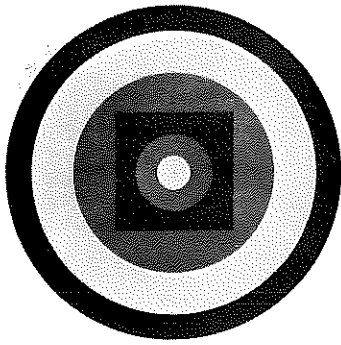
A handwritten signature in cursive script, appearing to read "K. Cannon", written in black ink.

KESSLER R. CANNON
Director

TABLE I

Parking Lot Class Spaces	Total Lots Reviewed Per Class	Percent of Total Lots	Cumulative Total Parking Lots Reviewed	Cumulative Percent of Total Lots	Total Parking Spaces Per Class	Percent of Total Spaces	Cumulative Total Parking Spaces	Cumulative Percent of Total Spaces
* 0-49	6	3.1	6	3.1	196	0.3	196	0.3
50-99	70	36.5	76	39.6	5043	7.5	5239	7.8
100-149	25	13.0	101	52.6	2940	4.4	8179	12.2
150-199	24	12.5	125	65.1	4113	6.2	12292	18.4
200-249	15	7.8	140	72.9	3200	4.8	15492	23.2
250-299	6	3.1	146	76.0	1635	2.4	17127	25.6
300-349	9	4.7	155	80.7	2915	4.4	20042	30.0
350-399	5	2.6	160	83.3	1849	2.8	21891	32.7
400-449	4	2.1	164	85.4	1678	2.5	23569	35.2
450-499	4	2.1	168	87.5	1917	2.9	25486	38.1
500-549	1	0.5	169	88.0	501	0.7	25987	38.9
550-599	1	0.5	170	88.5	590	0.9	26577	39.7
600-649	1	0.5	171	89.0	625	0.9	27202	55.6
650-699	3	1.6	174	90.6	2025	3.0	29227	43.7
700-749	3	1.6	177	92.2	2161	3.2	31388	46.9
750-799	-	0.0	177	92.2	-	0.0	31388	46.9
800-849	1	0.5	178	92.7	825	1.2	32213	48.2
850-899	1	0.5	179	93.2	864	1.3	33077	49.5
900-949	1	0.5	180	93.8	919	1.4	33996	50.8
950-999	-	0.0	180	93.8	-	0.0	33996	50.8
1000-1049	1	0.5	181	94.3	1047	1.6	35043	52.4
1100-1149	1	0.5	182	94.8	1136	1.7	36179	54.1
1200-1249	1	0.5	183	95.3	1234	1.8	37414	55.9
1400-1449	2	1.0	185	96.4	2867	4.3	40281	60.2
1550-1599	2	1.0	187	97.4	3114	4.7	43395	64.9
2450-2499	1	0.5	188	97.9	2464	3.7	45859	68.6
2800-2849	1	0.5	189	98.4	2819	4.2	48678	72.8
5350-5399	1	0.5	190	99.0	5366	8.0	54044	80.8
6300-6349	1	0.5	191	99.5	6328	9.5	60372	90.3
6500-6549	1	0.5	192	100.0	6500	9.7	66872	100.00

*Values for parking facilities less than 50 spaces represent only modifications to existing facilities.



OREGON ENVIRONMENTAL COUNCIL

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

November 13, 1974

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED

NOV 14 1974

OFFICE OF THE DIRECTOR

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

Dear Kess:

Enclosed please find one copy of the testimony we plan to present at the public hearing on November 22, 1974 regarding the 11-040 Petition.

Mary Ann Donnell, the OEC President will be presenting the testimony at the hearing.

Sincerely,


Larry Williams
Executive Director

LW:jan
cc: Mary Ann Donnell
Enclosure

A. F. T. E. R., Tigard
AMERICAN ASSOCIATION OF UNIVERSITY
WOMEN, Portland
AMERICAN INSTITUTE OF ARCHITECTS
The Portland Chapter
Southwestern Oregon Chapter
AMERICAN INSTITUTE OF PLANNERS
Oregon Section
AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS
Oregon Chapter
ANGLERS CLUB OF PORTLAND
AUDUBON SOCIETY, Portland, Central Oregon, Corvallis
BAY AREA ENVIRONMENTAL COMMITTEE
Coos Bay, Oregon
CHEMEKETANS, Salem, Oregon
CITIZENS FOR A CLEAN ENVIRONMENT
Corvallis, Oregon
CLATSOP ENVIRONMENTAL COUNCIL
ECO-ALLIANCE, Corvallis
EUGENE FUTURE POWER COMMITTEE
EUGENE NATURAL HISTORY SOCIETY
FACULTY WIVES OF CENTRAL COMMUNITY
COLLEGE, Bend
4-H CLUB CARROT-TOPPERS, Scappoose, Oregon
FRIENDS OF THE EARTH
FRIENDS OF SPRINGBROOK PARK, Lake Oswego
GARDEN CLUBS of Cedar Mill, Corvallis,
Eastmoreland, Gervais, Nehalem Bay,
McKenzie River, Scappoose, Portland, Villa,
Fir Grove
GREENLEAF CLUB OF FIRST UNITARIAN CHURCH
Portland
JUNIOR LEAGUE, Eugene, Portland
McKENZIE FLYFISHERS, Eugene, Oregon
McKENZIE GUARDIANS, Blue River, Oregon
MT. HOOD COMMUNITY COLLEGE
OUTDOOR CLUB
NEWPORT FRIENDS OF THE EARTH
NORTHWEST ENVIRONMENTAL
DEFENSE CENTER
NORTHWEST STEELHEADERS COUNCIL OF TROUT
UNLIMITED, Milwaukie, Tigard, Willamette Falls
OBSIDIANS, INC., Eugene, Oregon
OREGON CITIZENS FOR CLEAN AIR
OREGON COUNCIL OF ROCK AND MINERAL CLUBS
OREGON GUIDES AND PACKERS, Vida, Oregon
OREGON LUNG ASSOCIATION
OREGON PARK & RECREATION SOCIETY
Corvallis, Oregon
OREGON ROADSIDE COUNCIL
OREGON SHORES CONSERVATION COALITION
O.S.P.I.R.G.
O.S.U. FIN AND ANTLER CLUB
Corvallis, Oregon
PLANNED PARENTHOOD ASSOCIATION, INC.
Portland
PORTLAND RECYCLING TEAM, INC.
P.U.R.E., Bend, Oregon
REED COLLEGE OUTING CLUB
Portland, Oregon
ROGUE ECOLOGY COUNCIL
Ashland, Oregon
SANTIAM ALPINE CLUB
Salem, Oregon
SELLWOOD-MORELAND IMPROVEMENT
LEAGUE, Portland
SIERRA CLUB
Pacific Northwest Chapter
Mary's Peak, Corvallis
Rogue Valley, Ashland
Columbia Group, Portland
Mt. Jefferson, Salem
SOCIETY FOR OREGON AVIAN RESEARCH
SPENCER BUTTE IMPROVEMENT ASSOCIATION
Eugene, Oregon
STEAMBOATERS
SURVIVAL CENTER, U. of O., Eugene
TEAMSTERS FOOD PROCESSORS
UMPQUA WILDERNESS DEFENDERS
WESTERN RIVER GUIDES ASSOCIATION, INC.
WILLAMETTE LUNG ASSOCIATION
WILLAMETTE RIVER GREENWAY ASSOCIATION

COMMENTS OF THE OREGON ENVIRONMENTAL COUNCIL ON OSPIRG'S
PROPOSED RULE MAKING IMPLEMENTING A POLICY OF NON-
DETERIORATION OF AIR QUALITY - NOVEMBER 22, 1974

Mr. Chairman and Members of the Commission, I am Mary Ann Donnel, President of the Oregon Environmental Council. The Council is a coalition of 80 conservation, sportsman, planning, health, and labor organizations and approximately 2500 individual Oregonians. We maintain our offices at 2637 S. W. Water Avenue, Portland, Oregon 97201.

The Oregon Environmental Council supports OSPIRG's petition for the adoption of rules to implement the national policy of non-deterioration of air quality for the State of Oregon. We recognize at the same time we make this statement, however, that our support is superfluous, inasmuch as the Environmental Quality Commission's duty to implement non-deterioration is written into both State and Federal law. That stubborn and unyielding fact is the point above all others we want you to remember from our testimony, so we should like to re-phrase it: we are not testifying that a non-deterioration policy should be the law, nor that it will be the law, nor even that it might be the law. Non-deterioration of air quality is the law, and has been the law since at least the date the Clean Air Act was signed in 1970. (The Oregon statutory authority is now numbered ORS 468.280 and ORS 468.285.)

Nor is it merely a group of Oregon conservationists who make this assertion. The interpretation we have just given of the Clean Air Act is that of three levels of federal courts, culminating in a decision of the United States Supreme Court. We respectfully suggest, therefore, that the Commission declare that any testimony as to whether Oregon needs a non-deterioration policy or (conceding the need) should have a non-deterioration policy is irrelevant to the question before you today. The only question the EQC needs to decide is as to the form that the implementation of the policy mandated by statutes and court decisions should take.

The second suggestion we urge upon the Commission is that you forego adoption of the protective coloring you could assume through ratification of the proposed EPA rules on non-deterioration. The color of those rules is that of a yellow-brown smog, and the rules violate both the spirit of the Clean Air Act and the letter of the court decisions on non-deterioration. We have attached as an appendix to our testimony, an in-depth analysis of the deficiencies of the EPA rules which was written by Thomas Guilbert, formerly of the DEQ staff, and which appeared last month in the Environmental Law Reporter.

The proposed OSPIRG rules would remedy the worst deficiencies of the EPA rules as identified in Mr. Guilbert's article, because they eliminate EPA's illegal Class III and they require the application of best available control technology for all of the air pollutants for which EPA has promulgated secondary standards. In addition, the emission ceilings approach which OSPIRG sets out in section 20-048.03 is a clever and creative new means of defining the maximum limits to which deterioration may progress before it becomes significant.

The Oregon Environmental Council cannot recommend that the EOC adopt the OSPIRG rules in their present form, however. The OSPIRG proposal itself contains deficiencies which we will briefly reference here, but upon which we will elaborate more fully if the Commission resolves to conduct rule-making proceedings on the OSPIRG proposal without first amending it. These deficiencies include:

1. The disparity between the increment levels for Zone I and Zone II is so great that large "buffer zones" would be required around Zone I areas. EPA has estimated (Office of Air Quality Planning and Standards Memo, dated August 12, 1974) that large particulate and SO₂ sources which could operate within EPA's Class II increments (identical, except for 3-hour SO₂ increments, to OSPIRG's Zone II) would have to be placed at least 80 miles away or the upward side from Class I areas (identical to OSPIRG's Zone I) to avoid violating Class I increments. Buffer zones this large around small state parks, for instance, would be impractical, but excluding such state parks would subject those areas to the unacceptably large Zone II increments. The EPA Class (or Zone) approach is unworkable for designation of areas smaller than an entire airshed, unless the sizes of the Class II (or Zone II) increments are decreased.
2. The State Air Quality Control Regions are not strictly enough defined to prevent gerrymandering by inclusion of clean areas within a designated SAQCR in order to dilute the local effect of a very dirty source.
3. The relationship of "best available control technology" to federal new source performance standards and to the existing Oregon requirement of highest and best practicable treatment and control is not delineated. The OEC believes the best available control technology standard should be stricter than either.
4. Mapping required by designation of geographical areas required by Zone I, Zone II, and SAQCR's might raise potential jurisdictional conflicts with the Land Conservation and Development Commission. This difficulty and the difficulty numbered "1" above, could be avoided by the mechanism suggested in Mr. Guilbert's article of having the increments vary automatically according to the baseline emissions.
5. Use of 1972 rather than 1970 as the baseline is not explained.
6. As noted in Dr. Ullman's cover letter, adequate standards for nitrogen oxides, hydrocarbons, and carbon monoxide are not included in the proposed rules.

While the OEC does note these deficiencies in the OSPIRG proposal, we wish to emphasize once again our strong and unequivocal support of

immediate rulemaking to implement non-deterioration. EPA Administrator Ruckelshaus disapproved Oregon's Clean Air Implementation Plan to the extent that it failed to implement non-deterioration back in 1972, and Oregon has been in technical violation of the Clean Air Act ever since. We therefore propose that the Commission adopt the following temporary rule at today's meeting:

"The Director shall grant no air contaminant discharge permit in an area in which air pollution levels are below the secondary standards of the Clean Air Act of 1970 until such time as the Environmental Quality Commission has adopted final rules implementing a policy of non-deterioration of air quality,"

and that the Commission direct the Director to present specific rules to implement the non-deterioration policy to the Commission at its December 20, 1974 meeting in Albany, Oregon.

Thank you.

OREGON ENVIRONMENTAL COUNCIL
2637 S. W. Water Avenue
Portland, Oregon 97201

Up in Smoke: EPA's Significant Deterioration Regulations Deteriorate Significantly

By Thomas G. P. Guilbert*

On August 16, 1974, the Environmental Protection Agency announced its latest proposed regulations¹ for implementation of the Clean Air Act's stated purpose, "... to protect and enhance the quality of the Nation's air resources ..."² Usually referred to as "significant deterioration" regulations, the proposed regulations are the EPA's latest move in a chess game against the Sierra Club, whose opening move, *Sierra Club v. Ruckelshaus*³ in 1972, was the legal equivalent of taking the EPA queen. EPA has skillfully used the bureaucratic riptoste of delay and attrition, once resorting to the famed Nixon Defense (king's pawn to knight's fore: "In EPA's view, there has been no definitive judicial resolution of the issue whether the Clean Air Act requires prevention of significant deterioration of air quality. When the issue was presented to the Supreme Court, the Court was equally divided ..."⁴). The latest proposed regulations are very weak, and the Sierra Club must now decide if it will settle for a stalemate.

The term "significant deterioration" refers to the degradation of existing air quality in areas of the nation where it is now better than is required by EPA's secondary standards for pollutant concentrations in ambient air. According to the *Sierra Club* ruling, such degradation is forbidden by the "protect and enhance" language of the Clean Air Act, and the EPA Administrator has a non-discretionary duty under the statute to disapprove all state implementation plans which do not contain provisions to prevent it. The proposed regulations represent the Administrator's latest attempt to establish rules governing the preparation and approval of these significant deterioration portions of state plans.

The author supposes there would not be such a furor about significant deterioration regulations if the national

secondary ambient air quality standards really protected all of the values the Clean Air Act says they are supposed to protect. While the primary standards established under the Act are designed to protect human health, the secondary standards are supposed to protect "human welfare," which is defined by the Act to include (but not be limited to):

effects on soils, water, crops, vegetation, man-made materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being.⁵

The Environmental Protection Agency has, of course, established secondary standards under the Act, which are exceedingly difficult to meet in most urban areas. As a practical and political matter, the EPA would have had a difficult time establishing levels any more stringent than the current secondary standards, and there is organized political pressure to have the standards relaxed.

Looking at the value of visibility, for example, what may appear to New Yorkers or Los Angelenos as a sparkling, clear day might look like a cloud on the horizon of Taos, New Mexico, or Bend, Oregon. In vast areas of this nation, especially in the high deserts of the West, visibility is routinely on the order of hundreds of miles. By contrast, estimates of visibility through air loaded up to the secondary standard limitations are in the ten to fifteen-mile range. Resort towns whose attraction is based in part on vistas of distant mountains could find, if the air in the intervening area were allowed to degrade to secondary standard levels, that they were located ten times too far away from the mountains to see them. A visitor to Crater Lake might find he couldn't see all the way across.

In addition to visibility reduction and by no means of lesser importance, however, are a variety of other effects which EPA has noted may result from increasing amounts of air pollutants.⁶ These effects include reduction in solar radiation reaching the ground, acidification of rain, lakes and streams, and conversion of sulfurous and nitrogenous emissions into sulfates and nitrates.

Conceding that the above scenario is possible, is it realistic? The answer, apparently, is yes: a source of air pollution currently located in an urban area may well

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1. 39 Fed. Reg. 30999 *et seq.* (Aug. 27, 1974).

2. 42 U.S.C. §1857 (b) (1), ELR 41201.

3. 2 ELR 20262 (D.D.C. 1972), *aff'd*, 2 ELR 20656 (D.C. Cir. 1972), *aff'd* by equally divided court, *sub nom.* *Fri v. Sierra Club*, 3 ELR 20684 (U.S. 1973).

4. 38 Fed. Reg. 18986 (July 16, 1973).

5. 42 U.S.C. §1857h (h), ELR 41224.

6. 38 Fed. Reg. 18991 (July 16, 1973).

wish to expand production and concomitantly expand emissions at the same time the air pollution control agency in the area is requiring other sources to cut back on emissions in order to meet secondary standards. The application for a permit for increased emissions will likely be denied, leaving the source with the choice between finding emissions control technology which will allow expanded production without expanded emissions, abandoning plans to expand production, or relocating the expanded source elsewhere. All other things being equal, good management would then suggest that a move occasioned by the lack of capacity of an airshed to assimilate the source's pollutants should be to an area with maximum assimilative capacity, i.e. an "empty" airshed. In fact it was the location of a massive fossil-fuel electric generating complex in the peculiarly pristine Four Corners area of the desert Southwest that provided a major impetus for the litigation affirming the Clean Air Act's no significant deterioration policy.

The EPA Response

In July, 1973,⁷ the EPA brought forth four alternative plans for achievement of minimal degradation of existing high air quality. Each of the four plans applied specific limitations to only two pollutants: sulfur dioxide and particulate matter; each required that all new or modified sources in clean air areas employ best available control technology; each applied to sixteen specified categories or sources, plus any other source which would emit more than 4000 tons per year of sulfur dioxide, particulate matter, nitrogen oxides, hydrocarbons, or carbon monoxide.

One of the four 1973 plans, the Emission Limitation Plan, would not have regulated ambient air quality directly at all, but rather would have limited total emissions over a relatively large area, which indirectly would have resulted in maintenance of air quality in many or most cases. This plan had the inherent simplicity of not relying upon complex diffusion modeling techniques to determine baseline air quality and the probable contribution of a proposed source to deterioration.

The EPA's 1973 Local Definition Plan, carrying to the logical limit an erroneous EPA concept that "significant" as used in Judge Pratt's opinion in *Sierra Club v. Ruckelshaus*⁸ could somehow be separated from "deterioration of air quality" and evaluated independently, allowed states and local air pollution agencies to make a case-by-case determination of whether the predicted deterioration of air quality caused by a new source would be "significant" in terms of that agency's or state's policy.

The EPA's 1973 Air Quality Increment Plan would have established a single nationwide allowable incremental increase in SO₂ and particulate concentrations. The in-

cremental size EPA settled on was one which, in EPA's opinion, would balance reasonable amounts of economic growth and deterioration of air quality.

Finally, EPA's announced favorite plan of 1973 combined elements of both the Local Definition and Air Quality Increment Plans. Called the Area Classification Plan, states could zone some areas so that incremental increases of the same size as in the Air Quality Increment Plan would be allowed (Zone II); other areas could be zoned so that much smaller incremental increases would be allowed (Zone I). While the increment for Zone II would allow moderate industrial development, the Zone I increment would prohibit the introduction of even one small fossil fuel fired power plant, municipal incinerator or medium apartment complex, using normal emission control techniques. There was also an "exception," or variance, procedure allowing states to zone some areas so that deterioration up to the secondary standard would be allowable.

With only very minor changes, the Area Classification Plan was re-proposed to the states in a document mailed to the fifty governors with a cover letter signed by Russell Train and dated July 11, 1974. The preamble accompanying that letter informed the states that they had thirty days to comment on the proposed regulations. However, when the employees of the air pollution agency of at least one state telephoned the EPA offices in Research Triangle Park, North Carolina, during the first week in August concerning the regulations, they were told not to bother to comment, since major revisions were to be included in a new proposal that was released August 16, 1974.

Major Weaknesses of the EPA Plan

The latest plan carries over the weaknesses of its lineal ancestors, the Area Classification Plan and the stillborn July 11, 1974, plan. However, what baby teeth those predecessors had have been pulled in the August 16 proposal.

By all odds, the greatest weakness in the original Area Classification Plan was the "exception" procedure. By granting exceptions, states could allow any area of the state to be exempt from the Clean Air Act's "protect and enhance" requirement and deteriorate to the secondary standard. This procedure is now formalized as Class III (1973's "zones" having become 1974's "classes") of the August, 1974, plan. Although the proposed regulations establish some procedures the states must go through to redesignate areas Class III, including holding public hearings and consulting with Federal Land Managers, where applicable, they state that the redesignation "shall be approved unless the Administrator determines ... that the State has arbitrarily and capriciously disregarded relevant environmental, social, or economic considerations ..." (emphasis added). The requirement that the considerations must be arbitrarily and capriciously disregarded

7. 38 Fed. Reg. 18985 *et seq.* (July 16, 1973).

8. 2 ELR 20263.

9. 39 Fed. Reg. 31008 (Aug. 27, 1974).

assures that the Administrator will not disapprove a redesignation to Class III so long as the state gives lip service to air quality considerations and cites the economic advantage to the air pollution source. Predictably, this loophole will swallow up the rule.

But is the loophole legal? Judge Pratt's order in *Sierra Club v. Ruckelshaus* required the EPA Administrator to disapprove state implementation plans which allow significant deterioration of air quality "in any portion of any state."¹⁰ Under the EPA proposed regulations, a state could redesignate an area where there existed zero pollution or nonmeasurable amounts of pollution as a Class III area and then allow the air quality to degrade all the way to the secondary standards. On exclusively air quality grounds, if there is to be any meaning to Judge Pratt's order, it must mean at least that such deterioration is prohibited by the Clean Air Act's "protect and enhance" language; otherwise, we are left with no standard beyond the secondary standards.

In 40 CFR part 52, section 52.21, to which the new significant deterioration regulations will be added, the EPA Administrator, in compliance with the order, disapproved all state plans "... to the extent that such plans lack procedures or regulations for preventing significant deterioration of air quality in portions of States where air quality is now better than secondary standards."¹¹ Yet, at the press conference on August 16, John Quarles, Deputy Administrator of EPA, conceded under questioning that it would be correct to characterize the proposed regulations as not preventing the states from allowing existing clean air in some areas to degrade all the way down to the national standards, and thus the regulations do not solve the problem.

How can EPA propagate this Newspeak a full ten years before 1984? In his prepared remarks for the August 16 press conference, Quarles advanced "... a recognition that deterioration of air quality can be regarded as 'significant' only within the broader perspective of public expectations and desires concerning the manner in which a particular region should be developed."¹² Unfortunately, Quarles, a lawyer and a very good one, did not tell us where EPA derived the statutory authority to enact regulations formalizing such recognition. The Clean Air Act does very specifically grant states the authority to impose "land use and transportation controls" as part of their implementation plans, but only "... as may be necessary to insure attainment and maintenance of [a] primary or secondary standard."¹³ The authority to apply (or not apply) ambient air quality standards more restrictive than

the secondary standard for the purpose of land use control is not an extension of that authority, but the converse of it, and legally highly dubious. The purpose of enforcing ambient air standards more restrictive than the secondary standards is, as stated in the Clean Air Act, simply "to protect and enhance the quality of the Nation's air resources." The author fails to find authority in that law for using air quality standards for any other purpose.

In one of the sentences added to the preamble to the proposed regulations between the July and August, 1974, drafts, the EPA has italicized two words in the second part of the "protect and enhance" subsection: "... so as to promote the public health and welfare and the *productive capacity* of its population."¹⁴ Could this be the phantom authority for using the Clean Air Act as a means to accomplish the "broader perspective of public expectations and desires concerning the manner in which a particular region should be developed"? It takes a distortion of language to read it so. What EPA seems to want the subsection to say is that the quality of the Nation's air resources should be protected and enhanced *so long as it does not interfere with* pollutant-producing production by the population in clean air regions: that is, EPA views productive capacity as in conflict with, and restricting, the purpose of protection and enhancement of air quality. The subsection's language, however, shows that Congress expected that protection and enhancement would *result* in the promotion of productive capacity, in that people will be healthier, happier, and more productive when the air is clean than when it is dirty.

In their inherent police power, the states do, of course, have the power to regulate land use in accord with the expectations and desires of the populace on how land should be developed. The EPA, however, has no statutory authority to *require* the states to exercise that power, as would be suggested by the Administrator's reserving the right to disapprove a redesignation if the state has disregarded a relevant social or economic consideration.

The whole thrust of *Sierra Club v. Ruckelshaus*, appealed all the way to the Supreme Court and affirmed there, is that the Clean Air Act, by its "protect and enhance" language, forbids any "significant deterioration of existing air quality in any portion of any state where existing air quality is better than one or more of the secondary standards promulgated by the Administrator."¹⁵ Under the doctrine of pre-emption, a state cannot validly adopt less restrictive air quality controls than the federal standard. Nor may EPA delegate to the states the power to adopt less stringent standards than are allowed by federal law, and it is thus highly doubtful that the Agency has the power to *approve* the exercise of state police power in the field of air pollution control if that exercise would work against the goals of the Clean Air Act.

10. 2 ELR 20263.

11. 37 Fed. Reg. 23836 (Nov. 9, 1972).

12. Remarks by John R. Quarles, Jr., EPA Deputy Administrator, at the Significant Deterioration Press Conference (August 16, 1974) at 3.

13. 42 U.S.C. §1857c-5(a)(2)(B), ELR 41206

14. 39 Fed. Reg. 31000 (Aug. 27, 1974).

15. 2 ELR 20263.

The stillborn July, 1974 proposal had an interesting feature, deleted from the August proposal, requiring states to specifically redesignate any areas they desired to be Class II (moderate degradation) or Class III (degradation to the secondary standards) within 24 months of promulgation of the regulations. As with the earlier 1973 Area Classification Plan and the later August 16, 1974, proposal, the Class II designation was to become the nationwide standard as of the date of promulgation, but under the July, 1974, proposal, areas not specifically redesignated Class II or Class III within two years would then automatically revert to Class I (almost no degradation). (States could, however, later redesignate the now-Class I areas to Class II or Class III.) Thus under the July, 1974 proposal the weight of bureaucratic inertia was on the side of cleaner air, since a state's failure to take classification action would result in areas reverting to the high standards of Class I, whereas state inaction under the more recent proposal would leave areas subject to the lower standards of Class II. In its preamble to the July, 1974, proposal, where this feature was explained, EPA stated:

The nationwide Class I designation after 24 months for State hearings and redesignations . . . is not simply a tactical maneuver to force States into action. It does have this conceptual basis: *if "significant deterioration" were to be considered from a purely air quality standpoint, without any consideration and balancing of economic, social, and other factors, it is at least arguable that the Class I type of designation would be the most appropriate in many areas. Therefore, on a conceptual basis, the Administrator is simply providing a tentative determination of what significant deterioration means . . .*" (emphasis added)¹⁶

These words are gone from the preamble to the August 16, 1974, proposal, but the obvious question that quotation raises lives on in the proposed regulations: if deterioration greater than the increments allowed in Class I areas is significant in some places, why isn't it significant in all places? If the answer to that question can be framed only in terms of consideration of factors other than air quality, where is the statutory authority of the EPA to require consideration of those factors? More importantly, in the face of the Clean Air Act's "protect and enhance" language and the judicial interpretation thereof, where is the statutory authority of the EPA to allow deterioration greater than Class I in any area? In short, the very existence of a Class I in the latest EPA proposal stands as the strongest criticism of the existence of Classes II and III.

EPA argues, not frivolously, that a significant deterioration regulation of the stringency of the Class I allowable increments, applied universally and uniformly, would be severely restrictive of many social and economic activities; and that if Congress had intended to make air quality considerations as dominant a determi-

nant of land use as a nationwide Class I designation would dictate, it would have used more explicit language than that of the "protect and enhance" subsection. This is an important argument which, though apparently rejected by the courts, deserves serious consideration. The author would like to make three observations with regard to it.

First, the land use implications of the significant deterioration requirement of the Clean Air Act have probably been overexaggerated. No air regulation, standing alone, can affect uses of land which do not cause air pollutant emissions, and as a practical matter, will have little effect on any but large sources of pollutants. Residential, agricultural, small commercial, and light industrial land uses don't generate enough pollutants (except, perhaps, from the automobile exhausts in parking lots and from building heating units) to raise serious concerns about significant deterioration. If improvements in automobile emissions control which EPA anticipates materialize, and sensible transportation planning accompanies future development, significant deterioration rules will most likely not have a restrictive effect on these land uses unless dirty fuels are burned in a large number of home and small business furnaces. Even controlling the emissions from furnaces yet to be built does not, however, appear to raise insurmountable land use problems.

Second, with regard to heavy industry and utilities, the prohibition against significant deterioration means only that in the short run, increases in the volume of uncontrolled emissions will not be allowed to seriously outstrip improvements in emissions treatment and control technology; and in the long run the improvements in control technology must very nearly equal the increases in pollutants generated. But this long-run requirement is the same no matter what ceiling exists on ambient air deterioration. Even if all areas were allowed to deteriorate to the secondary standards and even if the secondary standards were relaxed, sooner or later, if the increase in pollutants generated continues to exceed improvements in treatment and control technology, all air sheds will be loaded to the point where they can assimilate no more pollutants. Thus, the question is not whether there will be a "no-growth" policy on pollutants actually being emitted into the air, but rather how fast a time schedule is imposed to achieve that policy, and how far air quality will deteriorate before the eventual "no-growth" policy is achieved.

Third, it is not necessarily true that, from a purely air quality standpoint, deterioration greater than Class I increments would in every case be significant. While, as argued above, the EPA lacks statutory authority to impose allowable deterioration increments on grounds other than air quality, an increment which varies according to purely air quality considerations would fall within the statutory mandate. Thus, using as an example the annual arithmetic mean secondary standard for sulfur dioxide (80 micrograms per cubic meter), while it may be that a deterioration of more than 2 micrograms per cubic meter

16. Draft Preamble to regulations sent to governors July 11, 1974, at p. 17.

(the Class I increment) would be considered significant where existing air quality either has zero concentration of sulfur dioxide or stands at 78 micrograms per cubic meter, a deterioration of 15 micrograms per cubic meter (the Class II increment) might well be considered insignificant where existing air quality stands at 50 micrograms per cubic meter.

Other Weaknesses of the EPA Plan

While the above deficiencies in the EPA proposal are the most serious, they are not the only areas in which the proposed regulations fail to satisfy the Clean Air Act.

Under the proposed regulations, the head of any department or agency or the United States Government which administers federally-owned land, including public domain lands, or his designated representative, may stymie any state's attempt to redesignate the land Class I (or Class II or III).¹⁷ In the event of disagreement between the federal land manager and the state, the Executive Office of the President will designate a classification for the area. This provision seems to fly in the face of the Clean Air Act's clear statement:

that the prevention and control of air pollution at its source is the primary responsibility of States and local governments.¹⁸

In light of the fact that it is precisely in the sparsely settled states of the West and Alaska, where the United States Government owns a large percentage of the land, that many large, scenic pristine air areas exist, this provision in the proposed rules is a significant one. Further, it is conceivable that, for example, a soft-coal fired thermal generating plant located on federal lands redesignated by the Executive Office of the President as Class III could prevent the maintenance of Class I deterioration increment levels on adjoining non-federally-owned land.

This latter situation would provide a direct parallel with the facts in *Huron Portland Cement Co. v. Detroit*.¹⁹ In that case, a ship operating in interstate commerce on the Great Lakes was in full compliance with federal regulations governing its boiler equipment and operations, and would require structural alterations in order to comply with Detroit's smoke emission standards. Nonetheless, finding that maintenance of air quality is a matter of peculiarly local concern, the Court held that the ship must comply with the smoke standards.

The federal regulations in the *Huron Portland Cement* case had been enacted for safety, not air quality, purposes. An even more apposite case might thus be *Florida Lime and Avocado Growers v. Paul*.²⁰ In that case, the relevant federal regulations were the United States Department of

Agriculture's standards of wholesomeness. California excluded importation of some avocados for failing to meet stricter state standards covering the same subject matter and was upheld in its action by the Supreme Court.

Finally, to allow a federal land manager to deadlock the imposition by a state of significant deterioration limitations over an area, with the power to resolve the deadlock vested in a federal authority, amounts to exclusive federal jurisdiction over the land. Article I, section 8, clause 17 of the United States Constitution provides the only express authority for the exercise of exclusive jurisdiction over lands within states. That clause states, in part:

The Congress shall have power . . . To exercise exclusive Legislation in all Cases whatsoever . . . over all Places purchased by the Consent of the Legislature of the State in which the Same shall be, for the Erection of Forts, Magazines, Arsenals, dock-Yards, and other needful Buildings. . .

Under the Tenth Amendment to the United States Constitution, reserving all powers not enumerated to the federal government to the states and the people, there can be no other instances when there is exclusive federal jurisdiction over lands within states, and so this portion of the rule presents constitutional problems.

The other side of this federal regulation coin is that the Administrator of the EPA clearly could use the statutory directive that he

shall encourage cooperative activities by the States and local governments for the prevention and control of air pollution; encourage the enactment of improved and, so far as practicable in the light of varying conditions and needs, uniform State and local laws relating to the prevention and control of air pollution; and encourage the making of agreements and compacts between States for the prevention and control of air pollution.²¹

in resolving jurisdictional disputes over allocation of the deterioration increment along state boundaries. Many such disagreements could actually be created by the proposed regulations in that the deterioration allowed in a Class III area designated by one state and that allowed in a Class I area which the neighboring state may wish to designate in the same airshed may be mutually inconsistent. However, while noting that the "transport of pollutants across State lines was a major issue raised by the states which filed amicus curiae briefs in [*Sierra Club v. Ruckelshaus*]," the EPA states in its preamble to the regulations, "it is not appropriate to place the Administrator in the role of arbitrator in interstate disputes because

17. 39 Fed. Reg. 31007 (Aug. 27, 1974).

18. 42 U.S.C. §1857(a)(3), ELR 41201.

19. 362 U.S. 440 (1959).

20. 373 U.S. 132 (1963).

21. 42 U.S.C. §1857a (a), ELR 41201. *cf.* 42 U.S.C. §1857c-5 (a) (2) (E), ELR 41206, requiring all state implementation plans to contain "adequate provisions for intergovernmental cooperation, including measures necessary to insure that emissions of air pollutants from sources located in any air quality control region will not interfere with the attainment or maintenance of such primary or secondary standard in any portion of such region outside of such state or in any other air quality control region."

he would have no criteria on which to base his decisions." The EPA can and will provide technical assistance and make findings of fact; but if the differences cannot be resolved, relief should be sought through the courts."²²

The author suggests, however, that the only criteria the EPA Administrator lacks to perform the role of arbitrator are the social and economic factors which he lacks statutory authority to consider in any event. At the same time, the statutory directive cited above that he "shall encourage . . ." gives him ample criteria on which to base his decisions.

The date of the baseline above which no significant deterioration will be allowed presents another anomaly of the proposed regulations. The "protect and enhance" language has been in federal law since the Air Quality Act of 1967, although there existed only meager federal enforcement powers prior to the enactment of the Clean Air Act of 1970. It was in the 1970 Senate Report accompanying the bill that became the Clean Air Act that Judge Pratt found convincing evidence that in the re-passage of the "protect and enhance" clause the policy of no significant deterioration became the legislative intent.²³ In Judge Pratt's order in *Sierra Club v. Ruckelshaus* in 1972, he directed the EPA Administrator to "disapprove any portion of any state plan which fails to effectively prevent the significant deterioration of existing air quality in any portion of any state,"²⁴ (emphasis added) meaning, presumably, 1972, so that that date must be the latest candidate from which significant deterioration may be computed.

The proposed EPA regulations, however, use as the baseline 1973 data to which has been added the modeled contribution from sources on which construction began before the effective date of the regulations. EPA justifies this choice on three bases: that 1973 is the latest year for which complete data is available, and since data gets better every year, it is also the most reliable data available; that extrapolation back to a recent baseline by modeling techniques is more easily done for a recent date since which fewer pollution sources have located than for a distant, historical date; and that using an earlier date would work an unfairness upon sources which have located in clean air areas since the baseline date.

The first two arguments for a 1973 baseline are based upon technical and administrative convenience, and have no legal color at all. However, if 1973 (or later) air quality can reasonably be equated with an earlier baseline, i.e., if no new sources have located to cause deterioration since the earlier baseline date, then these arguments also have no technical or administrative merit. In other words, the convenience applied only in precisely those cases where a

new source has changed the air quality from that existing when Judge Pratt's order was given.

The third fairness argument is unconvincing because it cuts both ways. If it is unfair to impose a retroactive baseline which may force a source which has located in a clean air area since that baseline date to clean up, is it not equally unfair to reward those "sooners" who rushed to clean air areas after Judge Pratt's order but before the regulations came out, gaining a competitive advantage over those who may wish to locate in those areas later but cannot fit within the allowable deterioration increment? In fact, is there not a colorable equal protection argument here which outweighs any due process considerations?

Beyond these questions, the proposed regulations establish an incremental deterioration that may be added to the baseline, so that in a Class II area, for instance, a moderate amount of pollutants may be added to the air shed beyond the 1973-74 baseline, even if, due to new sources, that 1973-74 baseline has been raised by several times that moderate amount above air quality levels existing in 1972. What logic is there in allowing further deterioration from levels existing in 1972 only because a new large source managed to get into the area before 1973-74 data were taken?

Related to the question of the baseline date is the fact that the proposed regulations, which are effectuated through the new source review process, do not affect new sources which commence construction within six months of the effective date of the regulations. Thus it is possible that, even with the baseline effectively the level as of the date of promulgation of the regulations, EPA's own allowable incremental deterioration may have been exceeded many times over before the first new source in the area is reviewed under the significant deterioration criteria.

The 1973 Area Classification Plan and the stillborn July, 1974 proposal to the governors both contained provisions requiring major new sources to conduct air quality monitoring in their vicinity. The data from such monitoring was to be used both to assure that the air quality was not deteriorating beyond the increment allowed for that area and to provide data for the prediction of whether a proposed later new source could be constructed without exceeding the allowable deterioration increment. The monitoring requirement has been excised from the August, 1974 proposal. EPA has now committed itself fully to preconstruction modeling techniques. This weakness in the present regulation is a technical, rather than a legal one, but it is a serious weakness. Diffusion modeling is a young science, and results derived from it are subject to error of a high magnitude. EPA asserts that "[d]ata obtained from current diffusion modeling techniques, while not corresponding to actual conditions in the ambient air, do provide a consistent and reproducible guide which can be used in comparing the relative impact of a source."²⁵

22. 39 Fed. Reg. 31005 (Aug. 27, 1974).

23. 2 ELR 20264.

24. 2 ELR 20263.

25. 39 Fed. Reg. 31003 (Aug. 27, 1974).

Errors in the results can be reduced somewhat by calibration of the model against measured data; however, with no monitoring requirement, such calibration is unlikely to occur or even be possible. Furthermore, like any modeling technique, diffusion modeling becomes much more complex, difficult, and expensive the more variables are introduced. The cumulative effects of non-major sources on the air quality of an area are likely to be simplified out of a pre-construction model for a major source.

From the manpower standpoint of the state regulating agency, monitoring data provides some reference numbers against which to compare what will probably be a bewildering document submitted when an applicant for a permit presents his diffusion model "proving" that his proposed source will not cause air pollution levels to exceed the allowable deterioration increment. After the source is constructed, monitoring data will afford the regulating agency a method of knowing if the pre-construction prediction was correct, if the applicant is in compliance, and if there is any "unused" increment left. The data collected from such monitoring stations, moreover, can be useful to the agency for other air programs.

In two respects the new proposed regulations are extremely solicitous of the interests of fossil fuel-fired steam electric power plants. In the first instance, as explained in the preamble to the rules, EPA has eschewed the use of "modified source" in favor of "expanded source," defined as a "source which intends to increase production through a major capital expenditure." EPA states that this was to accommodate fuel-switching allowed under the Energy Supply and Environmental Coordination Act of 1974,²⁶ which EPA concedes was not intended to resolve the significant deterioration issue, but which does reflect a recent expression of congressional intent regarding priorities. EPA is probably correct that, subject to the limitations provided in the 1974 Act, Congress has determined that conservation of clean fuels achieved by fuel-switching takes precedence over significant deterioration.

The second accommodation to fossil fuel-fired steam electric power plants is less defensible. In the July, 1973, preamble,²⁷ EPA explained (highly simplified here) that the new source performance standards for this type of source had been set to correspond to the performance of the best control technology (stack scrubbers or electrostatic precipitators) on the emissions from the worst fuel conditions (high sulfur coal). However, due to the availability of low sulfur fuels in many of the same areas where the air is presently cleaner than the national secondary standards, these new source performance standards could be met without application of the best control technology. Nonetheless, the 1973 proposal contained a provision requiring the best available control technology which, when used in conjunction with the better fuels,

would result in performance standards appreciably higher than the new source performance standards.

The requirement for best available control technology on such power plants in clean areas has been deleted from the most recent proposal. In EPA's words, "power plants would not be subjected to the special [best available control technology] review because requiring such a review might arguably be inconsistent with the Congressional intent of requiring national standards of performance for new sources."²⁸ Congressional intent? Whatever happened to "The purposes of this subchapter are — (1) To protect and enhance the quality of the Nation's air resources ..."²⁹

The Clean Air Act requires, by reference,³⁰ that national primary and secondary ambient air quality standards be established for a minimum of six pollutants: sulfur dioxide, particulate matter, carbon monoxide, hydrocarbons, nitrogen oxides, and photochemical oxidants. (Photochemical oxidants are caused by the action of sunlight on other pollutants, and should be adequately controlled by emissions standards controlling the ambient air concentrations of the first five pollutants.) Judge Pratt's order required that the EPA Administrator approve only those state implementation plans which do "... not permit significant deterioration of existing air quality in any portion of any state where the existing air quality is better than *one or more of the secondary standards promulgated by the Administrator.*"³¹ (emphasis added) The presently proposed regulations control only sulfur dioxide and particulate matter, and are thus in putative violation of the court order.

In the 1973 Area Classification Plan, best available control technology was required for all pollutants for which secondary standards exist, although the Zone I and Zone II increments applied only to sulfur dioxide and particulates. EPA in its latest regulation finds this best available control technology requirement "inconsistent" with the Class I and Class II restriction to the two pollutants. EPA does not explain why it considers the requirement that new sources apply best available control technology to all pollutants is inconsistent with its regulations proposed for the express purpose of preventing significant deterioration of air quality. Interestingly, EPA continues to use the argument that the regulations require application of best available control technology, even though the regulations in fact no longer so require, as an argument against including carbon monoxide, hydrocarbons, and nitrogen oxide in the increments in its area classifications.³²

The preamble makes two other arguments against in-

26. P.L. 93-319, ELR 41231.

27. 38 Fed. Reg. 18989 (July 16, 1973).

28. 39 Fed. Reg. 31005 (Aug. 27, 1974).

29. 42 U.S.C. §1857(b) (1), ELR 41202.

30. 42 U.S.C. §1857c-4(a)(1)(A), ELR 41205.

31. 2 ELR 20263.

32. 39 Fed. Reg. 31006 (Aug. 27, 1974).

clusion of carbon monoxide, hydrocarbons, and nitrogen oxide in the deterioration increment, neither of which is nearly as convincing as the former and now invalid argument based on the deleted best available control technology requirement. The first is that, since the prime source of this type of pollution is the automobile, and new automobile emission controls are drastically reducing automobile emissions, there will be no significant deterioration for these pollutants, and conditions may actually improve. If significant deterioration for these pollutants is unlikely to occur, however, what harm can be caused by issuing regulations setting a deterioration increment which may not be exceeded? Furthermore, reductions of emissions at the source will result in reductions of pollutants in the ambient air only if the number of new sources does not exceed the amount of per-source reduction. The EPA has published separate regulations concerning indirect sources:³³ parking lots, highways, airports, etc., in recognition of this fact. While moderate residential and small commercial development is not likely to cause significant air pollution, a massive shopping center with its accompanying parking lot where once there was only rangeland might well cause significant deterioration of the ambient air for the "automotive pollutants" in that area.

The other argument EPA makes against inclusion of these pollutants is that there are no identifiable or noticeable effects at concentrations below secondary standard levels. In making this point, EPA concedes that sulfur dioxide and particulates have aesthetic impact at levels below the secondary standards. If this latter is true, then in light of the Clean Air Act's definition of "welfare"³⁴ the secondary standard may have been promulgated at an improper level for those two pollutants. Regardless of aesthetic or other effects, however, the decision in *Sierra Club v. Ruckelshaus* appears to interpret the Clean Air Act to require that concentrations of any pollutants shall not be allowed to rise significantly where the existing levels are below the secondary standards; and to state that deterioration all the way to the secondary standards is not significant appears to be a transparent violation of the court order, and, by extension, the Clean Air Act.

Not all changes in the proposed regulations that have taken place since the original 1973 proposal have weakened them, however. The list of sources for which pre-construction review is required to determine the effect on ambient air has been expanded from 16 types to 19, adding fuel conversion plants, primary lead smelters, and sintering plants. At the same time, however, another requirement that any source not included in the original 16 types which has a total annual potential emission rate for any of the five major secondary standard pollutants greater than 4,000 tons was deleted. The deletion relating to carbon monoxide, hydrocarbons, and nitrogen oxides

is in line with the general decision, discussed above, to ignore these pollutants. The deletion of the requirement with regard to non-listed sources emitting greater than 4,000 tons per year of sulfur dioxide or particulates was "because the requirement generally is superfluous."³⁵ The only time the provision would have come into effect, however, would have been when it was specifically non-superfluous, so it is a matter of open conjecture why EPA did not leave the provision in the latest proposal.

Finally, as a purely political and practical matter, the proposed regulations suck state air pollution control agencies into a maelstrom. If a state should desire to redesignate any area Class I or refuse to redesignate an area Class III when requested to do so, the air pollution control agency is going to be cast as the villain which unreasonably insists on absurdly pure air at the cost of goods, services, and the American Way.

It is hard to imagine any regulation which does not have some ripple effects, of course, and pollution control regulations perhaps have more than most. On this issue, however, EPA has told the states it won't stand behind them. As any county planning official can testify, nothing inflames the passions more than drawing lines on a map, and yet the proposed regulations require drawing lines on a map if the state does not wish to settle for a uniform Class II designation. (Further, the EPA Administrator has specifically solicited "comments on the desirability of increasing the level of the Class II increments proposed."³⁶ Will he reject comments on the desirability of decreasing the level of the Class II increments, one wonders?)

Once the lines are drawn, the agency must defend them at at least one public hearing in the area affected. That won't be easy, since in the majority of cases, the decision to draw the line right here instead of a little over there, or maybe in the other direction, will have been an arbitrary one. Once the area is redesignated, another political question has been created: how far within a Class III area must a source locate so as not to violate the air at the border of a Class II or Class I area? This once arbitrary line suddenly takes on great importance as people take sides on the question of buffer zones to protect the border areas. Once the owner or operator of a proposed new source applies for a permit, the battle lines will form again on at least four different fronts. Will the new source cause the deterioration increment to be exceeded in its own area? Will it cause the increment to be exceeded in a neighboring area of a numerically lower class? Should the immedi-

33. 39 Fed. Reg. 7270 *et seq.* (Feb. 25, 1974).

34. See text accompanying note 5, *supra*.

35. 39 Fed. Reg. 31003 (Aug. 27, 1974). In the proposed regulations of 1973, the Administrator noted that the sixteen categories of sources account for approximately 30 percent of the particulate matter and 75 percent of the sulfur dioxide emitted into the atmosphere each year nationwide, and account for essentially all of these pollutants emitted in clean areas. 38 Fed. Reg. 18989 (July 16, 1973).

36. 39 Fed. Reg. 31002 (Aug. 27, 1974).

ate area to be affected by the proposed new source be redesignated to a numerically higher class? Should the entire area in which the new source will be located be redesignated? Later, as each Class I or Class II area reaches its deterioration ceiling, there is certain to be pressure to redesignate upward, or to start nibbling away at the edges by redrawing the boundary lines. Almost all of these political problems are caused by having differential deterioration increments assigned to geographical areas, combined with the unlimited power to redesignate the areas. Do we need regulations which create problems for us like this?

A Suggested Alternative

EPA has complained that commentators on their proposed significant deterioration regulations constantly criticize their conceptual base, but don't get down to the nitty gritty of proposing specific regulations which will work. The author has sent a copy of this article to EPA within the called-for comment period (which ended September 26, 1974), accompanied by a specific regulation which he drafted. The regulation is not printed here, but rests upon the following conceptual bases:

First, the like the EPA proposal, the mechanism establishes increments to be added to baseline air quality rather than setting absolute ceilings for areas irrespective of baseline air quality. This concept may appear at first blush to be a given, deriving from the term "significant deterioration." The statutory language, however, is not "significant deterioration" but rather "protect and enhance" (emphasis added). There is therefore no reason why so-called significant deterioration regulations could not establish absolute pollutant ceiling levels (tertiary standards?) and require air quality cleaner than baseline.

While the EPA proposed regulations are framed in terms of baseline-plus-increment, the environmental, social, and economic ends EPA proclaims are achievable thereby would be much better accomplished by the tertiary standard approach. Compare EPA's remarks in the preface to the proposed regulations:

It is important to recognize that the area classifications do not necessarily imply current air quality levels or current land use patterns . . . Class III could be applied to a currently pristine area, and Class I could be applied to a less clean area . . . Areas should be considered for re-designation as Class I in cases where the location of any polluting industry within the area is inconsistent with current or planned uses for the area . . . because it is one of exceptional scenic or recreational value or is ecologically fragile. . .³⁷

The author recalls the smog alerts in Yosemite National Park of a few years back and wonders if any baseline-plus-increment regulations would accomplish the ends which EPA envisions their regulations will allow. Cleanup of exceptionally scenic or ecologically fra-

gile areas can be achieved by specific emissions regulations, however,³⁸ and significant deterioration rules are more defensible if limited to baseline-plus-increment than if a tertiary standard approach is used.

Second, the deterioration increment is variable. As noted in the discussion of major weaknesses of the EPA proposal, Class I-sized increments may be an accurate reflection of what significant deterioration means in many clean air areas, but in the short run would be extremely restrictive of commercial development. To apply it to every area where the concentrations of one or more pollutants are below the secondary standards would create a far more drastic result than any Congress could have contemplated in passing the Clean Air Act.

Third, the deterioration increment is infinitely variable, rather than having two or three discrete steps, and the size is automatically determined, rather than being subject to political decisions. The infinite variability feature avoids the problems with the differential between allowable increments existing at borders, which are discussed above. The automatic application feature avoids the kind of political difficulties for air pollution control agencies ascribed to the EPA redesignation process.

Fourth, the size of the allowable deterioration increment is automatically determined by baseline air quality. The increment could just as easily be a function of any other independent factor, but the statutory authority probably exists only if the factor is intimately related to air quality. In its preamble to the regulations, EPA alludes to the NRDC Plan, developed by Richard Ayres, where the independent variable of which the increment is a function is population density.

Fifth, the author's proposal assumes that the purpose of the "protect and enhance" subsection is to protect two values above others: one is to guard against the possibility of as-yet-unknown low level effects the pollutants may have as concentrations approach the secondary standard levels; the other is to preserve forever the truly pristine areas where on a clear day you can see forever, and every day when the sun shines is clear. Accordingly, the author's proposal is for an allowable deterioration increment at zero when baseline air pollution concentrations are zero, increasing gradually as a function of higher baseline air pollution, peaking at a moderate level of baseline pollution, then dropping sharply as the baseline air quality approaches the secondary standard. The suggested formulation of such a function defines the significant deterioration increment as the lesser of one third of the baseline pollutant concentration or one half of the difference between the baseline level and the secondary standard.

Sixth, no single permit is allowed to allocate more than one half of the remaining deterioration increment

37. 39 Fed. Reg. 31004 (Aug. 27, 1974).

38. See, e.g. Oregon's Wilderness, Recreational, Scenic Area Rules, Oregon Administrative Rules, Chapter 340, Division 1, Subdivision 3, ELR 49001, at sections 13-015 and 13-020.

measured at any point greater than one mile from the source to which the permit is granted. Five years or more after a source locates in an area, it may apply for a permit to be allocated one half of the then-remaining deterioration increment.

Seventh, computation of the baseline levels and predicted emissions impact are to be accomplished using data measured over a year's time prior to the application for a permit and by diffusion modeling.

Eighth, the burden of proof is placed upon every applicant who must obtain any air pollution permit to show that he can comply with the regulations.

Ninth, permittees are required to continuously monitor

the effects of their emissions on ambient air quality.

Tenth, best available control technology is required in all cases.

In three months, the Clean Air Act will celebrate its fourth birthday. For more than half of those four years, EPA has been under a court order to promulgate regulations to effectuate the Act's "protect and enhance" subsection. That EPA is apparently on the verge of finally acting is welcome news. The American people, however, deserve regulations which comply with the Clean Air Act and the court order, and those we have yet to see from EPA.

PACIFIC POWER & LIGHT COMPANY
PUBLIC SERVICE BUILDING
PORTLAND, OREGON 97204

G. ELDON DRENNAN
SENIOR VICE PRESIDENT

November 18, 1974

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

Subject: OSPIRG Petition for Adoption of Rules Relating
to Significant Deterioration of Air Quality

Dear Mr. Cannon:

Pacific Power & Light Company herewith offers its comments and suggestions with respect to the proposed rules submitted to you by the Oregon Student Public Interest Research Group (OSPIRG) and the Northwest Environmental Defense Center (NEDC) on October 30, 1974.

Pacific Power & Light Company is an investor owned electric utility serving approximately 341,000 customers in the State of Oregon. Although we do not at present have any facilities in the planning stage which would fall within the purview of these proposed regulations, we anticipate that we may be required to construct such facilities at some time in the future to meet the energy needs of our customers and others in the State of Oregon and in the Pacific Northwest. Accordingly, we are concerned with the possible adoption of these proposed rules and welcome this opportunity for comment.

At the outset, we take exception to OSPIRG's contention in paragraph 4 of its petition to the effect that ORS 468.305 mandates adoption of the proposed rules. We respectfully suggest that OSPIRG has misread or misconstrued the statute, and further suggest that the State's Clean Air Act Implementation Plan fully satisfies ORS 468.305. Of course, the Attorney General will wish to address himself to this alleged violation of state law; however, we do wish to point out that ORS 468.305 provides for a plan for "prevention of new air pollution in any area of the state in which air pollution is found existing or in danger of existing," rather than "areas where pollution does not now exist, but may exist in the future" as suggested by OSPIRG. We believe this difference in verbiage to be significant in this context.

Secondly, we suggest that consideration of the proposed regulation at this time is premature. We are sure that OSPIRG is aware of the pending rule making proceeding of the Federal Environmental Protection Agency (EPA) with respect to this very subject. On August 27, 1974, EPA published in the Federal Register a notice of proposed rules for the prevention of significant air quality deterioration as part of its regulations on approval and promulgation of State Implementation Plans. EPA provided a thirty day period for public comment, and we anticipate that

its final rules on this subject will be promulgated in the near future. Accordingly, we urge you to delay action on the OSPIRG petition until such time as the EPA regulations are adopted, and that you adopt, at that time, regulations which will be fully compatible with the EPA rules.

In addition, we would like to point out the following provisions of OSPIRG's proposed regulations which deviate from or conflict with the proposed EPA rule, or which are otherwise unreasonable or unwarranted.

1. Proposed Sections 20-048.02(1) and (3) would place all areas of the state which now have air quality better than the national secondary ambient air quality standards within Zones I and II*. This would not permit the state to designate any area which, for cogent social and economic reasons, may be expected to experience major industrial or commercial expansion. We believe that it would be a grave mistake to foreclose this type of flexibility in land use planning for the state's future needs.

2. The baseline date of 1972 as specified in Sections 20-048.02(1) and 20-048.03(3) is essentially unreasonable and may be unworkable. It gives no consideration to facilities which may have been authorized or under construction in 1972, nor is any consideration given to the question of availability of baseline data for that year. We agree with EPA that an accurately measured baseline is not significant in measuring incremental additions, and urge that you utilize the same baseline as proposed by EPA.

3. The OSPIRG regulation would establish an ambient air standard of 300 ug/m^3 three hour maximum for SO_2 in Zone II areas, as opposed to the 700 ug/m^3 standard proposed by EPA. We commend your attention to the fact that EPA has rescinded its original three hour national ambient air quality standard for SO_2 because it determined that short term concentrations have little adverse effect on health or welfare. The state standard of 1300 ug/m^3 is still almost twice as great as the EPA 700 ug/m^3 standard, and we believe that the EPA figure is sufficient (for short term concentration) to preclude significant deterioration.

4. We believe that it is unnecessarily restrictive and arbitrary to include all lands administered by the Bureau of Land Management within Zone I. There may be BLM administered lands which would more reasonably be classified as Zone (Class) II or III, and we suggest an ad hoc determination on such lands. In addition, we refer you to proposed Section 52.21(c) of the EPA regulations which provides for redesignation of federal lands by the Federal Land Manager with approval of EPA.

5. The inclusion of emission limitations, as suggested by Section 20-048.03, is unnecessary to prevent significant deterioration if ambient limits are adopted. This Section, of course, is akin to the "emission limitation plan" rejected by EPA, and should be rejected for the same reasons. Land use planning

*We suggest the use of the term "Class" rather than "Zone" for the same reasons set forth by EPA in the preamble to its proposed rules in the 27th issue of the Federal Register.

is too important a subject to be based entirely upon one aspect of environmental protection, and so long as the ambient standards are met, there is no need for restriction on emissions in excess of those required under the new stationery source performance standards and under state emission standards. In addition, the 120% of baseline emission limit as proposed by OSPIRG would effectively prevent any development of areas which now have little or no industrial activity.

6. Again, the proposed 100-ton per year limitation suggested by Section 20-048.04 is unwarranted and unnecessary.

7. We suggest that the provisions of proposed Sections 20-048.04, 20-048.05, 20-048.06, 20-048.09, 20-048.10 and 20-048.11 are unnecessary and redundant to other existing regulations of the department. Specifically, OAR Sections 20-020 and -030 now require notice of a proposed new source and information with respect to the source's emissions; Section 20-033 requires permits for such sources; and Section 20-001 requires use of best available treatment and control of air contaminants. We see no need to adopt the OSPIRG suggestions which would unnecessarily duplicate or (in some instances) conflict with existing regulations.

Again, we thank you for the opportunity to offer these comments and trust that you will give them serious consideration.

Very truly yours,



APPENDIX A

OSPIRG AND NEDC PETITION

OSPIRG

OREGON STUDENT PUBLIC INTEREST RESEARCH GROUP

"a balance for the public interest"

411 GOVERNOR BUILDING • 408 SW 2ND AVENUE
PORTLAND, OREGON 97204 (503) 222-9641

October 28, 1974

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

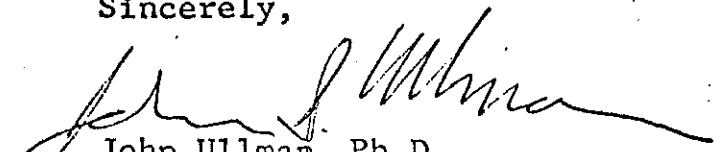
Dear Mr. Cannon:

OSPIRG and the Northwest Environmental Defense Center hereby submit the enclosed petition for adoption of rules relating to prevention of significant deterioration of air quality for consideration by the Environmental Quality Commission.

I request that within the time set in ORS 183.390 the Environmental Quality Commission give notice of intended action on this matter.

You will note that these proposed rules contain standards for only two air contaminants, particulates and sulfur dioxide. I believe it would be very desirable to develop similar standards for other important contaminants as well. I would therefore hope that you would instruct your staff to develop feasible standards for the following additional air contaminants: Nitrogen oxides, hydrocarbons, and carbon monoxide.

Sincerely,


John Ullman, Ph.D.
OSPIRG Staff Scientist

Enclosure

IN THE MATTER OF THE ADOPTION OF OAR)
340 20-048, ESTABLISHING RULES FOR THE)
PREVENTION OF FURTHER SIGNIFICANT)
DETERIORATION OF AIR QUALITY IN AREAS)
IN WHICH AIR POLLUTION DOES NOT EXCEED)
THE SECONDARY STANDARD OF PUBLIC)
LAW 91-604)

PETITION TO ADOPT OAR
340 20-048
AIR POLLUTION CONTROL

1. Petitioners' names and addresses are the Oregon Student Public Interest Research Group (OSPIRG), 408 S.W. Second Avenue, Portland, Oregon 97204, and the Northwest Environmental Defense Center, (NEDC), 10015 Southwest Terwilliger Blvd., Portland, Oregon, 97219.

2. Petitioners' are both incorporated as a non-profit corporations in the State of Oregon. The members of the OSPIRG board of directors are elected by the students at 15 colleges and universities in Oregon, which colleges and universities enroll over 75,000 students. The membership of NEDC is composed primarily of Oregon residents who are concerned with preserving and protecting the natural environment of Oregon and the Pacific Northwest.

3. The enjoyment of areas of the State of Oregon having clean air by members of the boards of directors of petitioners', as well as by other citizens of the State of Oregon, is adversely affected by the failure of the Environmental Quality Commission to adopt rules to protect air which is not polluted to the secondary standards of The Clean Air Act Amendments of 1970 (Public Law 91-604).

4. ORS 468.305 mandates the Department of Environmental Quality to develop a means for preventing the pollution of air in areas where pollution does not now exist, but may exist in the future. The DEQ has not adopted a plan for the prevention of degradation of air which is not now polluted. Failure to adopt such a plan in the five years since ORS 468.305 was promulgated in 1969 constitutes a violation of this law.

Adoption of the rules proposed below by petitioners would satisfy the requirements of ORS 468.305 and would fulfill the purpose of Public Law 91-604, section 101(b)(1).

5. OAR Chapter 340 20-048 as petitioner proposes it would read as follows:

20-048 - PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY

20-048.01 - REQUIREMENT Air which is not polluted to the limits of the secondary ambient standards of the Federal Environmental Protection Agency will be protected from further significant deterioration. The limitations listed in 20-048.02 and 20-048.03 will be used to define significant deterioration. In all cases, the more stringent limitations will apply.

20.048.02 POLLUTANT INCREMENT LIMITATIONS

(1) Areas of the state which have air quality better than the quality defined by the secondary ambient standards of the Federal Environmental Protection Agency (EPA) shall be designated as Zone I or Zone II and limited to increases in pollutant concentrations over 1972 levels as shown below:

AREA CLASSIFICATION

Pollutant :	Zone I	Zone II
	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
Particulate matter:		
Annual geometric mean	5	10
24-hour maximum	10	30
Sulfur dioxide:		
Annual arithmetic mean	2	15
24-hour maximum	5	100
3-hour maximum	25	300

(2) Effective as of the date of promulgation of this regulation: All state parks, forests, scenic areas, and wildlife refuges as well as all National Parks, National Forests, National Wildlife Refuges and lands administered by the U. S. Bureau of Land Management are hereby designated Zone I.

(3) The Commission shall, within six months of the date of promulgation of this regulation, classify the remaining appropriate areas Zone I or Zone II.

20-048.03 - EMISSION CEILINGS

(1) Within six months of the date of promulgation of this regulation the DEQ shall divide the state into State Air Quality Control Regions (SAQCR). These regions shall include all Zone I and Zone II areas described in paragraph (1).

(2) The maximum allowable emissions for a SAQCR shall be the following:

(a) For particulate matter the product of the area (square miles) for a SAQCR and three tons of particulate matter/year/square mile or 120 percent of the baseline emissions for particulate matter, whichever is least.

(b) For sulfur oxides the product of the area (square miles) of a SAQCR and 10 tons of sulfur dioxide/year/square mile or 120 percent of the baseline emissions for sulfur dioxide, whichever is least.

(3) Baseline emissions for purposes of determining maximum allowable emissions shall be the total emissions for a SAQCR in 1972.

20-048.04 - DETERMINATIONS OF DIRECTOR. In any SAQCR no owner or operator shall commence construction or modification of a source having a total annual potential emission rate on any premises equal to or greater than 100 tons for any of the following pollutants: particulate matter, sulfur dioxide, nitrogen oxides, hydrocarbons, or carbon monoxide, unless the Director determines that the effect on air quality of the source or modification of the source considered with the effect on air quality of existing, new or modified sources, will not cause the air quality to deteriorate such that the limitations in 20-048.02 are exceeded; and that the emission ceilings in 20-048.02(2) are not exceeded; and that the source or modified portion of the source will be constructed and operated to employ best available control technology for minimizing emissions of particulate matter, sulfur dioxide, nitrogen oxides, hydrocarbons, and carbon monoxide.

20-048.05 - INFORMATION REQUIREMENTS. In making the determinations required by 20-048.04, the Director shall, as a minimum, require the source to submit: Site information, plans, descriptions, specifications, and drawings showing the design of the source, calculations showing the nature and amount of emissions, a description of the manner in which the source will be operated and controlled, the cost of control, measurements of existing air quality levels, and the impact that the construction or modification will have on air quality levels and the air environment around the source.

20-048.06 - BEST AVAILABLE CONTROL TECHNICAL CRITERIA. In determining best available control technology the following shall be considered:

(1) Reasonably available control technology as defined by applicable regulations of the Environmental Protection Agency.

(2) The process, fuels, and raw materials employed.

(3) The engineering aspects of the application of various types of control techniques, process changes, alternative fuels, etc.

20-048.07 - MONITORING.

(1) The owner or operator of a source subject to the provisions of 20-048.04 shall install, or cause to be installed, a minimum of two continuous ambient air quality monitoring instruments for sulfur dioxide and/or two intermittent ambient air quality monitoring instruments for particulate matter.

(2) The Director shall specify which pollutant(s) the source shall monitor.

(3) When source, meteorological and/or terrain conditions warrant, the Director may require additional samplers above the minimum number specified in this paragraph.

(4) Such systems shall include one site equipped to monitor wind speed and wind direction.

(5) The instruments shall meet the performance and operating specification of applicable regulations of the Environmental Protection Agency.

(6) The locations of such instruments shall be located in areas of expected maximum concentrations determined by meteorological diffusion modeling or best judgment.

(7) The instruments shall be maintained, calibrated, and operated in accordance with the methods prescribed by the manufacturer of such instrument(s) and other procedures consistent with good engineering practice.

(8) The owner or operator of the source subject to this paragraph shall maintain a record of all measurements required by this section. Measurement results shall be summarized monthly and reported to the Department semi-annually, and shall be submitted within 45 days after the end of the reporting period. Reporting periods are January 1 - June 30 and July 1 - December 31, with the initial reporting period starting as indicated in subsection (9) of this section.

(9) The continuous monitoring and recordkeeping requirements of this section shall become applicable 15 months before construction of the source so that data for a pre-construction base-line may be obtained.

20-048.08 - PUBLIC NOTICE AND HEARING. Prior to making the determinations required by 20-048.04, the Director shall provide opportunity for public comment on the information submitted by the owner or operator and on the Director's analysis of the effect of such construction or modification on ambient air quality. Opportunity for public comment shall include, as a minimum:

(1) Availability for public inspection, in at least one location in the region affected, of the information submitted by the owner or operator, and the Director's analysis of the effect on air quality,

(2) a 60-day period for submittal of public comment, and

(3) a notice by prominent advertisement in the region affected of the location of the source information and analysis specified in 20-048.05.

20-048.09 - NOTIFICATION. The Director will notify the owner or operator in writing of his approval or denial to construct or modify a source within 150 days of the owner or operator's submission of the information required under 20-048.05.

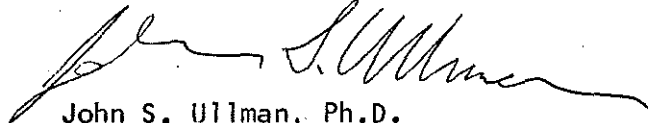
20-048.10 - CANCELLATION OF APPROVAL. The Director may cancel an approval to construct if the construction is not begun within two years from the date of issuance, or if during the construction, work is suspended for one year.

20-048.11 - OTHER REQUIREMENTS. Approval to construct or modify shall not relieve any owner or operator of the responsibility to comply with all local, State, or Federal regulations which are part of the applicable plan.

WHEREFORE, petitioner requests the Environmental Quality Commission after due notice and hearing, to adopt the foregoing proposed rules as permanent rules.

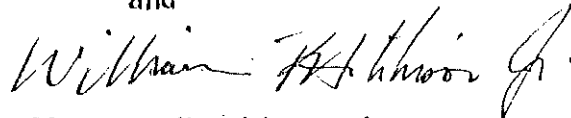
Dated this 30 day of October, 1974.

Respectfully submitted,



John S. Ullman, Ph.D.
OSPIRG Staff Scientist

and



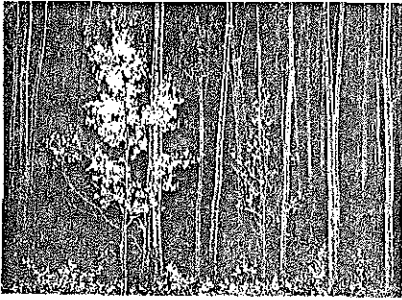
William P. Hutchison, Jr.
President, Northwest Environmental
Defense Center
Representing Petitioners

APPENDIX B

Sierra Club vs. Ruckelshaus

Federal Register July 16, 1973

Federal Register August 27, 1974



by Ansel Adams in *This Is the American Earth*

SIERRA CLUB

Mills Tower, San Francisco 94104

Reply to:
Sierra Club Legal Committee
311 California Street, Suite 311
San Francisco, California 94104
(415) 398-1411

4 November 1974

Mr. Norman Edmiston
1234 SW Morrison Street
Portland, Oregon 97205

RE: Sierra Club Ambient Air Quality Standards Suit

Dear Mr. Edmiston:

Enclosed, per your telephone request, is a copy of the Complaint for Declaratory and Injunctive Relief and for Mandamus in Sierra Club v. Train, Civ. Action No. 1031-72, U.S. District Court, District of Columbia. The Complaint was filed in May, 1972 and, as you know, the Club's position has been substantially refined in pleadings subsequent to that time.

I hope this material will provide what you need. Please let me know if you need anything more.

Sincerely,

EARL M. BLAUNER
Legal Coordinator

EMB:K

Enclosure

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

RECEIVED
MAY 26 1974

SIERRA CLUB, 1050 Mills Tower,
220 Bush Street, San Francisco,
California 94104,
METROPOLITAN WASHINGTON COALITION
FOR CLEAN AIR, 1714 Massachusetts Ave.,
N.W., Washington, D.C. 20036,
NEW MEXICO CITIZENS FOR CLEAN AIR
AND WATER, INC., 113 Monte Rey Drive
No., Los Alamos, N.M. 87544,
CLEAN AIR COUNCIL OF SAN DIEGO
COUNTY, P.O. Box 4900, La Jolla,
California, 92037,

Plaintiffs,

v.

WILLIAM D. RUCHELSHAUS, the Adminis-
trator of the Environmental Protection
Agency,

Defendant.

Civil Action
No.

COMPLAINT FOR DECLARATORY AND
INJUNCTIVE RELIEF AND FOR MANDAMUS

INTRODUCTION

1. The Clean Air Act of 1970 requires the Administrator of the Environmental Protection Agency to establish national air-quality standards for a variety of pollutants. These consist of primary standards for the protection of the public health and secondary standards, which are more strict, for the protection of the public welfare from any adverse effects of air pollutants. Each state is required by the Act to adopt an implementation plan for meeting the national primary and secondary standards within its jurisdiction.

2. The air is less polluted in many areas of this country without dense population or industry than the secondary standards. The Environmental Protection Agency has adopted regulations which allow the States to formulate implementation plans which would permit the significant deterioration of air quality in these areas as long as the pollution does not exceed the secondary standards. 40 C.F.R. 51.12(b). Plaintiffs contend that both these regulations and any state implementation plans which permit the significant

deterioration of air quality violate the Clean Air Act. 42 U.S.C. 1857(b)(1), 1857c-5.

JURISDICTION

3. The jurisdiction of this Court is based upon the Clean Air Act, 42 U.S.C. 1857h-2, which provides for judicial review under that Act; the Administrative Procedure Act, 5 U.S.C. 701-706, which provides for judicial review of actions of federal agencies; 28 U.S.C. 1331, which gives the district courts jurisdiction over cases involving federal questions in which the amount in controversy is over \$10,000; 28 U.S.C. 1361, which authorizes the district courts to entertain actions in the nature of mandamus; and 11 D.C. Code 501(4) which gives this Court jurisdiction over cases in which the amount in controversy is over \$50,000. The matter in controversy exceeds \$50,000, exclusive of interest and costs.

PARTIES

Plaintiffs

4. The Sierra Club is a non-profit California corporation with the purpose of protecting all aspects of the Nation's environment including air quality. Founded in 1892, its 136,000 members are organized into 38 chapters throughout the United States. Thousands of members of the Club live in areas where the air quality is better than some or all of the secondary standards.

5. The Metropolitan Washington Coalition for Clean Air, Inc. is a non-profit corporation organized under the laws of the District of Columbia. Its membership consists of over 900 individuals from the entire metropolitan Washington area and more than 100 civic, conservation, health, labor, professional and religious organizations. The Coalition is dedicated to the elimination of air pollution and the preservation and conservation of clear air for the metropolitan Washington area. Many members of the Coalition

live in portions of the metropolitan Washington area where air quality is better than some or all of the secondary standards.

6. New Mexico Citizens for Clean Air and Water, Inc. is a non-profit corporation organized under the laws of New Mexico. It has 2000 members in 16 chapters in cities and counties throughout the State. Since one of its principal purposes is to protect and improve ambient air quality, it has testified at every air-pollution hearing in New Mexico since 1969. Most of its members live in areas where air quality is better than all of the secondary standards.

7. The Clean Air Council of San Diego County is a non-profit corporation organized under the laws of California. Its purpose is to educate the public and governmental bodies with respect to the dangers of air pollution, provide the public and governmental bodies with solutions to the problems of air pollution, support legislation which would reduce or eliminate air pollution and participate in legal proceedings for this same purpose. Many of its more than 500 members live in portions of San Diego County where the air quality is better than some or all of the secondary standards.

8. The significant deterioration of air quality will have a substantial effect on the members of plaintiff organizations living in areas where the air quality is better than some or all of the secondary standards. Under 40 C.F.R. 51.12(b) and the policies of the Administrator, state implementation plans will be approved by the Administrator allowing the significant deterioration of air quality as long as the pollution does not exceed the secondary standards. In addition, this significant deterioration will have a substantial effect on the members of plaintiff organizations who visit any of these areas.

9. The members of New Mexico Citizens for Clean Air and

Water, Inc., for example, will be seriously affected by the significant deterioration of air quality where they live.

If the level of particulates rises to the secondary standard, members living in Las Cruces could not see the Organ Mountains 20 to 30 miles away; members living in Albuquerque could not see the Sandia Mountains 20 to 30 miles away; and members living in Los Alamos could not see the Sangre de Cristos Mountains 35 miles away. Members and other citizens of their communities will be economically injured if increased pollution reduces visibility since tourism depends significantly on the magnificent mountain views. Some of the members, who have special health problems, came to New Mexico to escape air pollution elsewhere.

10. Plaintiff Sierra Club wrote defendant on March 16, 1972, giving notice under 42 U.S.C. 1857h-2 that the Club believed that 42 U.S.C. 1857 and 42 U.S.C. 1857c-3 through c-5 are violated by (1) 42 C.F.R. 51.12(b) which purports to require the Administrator to approve state implementation plans which will permit deterioration of air which is less polluted than the secondary standards as long as ^{the pollution} does not exceed the level of the secondary standards; and (2) approval of any state implementation plans which allow for significant deterioration of existing air quality. On May 2, 1972, John R. Quarles, an Assistant Administrator of the Environmental Protection Agency, replied to the Sierra Club. The letter contended that the Administrator does not have the legal authority under 42 U.S.C. 1857c-5 to disapprove a state implementation ^{plan} as long as the level of pollution does not exceed the national secondary standard even if the plan allows for significant deterioration of air quality.

Defendant

11. William D. Ruckelshaus is the Administrator of the Environmental Protection Agency of the United States. The Clean Air Act of 1970 requires the Administrator to publish national

primary and secondary ambient standards (42 U.S.C. 1857c-4) and to approve or disapprove state implementation plans providing for implementation of these standards (42 U.S.C. 1857c-5).

FACTS

Clean Air Act

12. The Air Quality Act of 1967 provides that the "purposes of this subchapter are -- (1) to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population * * *." 42 U.S.C. 1857(b).

13. The Clean Air Act of 1970, requires the Administrator within 30 days after December 31, 1970, to "publish proposed regulations prescribing a national primary ambient air quality standard and a national secondary ambient air quality standard for each air pollutant" for which he had previously published air quality criteria. 42 U.S.C. 1857c-4(a)(1)(A). After allowing no more than 90 days for comment, the Act requires that the Administrator promulgate the primary and secondary standards. 42 U.S.C. 1857c-4(a)(1)(B).

14. National primary ambient air quality standards are "ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health." 42 U.S.C. 1857c-4(b)(1)(A). A national secondary ambient air quality standard is "a level of air quality the attainment and maintenance of which in the judgment of the Administrator, based on such criteria, is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air." 42 U.S.C. 1857c-4(b)(2). The "public welfare" is defined as "effects on soil, water, crops, vegetation, man-made

materials, minerals, wild life, weather, visibility and climate, damage to and deterioration of property, hazards to transportation, as well as on economic values and on personal comfort and well-being." 42 U.S.C. 1857h(h).

15. The Act requires each State to submit to the Administrator a state implementation plan for "implementation, maintenance, and enforcement" of both the primary and secondary standards for every portion of the State within nine months after the Administrator has promulgated the primary and secondary standards. 42 U.S.C. 1857c-5(a)(1). The Administrator may allow a State, where necessary, to delay submission of a plan to meet the secondary standards for 18 months. 42 U.S.C. 1857c-5(b).

16. The Administrator must, within four months after submission of a state implementation plan, approve or disapprove the plan. 42 U.S.C. 1857c-5(a)(2). The Administrator must approve a plan implementing a primary standard if "it provides for the attainment of such primary standards as expeditiously as practicable" and implementing a secondary standard if it will attain the standard within "a reasonable time." 42 U.S.C. 1857c-5(a)(2). If the state implementation/^{plan} does not meet these requirements and other requirements of the Act, the Administrator is required to disapprove the plan and prepare regulations setting forth the implementation plan for the State. 42 U.S.C. 1857c-5(c)(2).

Defendant's Actions Under the Act.

17. Defendant Ruckelshaus adopted National Primary and Secondary Ambient Air Quality Standards on April 30, 1971. 36 Fed. Reg. 8186; 42 C.F.R. 410. These same standards were repromulgated on November 25, 1971. 36 Fed. Reg. 22384; 40 C.F.R. 50. They will hereinafter be referred to by the latter citation.

18. The National Primary and Secondary Ambient Air Quality Standards provided, inter alia (40 C.F.R. 50.2(c)):

The promulgation of national primary and secondary ambient air quality standards shall not be considered in any manner to allow significant deterioration of existing air quality in any portion of any State.

This provision has never been rescinded.

19. Defendant Ruckelshaus adopted Requirements for Preparation, Adoption, and Submittal of Implementation Plans on August 14, 1971. 36 Fed. Reg. 15486; 42 C.F.R. 420. These same Regulations were repromulgated on November 25, 1971. 36 Fed. Reg. 22398; 40 C.F.R. 51. They will hereinafter be referred to by the latter citation.

20. The Requirements for State Implementation Plans provided that (40 C.F.R. 51.12(b)):

In any region where measured or estimated ambient levels of a pollutant are below the levels specified by an applicable secondary standard, the state implementation plan shall set forth a control strategy which shall be adequate to prevent such ambient pollution levels from exceeding such secondary standard.

21. Defendant Ruckelshaus has subsequently made clear to Congressional committees on January 27-28, 1972, and February 17, 1972, that, pursuant to 40 C.F.R. 51.12(b), he will approve state implementation plans which permit the significant deterioration of air quality as long as the resulting pollution levels do not exceed the secondary standards.

22. The States were required to submit their state implementation plans to defendant Ruckelshaus by January 31, 1972. Defendant Ruckelshaus is required to approve or disapprove these plans under 42 U.S.C. 1857c-5(a)(2) by May 30, 1972.

The Effect of Defendant's Actions

23. Ambient air quality in many areas of the country where there are no population centers or heavy industry are below or often far below the levels specified in some or all of the secondary standards. This is true of large areas of western

United States and rural areas throughout the country. 40 C.F.R. 51.12(b) and the policies which the Administrator has described to Congress will permit the significant deterioration of air quality in all these areas as long as the pollution does not exceed the secondary standards.

24. The national secondary standard for particulates, for example, is 60 micrograms per cubic meter. 40 C.F.R. 50.7(a). The amount of particulates in the air in New Mexico at various typical locations is 10-20 micrograms in Los Alamos County, 20 to 25 at Dulce, 26 in Rio Arriba County and 30 to 35 at West Mesa.

25. Most of the state implementation plans submitted to the Administrator do not even claim to prevent the deterioration of air which is now less polluted than the secondary standards. Most of the state plans which do mention this issue fail to describe any measures which will maintain present air quality or, if measures are mentioned, they would plainly be ineffective. Consequently, these state implementation plans will, if approved, permit the degradation of existing air quality in all or portions of those States. Nevertheless, the defendant will approve these plans under 40 C.F.R. 51.12(b) and the policies the Administrator has described to Congress.

26. The effect on persons who reside in or visit areas where air quality will significantly deteriorate to the levels set forth in the secondary standards will include the following:

(a) Scientists are not certain of the effects on human health of various levels of pollutants in the air, particularly over long periods of time. Consequently, the primary ambient air quality standards established by the Administrator are only estimates of the levels below which there is not likely to be a significant effect on health. There is a substantial body of scientific opinion that even lower levels of pollution

may affect the health of the public, particularly of the elderly, young children, and persons with asthma, heart or other disorders which make them particularly vulnerable. In fact, there may be no threshold level for pollutants below which there is no risk to health. At the least, the deterioration of the air from levels substantially below the secondary standards to the secondary standards will result in significant risks to the health of many persons.

(b) Sulfur and nitrogen oxides are converted chemically in the atmosphere to acids which return to the earth by precipitation. A total increase in the emission of these oxides into the air, even though below secondary standards in some areas, produces "acid rain" which increases acidification of both land and water areas. While the effects are not yet fully known, it appears that these acids remove nutrients from plant foliage and from the soil so that plant growth is retarded; destroy aquatic life in lakes and rivers; change ecosystems fundamentally; and increase corrosion of man-made structures.

(c) At the particulate level set by the secondary standards of 60 micrograms per cubic meter (40 C.F.R. 50.7(a)), visibility is about 12.5 miles. Since particulate concentrations in rural areas are typically about 30 micrograms per cubic meter, visibility is about 25 miles. The visibility in many western states commonly exceeds 100 miles. The increase in particulate concentration to the level of the secondary standards would therefore have a drastic effect on visibility in most areas of the country.

(d) The presently urbanized and industrialized areas will have great difficulty in meeting even the primary standards under the Clean Air Act. To accomplish this goal, emissions will have to be reduced drastically in these areas. If the concentration of pollutants moving from areas with cleaner air to the urban

areas is allowed to increase, the difficulty faced by urban areas in controlling their pollution will be even more acute.

CLAIMS

1. Both 40 C.F.R. 51.12(b) and the Administrator's policy to approve state implementation plans which allow for significant deterioration of existing air quality violate 42 U.S.C. 1857(b)(1).

The Administrator has the non-discretionary duty under this statutory provision not to permit significant deterioration of air quality.

2. Both 40 C.F.R. 51.12(b) and the Administrator's policy to approve state implementation plans which allow for significant deterioration of existing air quality violate 42 U.S.C. 1857c-5(a)(2), (c)(2). The National Primary and Secondary Ambient Air Quality Standards include a prohibition against the "significant deterioration of existing air quality in any portion of any State." 40 C.F.R. 50.2(c). The Administrator has the non-discretionary duty under 42 U.S.C. 1857c-5 not to approve state implementation plans which will fail to carry out national primary and secondary standards.

RELIEF

Wherefore, plaintiffs pray that this Court:

1. Enter a declaratory judgment that 40 C.F.R. 51.12(b) and the Administrator's policy to approve state implementation plans which allow for significant deterioration of existing air quality violate 42 U.S.C. 1857(b)(1) and 42 U.S.C. 1857c-5(a)(2), (c)(2).

2. Since plaintiffs will suffer severe and irreparable injury and no adequate remedy at law exists, enjoin defendant from approving any portion of a state implementation plan relating to an area of the State where the air is less polluted than the National Secondary Air Quality Standards unless it prohibits the significant deterioration of existing air quality in that area and includes measures necessary

to ensure maintenance of that level of air quality.

3. Order defendant to approve state implementation plans only insofar as they prohibit and prevent the significant deterioration of existing air quality in any portion of any State.

4. Determine that plaintiffs are entitled to the costs of litigation, including reasonable attorney and expert witness fees under 42 U.S.C. 1857h-2(d) and the equity powers of this Court.

5. Provide such other relief to the plaintiffs as the Court may consider just and proper.

Respectfully submitted,



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May 1972

ard level of pollution was contrary to the legislative policy of the Act and was invalid.

Requested relief granted.

1. Health and Environment C-28

Under section of Clean Air Act authorizing action against Administrator on allegation of Administrator's failure to perform act or duty not discretionary, plaintiffs who believed that his regulation, pursuant to which state plans had in part been formulated, was illegal were not required to await his approval of state plans and then appeal therefrom but could bring action for injunctive relief. Clean Air Act, §§ 110, 304(a), 307, 42 U.S.C.A. §§ 1857c-5, 1857h-2(a), 1857h-5.

2. Health and Environment C-28

Clean Air Act of 1970 was based in important part on policy of nondegradation of existing clean air, and regulation permitting states to submit plans which allow pollution levels of clean air to rise to secondary standard level of pollution was contrary to legislative policy of Act and was invalid. Clean Air Act, §§ 101 (b), 110, 42 U.S.C.A. §§ 1857(b) (1), 1857c-5.

3. Health and Environment C-28

Plaintiffs seeking preliminary injunctive relief against Administrator's approval of state plans under Clean Air Act of 1970 satisfied requirements for injunction: likelihood of prevailing on merits, irreparable injury, want of significant harm or inconvenience to Administrator or other parties interested in proceedings if preliminary injunction was granted, and support of public interest. Clean Air Act, §§ 110, 304(a), 42 U.S.C.A. §§ 1857c-5, 1857h-2(a).

Bruce J. Terris, Washington, D. C., for plaintiffs.

Joseph Hannon, Asst. U. S. Atty., Harold H. Titus, Jr., U. S. Atty., James Walpole, Department of Justice, Washington, D. C., for defendants.

SIERRA CLUB et al, Plaintiffs,

v.

RUCKELSHAUS, Defendant.

Civ. A. No. 1031-72.

United States District Court,
District of Columbia.

June 2, 1972.

Proceeding upon motion for preliminary injunction, in an action wherein plaintiffs sought to enjoin the Administrator of the Environmental Protection Agency from approving certain portions of state air pollution control plans. The District Court, John H. Pratt, J., held that the Clean Air Act of 1970 was based in important part on the policy of nondegradation of existing clean air, and a regulation permitting states to submit plans which allow pollution levels of clean air to rise to the secondary stand-

MEMORANDUM OPINION

JOHN H. PRATT, District Judge.

Initially, this matter came before the Court on plaintiffs' motion for temporary restraining order wherein they sought to enjoin the Administrator of the Environmental Protection Agency from approving certain portions of state air pollution control plans—implementing the national primary and secondary standards—which had been submitted to the Administrator pursuant to Section 110 of the Clean Air Act of 1970. 42 U.S.C. § 1857c-5 (1970). Having been informed that the Administrator would not be approving the plans until May 31, 1972, we denied the motion for temporary restraining order and scheduled a hearing on the preliminary injunction for May 30. At the conclusion of the May 30 hearing, having considered the pleadings and memoranda and the arguments of counsel, we announced our findings and conclusions and granted plaintiffs' motion for preliminary injunction. We now set down those findings and conclusions in memorandum form.

Standing

Although the Administrator does not question plaintiffs' standing to bring this action, it is clear to us that under the allegations of the complaint each of the four environmental groups who are parties-plaintiff has the requisite standing, even under the limitation expressed in the most recent Supreme Court case on the subject, *Sierra Club v. Morton*, 405 U.S. 727, 92 S.Ct. 1361, 31 L.Ed.2d 636 (1972).

Jurisdiction

[1] The Administrator challenges the jurisdiction of this Court to hear this case on the theory that the plaintiffs should wait until the Administrator approves the plans and then appeal the approval under 42 U.S.C. § 1857h-5. We disagree. It is our judgment that plaintiffs have the right to bring the action in this Court at this juncture under 42 U.S.C. § 1857h-2(a) which provides in pertinent part that

"any person may commence a civil action on his own behalf—

(2) against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this chapter which is not discretionary with the Administrator.

The district courts shall have jurisdiction, without regard to the amount in controversy or the citizenship of the parties, . . . to order the Administrator to perform such act or duty, as the case may be."

The Administrator, in recent testimony before Congress, indicated that he had declined to require state implementation plans to provide against significant deterioration of the existing clear air areas—i. e., areas with levels of pollution lower than the secondary standard—because he believed that he lacked the power to act otherwise. Unpublished transcript of Hearings Before the Subcomm. on Public Health and the Environment of the House Comm. on Interstate and Foreign Commerce, 92d Cong., 2d Sess., at 351-52 (remarks delivered on Jan. 27-28, 1972).

Previously, the Administrator had promulgated a regulation permitting states to submit plans which would allow clean air areas to be degraded, so long as the plans were merely "adequate to prevent such ambient pollution levels from exceeding such secondary standard." 40 C.F.R. § 51.12(b) (1972).

Plaintiffs' claim that the Administrator's interpretation of the extent of his authority is clearly erroneous and that his declination to assert his authority, evidenced in his remarks before Congress and his promulgation of a regulation that is contrary to the Clean Air Act, amounts to a failure to perform a non-discretionary act or duty.

It would appear that such an allegation is precisely the type of claim which Congress, through 52 U.S.C. § 1857h-2 (a), intended interested citizens to raise in the district courts. In view of this clear jurisdictional grant, the Ad-

Cite as 344 F.Supp. 253 (1972)

administrator's assertion that plaintiffs should await his approval of the state plans (formulated, in part, pursuant to his allegedly illegal regulation) and then proceed to appeal his approval under 42 U.S.C. § 1857h-5 is, in our opinion, untenable.

In discussing the merits of the present action—i. e., the extent of the Administrator's authority and the validity of the questioned regulation—we turn to the stated purpose of the Clean Air Act of 1970, the available legislative history of the Act and its predecessor, and the administrative interpretation of the Act.

Purpose of the Act

In Section 101(b) of the Clean Air Act, Congress states four basic purposes of the Act, the first of which is

"to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." 42 U.S.C. § 1857(b) (1).

On its face, this language would appear to declare Congress' intent to improve the quality of the nation's air and to prevent deterioration of that air quality, no matter how presently pure that quality in some sections of the country happens to be.

Legislative History

The "protect and enhance" language of the Clean Air Act of 1970 stems directly from the predecessor Air Quality Act of 1967, 81 Stat. 485. The Senate Report underlying the 1967 Act makes it clear that all areas of the country were to come under the protection of the Act. S.Rep. No. 403, 90th Cong., 1st Sess. 2-3 (1967).

The administrative guidelines promulgated by the National Air Pollution Control Administration (NAPCA) of the Department of Health, Education and Welfare (HEW), which at that time had the responsibility of carrying out the directives of the Air Quality Act of 1967, point up the significance of the "protect and enhance" language as follows:

"[A]n explicit purpose of the Act is 'to protect and enhance the quality of

the Nation's air resources' (emphasis added). Air quality standards which, even if fully implemented, would result in significant deterioration of air quality in any substantial portion of an air quality region clearly would conflict with this expressed purpose of the law." National Air Pollution Control Administration, U. S. Dept. of HEW, Guidelines for the Development of Air Quality Standards and Implementation Plans, Part I § 1.51, p. 7 (1969).

Turning now to the legislative history of the 1970 Act, we note at the outset that both Secretary Finch and Under Secretary Veneman of HEW testified before Congress that neither the 1967 Act nor the proposed Act would permit the quality of air to be degraded. Hearings on Air Pollution Before the Subcomm. on Air and Water Pollution of the Senate Public Works Comm., 91st Cong., 2d Sess., at 132-33, 143 (1970); Hearings on Air Pollution and Solid Waste Recycling Before the Subcomm. on Public Health and Welfare of the House Interstate and Foreign Commerce Comm., 91st Cong., 2d Sess., at 280, 287 (1970).

More important, of course, is the language of the Senate Report accompanying the bill which became the Clean Air Act of 1970. The Senate Report, in pertinent part, states:

"In areas where current air pollution levels are already equal to or better than the air quality goals, the Secretary shall not approve any implementation plan which does not provide, to the maximum extent practicable, for the continued maintenance of such ambient air quality." S.Rep.No. 1136, 91st Cong., 2d Sess., at 2 (1970).

The House Report, although not as clear, does not appear to contradict the Senate Report. See H.Rep. No. 1146, 91st Cong., 2d Sess., at 1, 2 and 5 (1970), U.S.Code Cong. & AdminNews 1970, p. 5356.

Administrative Interpretation

As we noted under our discussion of the legislative history of the 1967 Act, the 1969 guidelines promulgated by

~~HEW's NAPCA emphasized that significant deterioration of air quality in any region would subvert the "protect and enhance" language of the 1967 Act. We also pointed out that Secretary Finch and Under Secretary Veneman applied this same administrative interpretation to the very same language found in the proposed 1970 Act.~~

On the other hand, the present Administrator, in remarks made in January and February of 1972 before certain House and Senate Subcommittees, has taken the position that the 1970 Act allows degradation of clean air areas. Several Congressional leaders voiced their strong disagreement with the Administrator's interpretation. Unpublished transcript of Hearings Before the Subcomm. on Public Health and the Environment of the House Comm. on Interstate and Foreign Commerce, 92d Cong., 2d Sess., at 352 (remarks of Congressman Paul Rogers, Chairman of the Subcommittee); Unpublished transcript of Hearings Before the Subcomm. on Air and Water Pollution of the Senate Comm. on Public Works, 92d Cong., 2d Sess. at 33-34, 260 et seq. (remarks of Senator Thomas Eagleton, Vice-Chairman of the Subcommittee, presiding over the hearings at the time).

The Administrator's interpretation of the 1970 Act, as disclosed in his current regulations, appears to be self-contradictory. On the one hand, 40 C.F.R. § 50.2 (c) (1970) provides:

"The promulgation of national primary and secondary air quality standards shall not be considered in any manner to allow significant deterioration of existing air quality in any portion of any State."

Yet, in 40 C.F.R. § 51.12(b), he states:

"In any region where measured or estimated ambient levels of a pollutant are below the levels specified by an applicable secondary standard, the State implementation plan shall set forth a control strategy which shall be adequate to prevent such ambient pollution levels from exceeding such secondary standard."

~~The former regulation appears to reflect a policy of nondegradation of clean air but the latter mirrors the Administrator's doubts as to his authority to impose such a policy upon the states in their implementation plans. In our view, these regulations are irreconcilable and they demonstrate the weakness of the Administrator's position in this case.~~

Initial Conclusions

[2] Having considered the stated purpose of the Clean Air Act, of 1970, the legislative history of the Act and its predecessor, and the past and present administrative interpretation of the Acts, it is our judgment that the Clean Air Act of 1970 is based in important part on a policy of non-degradation of existing clean air and that 40 C.F.R. § 51.12(b), in permitting the states to submit plans which allow pollution levels of clean air to rise to the secondary standard level of pollution, is contrary to the legislative policy of the Act and is, therefore, invalid. Accordingly, we hold that plaintiffs have made out a claim for relief.

Injunctive Relief

[3] Whether this Court may properly grant injunctive relief depends on whether the plaintiffs have met the four criteria set forth in *Virginia Petroleum Jobbers Ass'n v. Federal Power Commission*, 104 U.S.App.D.C. 106, 259 F.2d 921 (1958) and such later authorities as *A Quaker Action Group, v. Hickel*, 137 U.S.App.D.C. 176, 421 F.2d 1111 (1969).

First, have the plaintiffs made a strong showing that they are likely to prevail on the merits? It appears to us, from our foregoing discussion, that the plaintiffs have made such a showing in this case.

Second, have the plaintiffs shown that without such relief they would suffer irreparable injury? In view of the nature and extent of the air pollution problem, once degradation is permitted the range of resulting damages could well have irreversible effects. Thus, we hold that plaintiffs have made the requisite showing of irreparable injury.

Third, will the issuance of a stay cause any significant harm or inconvenience to the Administrator or other parties interested in the proceedings? We are persuaded that no substantial harm or inconvenience will result from our order granting the preliminary injunction. The order is a very limited one. It was submitted by plaintiffs' counsel after consultation with counsel for the Administrator and, in our view, it provides the Administrator with sufficient time and flexibility so that he may exercise his expertise and carry out his duties under the Act with as little inconvenience as possible.

Fourth, and finally, where lies the public interest? It seems to us that the public interest in this case strongly supports the legislative policy of clean air and the non-degradation of areas in which clean air exists.

Conclusion

Having separately considered the four criteria for injunctive relief, and having found that plaintiffs have met each of these criteria, we conclude that we can and should grant the requested relief.

THE CLEAN AIR ACT

December 1970

ENVIRONMENTAL PROTECTION AGENCY

Washington, D. C.

"TITLE I—AIR POLLUTION PREVENTION AND CONTROL"

"FINDINGS AND PURPOSES

"SEC. 101. (a) The Congress finds—

"(1) that the predominant part of the Nation's population is located in its rapidly expanding metropolitan and other urban areas, which generally cross the boundary lines of local jurisdictions and often extend into two or more States;

"(2) that the growth in the amount and complexity of air pollution brought about by urbanization, industrial development, and the increasing use of motor vehicles, has resulted in mounting dangers to the public health and welfare, including injury to agricultural crops and livestock, damage to and the deterioration of property, and hazards to air and ground transportation;

"(3) that the prevention and control of air pollution at its source is the primary responsibility of States and local governments; and

"(4) that Federal financial assistance and leadership is essential for the development of cooperative Federal, State, regional, and local programs to prevent and control air pollution.

"(b) The purposes of this title are—

"(1) to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population;

"(2) to initiate and accelerate a national research and development program to achieve the prevention and control of air pollution;

"(3) to provide technical and financial assistance to State and local governments in connection with the development and execution of their air pollution prevention and control programs; and

"(4) to encourage and assist the development and operation of regional air pollution control programs.

"COOPERATIVE ACTIVITIES AND UNIFORM LAWS

"SEC. 102. (a) The Administrator shall encourage cooperative activities by the States and local governments for the prevention

¹ Clean Air Act (42 U.S.C. 1857 et seq.) includes the Clean Air Act of 1963 (P.L. 88-206), and amendments made by the "Motor Vehicle Air Pollution Control Act"—P.L. 89-272 (October 20, 1965), the "Clean Air Act Amendments of 1966"—P.L. 89-375 (October 15, 1966), the "Air Quality Act of 1967"—P.L. 90-148 (November 21, 1967), and the "Clean Air Amendments of 1970"—P.L. 91-604—(December 31, 1970).

federal register

**MONDAY, JULY 16, 1973
WASHINGTON, D.C.**

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PART IV



ENVIRONMENTAL PROTECTION AGENCY

■

**PREVENTION OF SIGNIFICANT
AIR QUALITY DETERIORATION**

Proposed Rulemaking

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 52]

APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

Prevention of Significant Air Quality Deterioration

Notice is hereby given that the Administrator of the Environmental Protection Agency (EPA) intends to issue regulations setting up a mechanism for preventing significant deterioration of air quality in areas where air pollution levels currently are below the national ambient air quality standards (40 CFR Part 50). These regulations would be issued under the Clean Air Act and would prescribe steps to be taken by the States. This notice sets forth four proposed plans reflecting various approaches to defining and preventing significant deterioration. It is the Administrator's intention not only to receive written comments on these proposals but also to hold public hearings in various places in order to provide the greatest possible opportunity for public involvement in this rule-making. Certain questions on which public comment is specifically invited are identified in the concluding section of this preface.

Publication of this notice is related to a suit filed May 24, 1972, in which the Sierra Club and other groups sought a declaratory judgment and injunction requiring the Administrator to disapprove all State implementation plans which did not contain procedures for preventing significant deterioration in any portion of any State where air quality is superior to national standards. On May 30, 1972, the District Court for the District of Columbia granted the plaintiffs' motion for a preliminary injunction and issued a preliminary injunction requiring the Administrator, within four months thereafter, to review all State plans and "disapprove any portion of a State plan which fails to effectively prevent significant deterioration of existing air quality." The preliminary injunction also required the Administrator to promulgate regulations "as to any State plan which he finds, on the basis of his review, either permits the significant deterioration of existing air quality in any portion of any State or fails to take the measures necessary to prevent such significant deterioration." On November 1, 1972, the decision of the District Court was affirmed by the U.S. Court of Appeals for the District of Columbia Circuit on the basis of an opinion filed by the District Court on June 2, 1972. Subsequently, the U.S. Supreme Court stayed the effect of the District Court's decision pending its consideration and disposition of the case on application for a writ of certiorari. On June 11, 1973, the Supreme Court, by an equally divided court, affirmed the judgment of the Court of Appeals; no opinion was issued.

Each State plan has been reviewed in accordance with the preliminary injunction issued by the District Court. Al-

though many State plans included regulations which have the potential for resulting in the attainment of air quality better than that required by the national standards, and although some State plans contained general policy statements indicating an intent to prevent or minimize deterioration of air quality, none was found to contain explicit and enforceable regulations for implementing such a policy. Accordingly, all State plans were disapproved by the Administrator on November 9, 1972 (37 FR 23838), insofar as they failed to provide for the prevention of significant deterioration. This disapproval did not affect the status of any previously or subsequently approved regulations designed to provide for the attainment and maintenance of national ambient air quality standards. Furthermore, in the absence of Federal regulations prescribing requirements for prevention of significant deterioration the Administrator's disapproval was necessarily based on a generalized assessment of the State plans. To the extent that any State plan is determined to meet any of the requirements ultimately established as a result of this rulemaking proceeding, the Administrator's disapproval will be appropriately modified.

In EPA's view, there has been no definitive judicial resolution of the issue whether the Clean Air Act requires prevention of significant deterioration of air quality. When the issue was presented to the Supreme Court, the Court was equally divided. The Court's action had the effect of permitting to stand the judgment of the Court of Appeals for the District of Columbia Circuit, which was entered in the procedural context of the issuance of a preliminary injunction.

In the absence of a definitive judicial decision on the issue, the Administrator adheres to the view that Section 110 of the Clean Air Act requires EPA to approve State implementation plans that will attain and maintain the national ambient air quality standards, and that the Act does not require EPA or the States to prevent significant deterioration of air quality. The proposed alternative regulations set forth herein would establish a mechanism for preventing significant deterioration pursuant to the preliminary injunction issued by the District Court.

PUBLIC POLICY ISSUE

The question raised by the Sierra Club suit was a legal issue, i.e., interpretation of the language and legislative history of the Clean Air Act. Thus, the courts were asked to determine that the Act requires the Administrator to ensure that State implementation plans will not permit significant deterioration of air quality. What the courts were not asked to determine is what constitutes significant deterioration and exactly how it will be prevented.

A national policy of preventing significant deterioration, however defined and implemented, will have a substantial

impact on the nature, extent, and location of future industrial, commercial, and residential development throughout the United States. It could affect the utilization of the Nation's mineral resources, the availability of employment and housing in many areas, and the costs of producing and transporting electricity and manufactured goods. Without implying any judgment as to the general acceptability of any of the effects of a "no significant deterioration" policy, the Administrator believes that they are potentially so far-reaching that the question of how such a policy should be defined and implemented cannot properly be addressed, much less decided, on narrow legal grounds. Rather, it is a question that must be discussed, debated, and decided as a public policy issue, with full consideration of its economic and social implications. To approach the question in any other manner would be much too simplistic. There is, perhaps, no other environmental issue that imposes upon the Administrator, and the public, a greater obligation to formulate and objectively evaluate a range of possible solutions. The usual rulemaking procedure of putting forth a single proposal clearly is inadequate in this case. Accordingly, this notice sets forth four alternative sets of proposed regulations based upon different philosophies and administrative approaches to defining and preventing significant deterioration.

CURRENT CONSTRAINTS ON DETERIORATION

It is important to recognize that many State plans, as well as certain rule making actions already completed under provisions of the Clean Air Act, will have the effect of attaining or maintaining air quality significantly better than the national secondary standards in many places, and that these actions will have the effect of generally improving air quality nationwide. The following paragraphs summarize the more significant of these actions, and there is no intent that the alternatives proposed herein should in any way mitigate the impact of these actions.

1. The Administrator has promulgated (36 FR 8186) national primary and secondary ambient air quality standards. In accordance with the Act, the primary standards were set at a level that provides an adequate margin of safety for protection of the public health, and secondary standards were set at a level that protects the public welfare from any known or anticipated adverse effects. All States have submitted implementation plans to attain and maintain these standards. In many areas of the country, air quality was not sufficient to meet these standards and, hence, in these areas, the State plans will ensure that deterioration cannot occur because the regulations require specific improvements in air quality.

2. Emission control actions to be taken by the States, in accordance with their plans to implement the National Ambient Air Quality Standards in heavily polluted areas, will reduce air pollution concentrations in the periphery of such

areas. For example, the annual average sulfur dioxide concentration in Mercer County, New Jersey, is expected to drop from about 25 micrograms per cubic meter to about 10 micrograms per cubic meter (as compared to the national secondary standard of 60 micrograms) as a result of emission reductions in and around Philadelphia.

3. Emissions reductions to be achieved under State plans in major urban and industrial centers will significantly affect total national emissions and thereby lower the background pollutant concentrations in rural areas. Thus a 25 percent reduction in the background concentration of particulate matter (from about 40 micrograms per cubic meter to about 30 micrograms) in rural areas in the Northeast is anticipated.

4. Emission limitations and other regulations, including restrictions on the sulfur content of fossil fuels as prescribed by many State plans, go beyond what is minimally necessary for attainment of the national standards. In many instances, emission control regulations necessary for attainment of national standards in the most polluted area(s) of a State have been applied statewide. For sulfur dioxide, this has occurred in 33 States. Although implementation of these regulations may be deferred in some clean areas in order to make available low sulfur fuels for use in heavily polluted areas, these regulations will eventually result in further improvement in air quality in many areas where the secondary standards were not exceeded.

5. Federal emission standards for new motor vehicles will result in a steady decrease in motor vehicle emissions in all parts of the Nation through the 1970's and well into the 1980's, as new automobiles equipped to meet these emission standards replace older models which were subject to less restrictive emission standards or none at all. For example, 1974 model automobiles will have emission reductions (per mile) of approximately 80% for carbon monoxide, 70% for hydrocarbons, and 35% for oxides of nitrogen, as compared to vehicles sold prior to 1969. This trend is a result of the Federal emission standards already in effect; it will be accelerated by the even more stringent emission standards due to take effect in the 1975 and 1976 model years.

6. Control of sulfur dioxide, nitrogen oxides, and hydrocarbon emissions to meet national ambient air quality standards and/or Federal emission standards for new stationary sources and motor vehicles can be expected to inhibit atmospheric reactions involving these pollutants and thereby reduce ambient air concentrations of particulate matter such as sulfates, nitrates, and organics. Current State implementation plans generally do not consider this secondary reduction of particulate levels.

It can be seen that there are very strong regulatory measures in existence to prevent any deterioration of air quality in regions where the national stand-

ards are currently exceeded. Strong regulatory measures also exist to insure that air quality in currently clean areas cannot deteriorate sufficiently to subject the public health or welfare to any currently quantifiable adverse effects. Although the effect of these regulations is to mitigate any deterioration in most sections of the country, the alternatives presented herein are intended to prevent, in accordance with the District Court's preliminary injunction, any significant deterioration of air quality in any portion of any State.

CONCEPTUAL ISSUES

Section 109 of the Clean Air Act requires the Administrator to establish national primary ambient air quality standards "to protect the public health" and national secondary ambient air quality standards, "to protect the public welfare from any known or anticipated adverse effects," including, as specified by section 302(h), "effects on soils, water, crops, vegetation, man-made materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being." Such national standards must be based on air quality criteria which, under section 108, must "reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health and welfare which may be expected from the presence [of air pollutants] in the ambient air, in varying quantities." Thus, standard-setting under section 109 is necessarily limited to demonstrable or predictable adverse effects which can be quantitatively related to pollutant concentrations in the ambient air.

The basis for preventing significant deterioration therefore lies in a desire to protect aesthetic, scenic, and recreational values, particularly in rural areas, and in concern that some air pollutants may have adverse effects that have not been documented in such a way as to permit their consideration in the formulation of national ambient air quality standards. Pending the development of adequate scientific data on the kind and extent of adverse effects of air pollutant levels below the secondary standards, significant deterioration must necessarily be defined without a direct quantitative relationship to specific adverse effects on public health and welfare. It should be emphasized that defining significant deterioration in this way does not imply a judgment by EPA on the question of whether it is sound public policy to define "deterioration" as any increment above existing air pollution levels and to attempt to define "significant" deterioration in the absence of documentation on the adverse effects thereof. Furthermore, it is possible, indeed probable, that even when there are additional data, it will be evident that there are levels below which some of the pollutants covered by national standards do not have effects that can be consid-

ered adverse to public health and welfare.

To the extent that the Act provides any basis for defining significant deterioration, it does so only in section 101(b)(1), which declares that one of the purposes of the Act is "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population". Additional guidance is available from the legislative history; specifically, the Report of the Senate Committee on Public Works (Report No. 91-1196, dated September 17, 1970) contained the following statement:

In areas where current air pollution levels are already equal to, or better than, the air quality goals, the Secretary should not approve any implementation plan which does not provide, to the maximum extent practicable, for the continued maintenance of such ambient air quality.

Though the Report also suggested that it might be possible to prevent all deterioration, it is apparent that the measures necessary for that purpose would bring growth and development virtually to a standstill in many areas and therefore are incompatible with protecting the "productive capacity" of the Nation's population.

Clearly, it is not within the province of EPA, under either the Clean Air Act or any other statute, to impose limitations on the Nation's growth. Neither the Sierra Club nor any of the States or organizations that filed *amicus curiae* briefs with the Supreme Court in support of the Sierra Club's position argued that the District Court's preliminary injunction means that EPA must limit economic growth, as such, in order to prevent significant deterioration of air quality. To the contrary, it was agreed that growth could and would continue, albeit with the restrictions necessary to prevent significant deterioration.

The Sierra Club, for example, made the following statement:

The development of rural areas will not be prevented by a prohibition against significant deterioration of air quality. Such a prohibition on its face does not prevent all increases in pollution. If the best available technological developments are utilized and if numerous pollution producing sources are not concentrated in one place, most industry can enter clean areas without causing significant deterioration. (p. 94)

And the State of California made the following statements:

Prevention of significant deterioration of air quality does not foreclose the construction in clean air basins and partially polluted air basins of well-planned and well-disbursed fossil fuel power plants and other polluting industries which utilize, on a continuing basis, the best available technology. No significant deterioration simply means that certain large and inadequately controlled pollution sources will not be permitted. (pp. 1-2) Of course, economic and social factors may well require some degradation of air quality in certain areas. But this case does not involve any question of prohibiting growth or prohibiting any deterioration of air quality. It is not a 'non-degradation' case. (p. 28)

There is, therefore, a consensus that the definition of significant deterioration is intended to represent some level above zero deterioration. An upper bound can also be established on the definition of significant deterioration by recognizing that existing regulations prevent deterioration to levels in excess of the secondary air quality standards.

Hence, any quantitative definition of significant deterioration must fall between the levels of zero deterioration and deterioration up to the secondary standards. Any quantitative definition within this range must be essentially subjective, because, within this range, data are not available with which to quantify any adverse impact on either public health or welfare.

Nationally, the steady deterioration in air quality over the last several decades has already been reversed by existing regulations, and air quality generally has begun to improve in the last few years. Further, this improvement will continue for the foreseeable future. The following table summarizes the expected reductions in total national emissions by 1980. The percentages shown are based on the national emissions of 1970, and include (i.e. "absorb") the growth in sources anticipated for the 1970-1980 period.

Pollutant:	Percent Reduction in Emissions
Particulates	40
Sulfur Dioxide	70
Carbon Monoxide	80
Oxides of Nitrogen	40
Hydrocarbons	60

However, even though the nationwide trend in emissions and air quality is favorable, in many local areas which are now quite clean there is the possibility that deterioration could occur. This is because trends in the nationwide averages are predominately influenced by severe emission controls being applied in the large urban areas to attain and maintain the national ambient air quality standards. These controls could drive major polluters into the semi-urban and rural areas, thereby degrading air quality in those areas to a degree that could approach (but not exceed) the secondary standards. Additionally, the growth patterns throughout the country are continually changing, and the normal economic expansion can be expected to lead to increased emissions in some local areas which previously were undeveloped. In some of these areas, the public may feel that the improved economic conditions do not justify the resulting environmental deterioration, even though that deterioration is insufficient to cause a quantifiable adverse impact on either the health or welfare of the population.

However, the future nationwide reduction in emissions, and hence in pollutant concentrations, will be significant. Although much of this reduction is being accomplished in highly industrialized urban areas in order to attain and maintain the national standards, a considerable reduction is also being accomplished in semi-urban areas already well below the standards. Depending upon the plan

selected with which to prevent significant deterioration, much of this latter reduction could be used to accommodate future growth without significant deterioration. Further improvements in emission control technology would allow additional growth without causing significant deterioration. The proposed plans would serve to stimulate such improvements.

Nevertheless, it is not possible to rely solely on improved emission control technology to offset the increased emissions attendant to population and economic expansion and redistribution. Many areas of the country have virtually no man-made emissions. To establish a policy that new emissions can only be introduced to the extent that current emissions are reduced would forever relegate these areas to an essentially undeveloped status. This feature would, in turn, require that new pollution sources be located only in the semi-urban and urban areas of the country in which improved control technology would have the greatest impact. This would force the majority of the new emissions into these areas in which the majority of the Nation's population resides.

The relative significance of air quality versus economic growth may be a variable dependent upon regional conditions. For example, relatively minor deterioration of the aesthetic quality of the air may be very significant in a recreational area in which great pride (and economic development) is derived from the "clean air." Conversely, in areas with severe unemployment and little recreational value, the same level of deterioration might very well be considered "insignificant" in comparison to the favorable impact of new industrial growth with resultant employment and other economic opportunities. Accordingly, the definition of what constitutes significant deterioration must be accomplished in a manner to minimize the imposition of inequitable regulations on different segments of the Nation.

Many States have expressed the desire that federal regulations be promulgated in a manner which would permit all States to prevent significant deterioration without placing any individual states in unfairly advantageous or disadvantageous positions for attracting new industry. It is therefore desirable to insure that industry is provided with no incentive to "shop" for areas in which efforts to prevent significant deterioration are deliberately relaxed. Because the competition for new industry is extremely keen among many States, this would require that the philosophy for preventing significant deterioration be enforced uniformly throughout the Nation, even though the definition of what constitutes significant deterioration could include regional variations.

The problem of preventing significant deterioration can be somewhat simplistically, stated as that of reducing emissions to the lowest practicable level, and then distributing those residual emissions in a manner in which they do the least

harm. The four alternative plans discussed herein would accomplish this at requiring application of best available control technology to all new or significantly modified major sources regardless of any expected level of deterioration. In addition, each plan is based upon a different type of decision criterion which would be used to determine whether a proposed new or significantly modified source would be permitted to commence construction in any specific location. The four decision criteria would be based upon (1) definition of "significant deterioration" as a constant increment in air quality applicable nationwide, (2) definition of "significant deterioration" as the greater of either a percentage increase in emissions or an emission increment, (3) definition of "significant deterioration" on a case-by-case basis by the public in the local area affected, and (4) definition of "significant deterioration" as one of two air quality increments depending upon land use projections by the State. Each of these plans are discussed in subsequent sections. However, all four plans contain several common features which are worthy of consolidated discussion.

POLLUTANTS SUBJECT TO DETERIORATION CONTROL

Each of the alternative proposals set forth below would require, as a minimum, that best available control technology be applied to certain categories of new sources of sulfur dioxide, particulate matter, carbon monoxide, hydrocarbons, and nitrogen oxides. Thus, this requirement would apply directly or, in the case of photochemical oxidants, indirectly to all pollutants covered by national ambient air quality standards.

The second basic requirement is a review to determine that individual new sources within the specified source categories will not cause significant deterioration. This requirement would apply only to particulate matter and sulfur dioxide. The other pollutants covered by national standards are related primarily or substantially to motor vehicle emissions. As a result of the application of EPA's emissions standards for new motor vehicles, total motor vehicle emissions are decreasing and will continue decreasing well into the future. Accordingly, the purpose of preventing significant deterioration related to carbon monoxide, hydrocarbons, nitrogen oxides, and photochemical oxidants is in the Administrator's judgment, adequately served by the proposed additional requirement for applying best available technology to new stationary sources.

Furthermore, the formation of photochemical oxidants from hydrocarbons and nitrogen oxides and the formation of nitrogen dioxide from nitric oxides involve complex photochemical processes which are time-dependent and related to atmospheric conditions and the interaction of emissions from a variety of sources. It is not possible to relate a specific isolated point source of hydrocarbons or nitrogen oxides to a specific

ambient concentration of photochemical oxidants or nitrogen dioxide because the techniques and assumptions that permit correlation of emissions with ambient air quality in multiple-source areas generally are not valid for application to point sources in relatively clean areas.

SOURCES SUBJECT TO REVIEW

All the proposals set forth below would require preconstruction review of certain types of stationary sources. The proposed preconstruction review procedures are similar to those already required by State implementation plans. These procedures require that source owners or operators submit data to the State and apply for approval to construct, and that the State approves or disapproves the request based on specific criteria. In relation to air quality deterioration, the criteria for this "yes or no" decision are inherent in each plan proposed herein, and are described in the section on each plan.

The initial list of sources proposed for this specific review in each plan represents the Administrator's best judgment as to which sources, in and of themselves, have the potential for causing "significant deterioration" as defined by the four alternative plans. The proposed regulations contain sixteen source categories which currently account for approximately 30 percent of the particulate matter and 75 percent of the sulfur dioxide emitted into the atmosphere each year nationwide, and account for essentially all of these pollutants emitted in clean areas. The regulations also require that any other sources emitting more than 4000 tons of sulfur dioxide or particulate matter annually be subjected to this review.

It is important to note that under the three alternative plans which place a ceiling on pollutant concentrations or emissions from an area, this initial list of sources will be subject to revision as an area approaches its ceiling.

The list of source categories has been restricted in the proposed regulations because it is considered unwise and unnecessary to divert available resources from other air pollution control activities in order to review new sources which do not have the potential to violate the proposed decision-making criteria. It may eventually be necessary to establish a mechanism for making advance assessments of the aggregate air quality impact of smaller sources. Such a mechanism is likely to involve projections of future growth and estimates of air quality impact, similar to those required by the recently promulgated amendments (38 FR 15834, dated June 18, 1973) to new source review requirements applicable to State implementation plans.

BEST AVAILABLE CONTROL TECHNOLOGY

Each of the plans proposed herein would require, as a minimum, application of "best available control technology" (BACT) to specified categories of new sources. The proposed regulations specify that control systems adequate to comply with new source performance

standards (NSPS) promulgated under section 111 of the Clean Air Act generally will be considered BACT (with the exception noted below). The proposed regulations also specify that until such time as new source performance standards (NSPS) are promulgated, BACT for a particular source will be determined by considering: reasonably available control technology (as defined in Appendix B to the Administrator's regulations for the preparation, adoption, and submittal of state implementation plans (40 CFR Part 51.1); the processes, fuels, and raw materials to be employed by an affected source; the engineering aspects of the application of various types of control techniques; and the cost of employing the available control techniques, including hardware and alternative processes, fuels, and raw materials. However, all specified sources are expected to be covered by NSPS within 18 to 24 months and, because NSPS generally represent the lowest practicable level of emissions, the attainment of NSPS will generally be compatible with application of BACT.

The proposed exception to this equivalency of NSPS to BACT exists with respect to sulfur dioxide emissions from fossil fuel-fired steam electric plants. The levels of emissions from these plants have an extremely wide range due to the varying amounts of sulfur in fuels available in different parts of the country. Current NSPS are set at a level which requires use of a control system on plants burning high sulfur coal. However, in some regions, coal with sulfur content low enough to meet the NSPS is readily available and would be used even in the absence of emission limitations. In these situations, use of the low sulfur regional coal with no additional efforts to control sulfur dioxide emissions would not automatically constitute application of BACT. This use of NSPS as a maximum emission limitation, with the possibility of requiring additional control on a case-by-case basis, is being proposed because the NSPS are designed for uniform application nationwide, whereas significant deterioration is essentially a local or regional issue. Therefore, each of the proposed regulations requires that a case-by-case analysis of fossil fuel-fired electric plants be conducted to determine if emissions can and should be further reduced.

Alternatively, control systems adequate to meet NSPS could be considered BACT in all cases where NSPS exist, including the case of fossil fuel-fired electric generating plants. Since NSPS are required to reflect "the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction) the Administrator determines has been adequately demonstrated," they could be considered to represent a sufficient degree of emission control to prevent significant deterioration "to the maximum extent practicable," in all areas. This alternative definition of BACT is not specifically included in the proposed regulations but since it is arguably consistent with the

District Court's preliminary injunction, it is described herein and specifically called to the attention of all interested parties so that there will be an adequate opportunity for public comment thereon.

BASELINE FOR MEASURING DETERIORATION

Most of the plans which have been considered for preventing significant deterioration require that an identifiable level of air quality or emissions be established as a baseline from which to measure deterioration. The three principal alternatives which have been considered are the level existing in 1970 (to correspond to passage of the Clean Air Act), the level existing in 1972 (to correspond to the litigation to which these proposals are related), and the level existing in 1973 (to correspond to these proposed regulations.)

The use of 1970 as a nationwide baseline would present several practical problems. Foremost among these is that in the interim between 1970 and the current time, growth patterns have changed sufficiently that, although the nationwide air quality has improved substantially, in some (particularly non-urban) areas the air quality has already deteriorated—in some places to the extent that the deterioration could be considered significant under some alternative plans. The status of sources which have received prior authorization to construct in these areas would become questionable. Yet, it does not appear equitable to withdraw that authorization due to newly promulgated regulations. In many other areas, air quality could have improved so dramatically that use of 1970 as a baseline would render any deterioration regulations virtually meaningless.

In addition, the availability of air quality data from which to measure deterioration represents a severe problem. Generally, air monitoring has been most intensive in heavily polluted areas. There has been only scattered monitoring in relatively clean areas. However, it is in these relatively clean areas that the deterioration issue is most critical, and to effectively apply most deterioration plans it is essential that relatively precise baseline data be available. Even today, the precise air quality or emission levels in many of these areas are unknown; this problem is compounded if baseline requirements are extended into the past.

However, the use of 1973 as a baseline year is also impractical, because the baseline must be established upon data for an entire year. Since annual data for 1973 could not be made available in sufficient time for initial application of these regulations, the use of 1973 would require that all data be estimated.

For these reasons, those plans discussed herein which require establishment of a baseline air quality or emission level are developed around the measured or estimated data for 1972. This minimizes, but does not eliminate, the problems associated with lack of data. It also tends to minimize many inequities associated with use of prior year baselines. It does, however, retain the problem regarding treatment of new or modified sources which

have already been approved for construction by the appropriate air pollution agency, but whose emissions and impact on air quality would not be included in the 1972 data base. Because it does not appear equitable to withdraw the construction approval from these sources, the 1972 baseline as defined in the proposed regulations consists of the measured or estimated air quality (or emissions) existing in 1972 as modified by the estimated impact of any source approved (prior to date of this proposal) for construction.

The selection of 1972 as the baseline year also introduces potential problems for a number of growth-oriented regions which improved their air quality in the period 1970-1972 to levels substantially superior to the national standards in anticipation of using that full increment to accommodate future economic expansion. The proposed regulations could substantially reduce that flexibility. The use of 1972 also tends to benefit those areas which were comparatively slow to implement emission reductions. These areas may now implement reductions in the future, and use the resulting air quality or emission increment for future economic expansion. Although this feature appears to penalize growth-oriented regions which implemented stringent controls to achieve air quality substantially superior to the national standards, the disadvantages of the alternative baseline concepts appear to be more significant. Hence, in all plans proposed herein requiring a baseline year, the year 1972 is used.

One or, possibly, some combination of the following four alternatives to prevent significant deterioration will be promulgated as Federal regulations to be enforced by the States until such time as each State possesses authority to enforce similar State regulations.

I. AIR QUALITY INCREMENT PLAN

This section discusses a plan to prevent significant deterioration by establishing, for nationwide application, a maximum allowable increment in air quality above the baseline air quality. It is based upon the premise that "significant" deterioration can be defined as a finite increment in air quality, and that the resulting quantitative definition is appropriate for all sections of the country regardless of socio-economic conditions, and regardless of the current level of air quality (so long as national ambient air quality standards or other limitations are not exceeded). In addition to establishing this allowable increment, which is applicable to sulfur dioxide and particulate matter, the plan also incorporates the requirement common to all plans that all new or modified sources employ best available control technology.

Regulations which would implement this plan are proposed as the first set of alternative regulations in this notice. The regulations list the sixteen source categories for which deterioration review must be conducted, and also require the review of additional sources with potential emissions in excess of 4000 tons per year.

The definition of significant deterioration on which this plan is based consists of specific allowable increments to be added to the baseline air quality level. These increments are specified in the proposed regulations as:

For particulate matter:
 10 $\mu\text{g}/\text{m}^3$ (annual average)
 30 $\mu\text{g}/\text{m}^3$ (24 hour average)
 For sulfur dioxide:
 15 $\mu\text{g}/\text{m}^3$ (annual average)
 100 $\mu\text{g}/\text{m}^3$ (24 hour average)
 300 $\mu\text{g}/\text{m}^3$ (3 hour average)

The averaging times have been selected to be compatible with the existing secondary standards for these pollutants, and the times would be revised to be compatible with any revisions to the standards. This use of compatible time periods is necessary to insure maximum availability of baseline data, and also to facilitate incorporation of the deterioration review procedures into the existing new source review procedures.

Although there are no quantitative data to support the choice of any specific increment below the national standards, the increments proposed represent the Administrator's best judgment of increments which would prevent significant deterioration of currently clean areas, and yet not totally prevent the economic development of selected areas if that development were in the public interest.

If this proposed regulation were implemented, it would limit future development to the level of light industrial and residential complexes, or a very small amount of heavy industry such as stringently controlled power plants. For example, a recently constructed large apartment complex (15,375 units) in New York City is estimated to increase the 3-hour SO_2 concentration by 70 $\mu\text{g}/\text{m}^3$. This type of development would be allowed. A single well controlled large (1000-1500 MW) coal fired power plant can be expected to increase 24-hour SO_2 from 50 to 200 $\mu\text{g}/\text{m}^3$ depending on terrain conditions, the emission height and the dispersive characteristics of the atmosphere. The lower numbers represent typical values associated with construction in areas of good dispersion and relatively level terrain; a power plant of this type could be constructed to operate within the proposed criteria. The large increases represent plant construction in non-level terrain or areas of limited dispersion capability: If a plant were to locate in these areas a reduction in emissions beyond NSPS would be required. In general, most other types of sources would have a smaller impact on sulfur dioxide concentrations than a coal fired power plant and, if well controlled, could probably be constructed in most areas. However, in most areas if a source such as a power plant were constructed, the influence of emissions from this source would possibly raise the pollutant concentration over a large area (as great as 700 sq. miles) to a level which would be incompatible with any additional significant development.

The examples cited above assume that emission levels would be comparable to New Source Performance Standards.

However, if a coal fired power plant used, for example, 80 percent efficient stack gas cleaning in addition to low sulfur (approximately 0.7 percent) coal, the 24-hour SO_2 increase could be limited to 10-40 $\mu\text{g}/\text{m}^3$, thus permitting construction of several sources. This example further emphasizes that prevention of significant deterioration need not necessarily prevent significant economic development so long as major emphasis is placed on improving emission reduction techniques.

The proposed regulations for this plan would require that all applicable new or modified sources submit comprehensive data to the State describing the source, the type and amount of projected emissions, the type of controls planned, the impact that the new or modified source would have on air quality, and an estimate of the existing air quality in the vicinity of the source. This information would be used by the State, subject to the Administrator's approval, to determine if the source would exceed the allowable air quality or emission limitations and to insure that the source plans to apply best available control technology. Prior to making this determination, the State would be required to provide opportunity for public comment on all information available.

In addition, the proposed regulations require that, unless the State determines that there is already an adequate air quality monitoring network in the vicinity, the source install a minimum of two continuous air quality monitoring instruments and one meteorological instrument in the areas of expected maximum concentration. This feature would assist in developing adequate air quality information for monitoring of the source's impact, and for analysis of the potential impact of proposed future sources to insure that the deterioration ceiling is not exceeded.

Unfortunately, the type of air quality data needed to accurately establish the baseline air quality is not currently available in many clean areas of the country. It would therefore become necessary to initially estimate this information by use of diffusion modeling and other appropriate techniques.

Despite the problems generated by lack of data in most very clean areas, this alternative has some generally desirable features. The increments proposed would not totally prevent economic development of all currently clean areas, but they would force large sources to employ increasingly effective control techniques, would provide the incentive for strong control technology research and development, would prevent construction in difficult terrain areas such as valleys or mountainous areas with poor dispersion characteristics, and would also prevent clustering of large sources with the potential for high localized pollutant concentrations.

The impact of this alternative on currently developed regions is more difficult to assess. As time progresses, improved control technology will cause significant

improvements in the air quality of currently developed areas and these areas will therefore be capable of absorbing more new development than the currently clean areas. This plan would therefore cause currently clean areas to remain relatively clean, but only at the expense of forcing new sources back into the more highly developed and populated areas.

A basic problem of this plan is the land use implications implied with no provisions to insure that they are in the best interests of the public or compatible with public desires. Inherent in any plan with a single deterioration definition applied nationally is the arbitrarily equal treatment of all equally clean areas. It may not be wise to restrict the development of waste lands to the same degree that a scenic national park is restricted, particularly if that restriction forces additional air quality deterioration on the heavily populated regions of the nation.

II. EMISSION LIMITATION PLAN

This section discusses an alternative plan to indirectly prevent significant deterioration of air quality by preventing significant increases in emissions. Although the correlation between emissions and air quality is often difficult to establish, control of emissions may result in the same effects as are intended by preventing significant deterioration of air quality. Although the national ambient air quality standards are intended to adequately protect the public health and welfare from adverse effects, there are suspected effects that may be related more closely to total atmospheric loading than to specific ambient concentrations. These effects include visibility reduction; reduction in solar radiation reaching the ground; acidification of rain, lakes, and streams; conversion of sulfurous and nitrogenous emissions into sulfates and nitrates; and increases in "background" concentrations. None of these effects have been quantified to the extent that a precise relationship between pollutant emissions, pollutant concentrations, and the degree of adverse effects can be stated. There is, however, at least a qualitative basis for the prevention of significant increases in the load of pollutants carried by the atmosphere.

Atmospheric loading is poorly indicated by ground level concentration measurement due to the influence of meteorological dispersion and source location. Emission density (regional emissions/regional area) is an excellent indicator of atmospheric loading. Furthermore, emission data are more readily available and easier to acquire than air quality distribution data. Thus, emission density is a relevant and practical measure of, and means of control for, types of ambient air deterioration not presently limited by ambient air quality standards.

The calculation of emission density requires the choice of an area over which emissions are to be averaged. The regulations proposed for this plan specify an Air Quality Control Region (AQCR) as

this area. There are several reasons for this choice. The AQCR is an established geographical subdivision for purposes of air quality analysis. Considerable data are available on this basis. Furthermore, an area of median AQCR size is necessary in order to provide the kind of development flexibility required with currently available technology. If the averaging area is too small, then no large source of source cluster could locate within it without violating the emission ceiling. A larger averaging area allows the location of a few such large sources because the total emission increase can be allocated to a small portion of the land (thus assuring that the remaining area will remain at low emission density).

It is recognized that AQCRs differ in size and that rigid adherence to the AQCR subdivision could lead to inequitable development opportunity; therefore it is anticipated that, if this proposal is promulgated, States would develop procedures to permit subdivision of large AQCRs and aggregation of small ones. This would also permit relatively pollution free portions of Priority I and II AQCRs to be included in the regions covered by this plan during the AQCR size adjustment process. As the proposed regulations are currently written, this plan would apply only to Priority IA and III AQCRs.

Given the size of an AQCR or averaging region, the baseline annual emissions of sulfur dioxide and particulate matter can be determined. A ceiling emission rate is then calculated by adding either 20% to the baseline emissions, or by calculating a ceiling based on emission density, whichever is larger. This establishes the emission limits for the region. Implementation of this plan would then consist of insuring that the total annual emissions from the region remained below the established emission ceiling.

The incremental increase is difficult to select due to a deficiency of relevant data and theory on the relationship between emission density, atmospheric loading, and the effects to be limited. The emission density factors included in the proposed regulations are 10 tons/year/sq. mile for sulfur dioxide and 3 tons/year/sq. mile for particulates. No AQCR with sulfur dioxide emission densities below these has exhibited air quality poorer than secondary national standards. Particulate emission densities display no general correlation of this type. However, most relatively clean areas have man-made particulate emissions below this level. It should be noted, however, that sulfur dioxide emission densities as high as 200 tons/year/sq. mile may be compatible with Priority III status. The poor correlation between emission density and measured air quality is due to the effect of meteorological factors and source location, as mentioned earlier.

Given the size of the region the allowable emission density factor or percentage increase and the baseline emissions, the emission ceiling for each region can be calculated. The resulting ceilings apply

to all emitters in the region. For practical reasons, only the large sources included in the proposed regulations must be given formal review, but the contributions of new and existing small sources to the total emissions must also be inventoried.

The regulations proposed for this plan would require each new or modified major source to provide information necessary for the determination of the probable emission rate, compliance with BACT, siting analysis under current new source review procedures, and for public information on which to base comments.

This plan would allow each region considerable flexibility on the selection and location of new emitting sources. The amount of new development possible under the emission ceiling depends critically on the degree of emission control applied to both new and existing sources. The ground level air quality at a given point in the region depends on the distribution of sources about that point. It is possible that the development of small residential and commercial sources could be limited because the available emission increment is used by a few large new emitters. It is also possible that ground level air quality could increase to secondary standards in one or more places due to large new sources or source clusters (although this would insure that air quality in the rest of the region would have no deterioration).

The determination of how emission density is to be distributed in each region would be the State's prerogative, and the Administrator would accept any distribution provided that the emission ceiling and national ambient air quality standards are observed. It is strongly recommended, however, that the allowable regional emissions be distributed in some rational and equitable manner so that the best available ground level air quality is maintained, development is balanced between industry, commerce, and residences, and that the review and approval of the sources specified in this regulation precludes the possibility that a few large sources usurp all of the available air resources of the region.

As an example of how this plan operates, assume that an AQCR of 10,000 square mile area has baseline emissions of 40,000 tons/year of sulfur dioxide. The applicable emission ceiling in this case would be 100,000 tons/year. Assume also that existing sources are expected to reduce emissions from 40,000 to 20,000 tons/year by 1980, and that small source growth is expected to equal 10,000 tons/year. The net available emissions through 1980 would amount to 70,000 tons/year. A coal fired power plant of 1,000 megawatt capacity which meets NSPS will emit about 50,000 tons of sulfur dioxide per year. Such a plant could be located in this AQCR, but it would use a large proportion of the available emission allowance. The State would have to balance its need for electricity against other anticipated emission increases to determine if such a power plant was desirable,

if this type of plant was necessary, or if the emissions from the plant should be reduced below NSPS by applying lower sulfur coal and/or more efficient stack gas cleaning equipment.

III. LOCAL DEFINITION PLAN

One of the major problems in defining significant deterioration is that the level at which air quality deterioration becomes "significant" is essentially subjective, and is often logically dependent upon a large number of factors which vary from location to location. Accordingly, the proposed regulations supporting this alternative plan would ensure that the rate of deterioration is minimized in all areas and requires State decision-making, with public participation, on the question of whether the deterioration resulting from particular sources would be considered "significant." In order to accomplish this, the regulations incorporate the following four features:

All major new or modified sources would be required to incorporate Best Available Control Technology, as defined previously, thus insuring that deterioration by any major source is held to the lowest practicable minimum regardless of the air quality in the surrounding area.

Any proposed source would be required to submit detailed information to the State concerning the amount and type of emissions anticipated, and the projected impact of those emissions on the air quality in the surrounding areas. The requirement for this type of information is intended to insure that adequate information is available on which to base an objective assessment regarding the significance of any resulting deterioration. Although not specifically required by the proposed regulations, it is anticipated that in many cases the State or local agency would analyze this information in relation to other sources impacting on air quality in the area. This would permit identification of existing sources which could be candidates for additional emission control capable of minimizing or offsetting the potential deterioration attributed to the proposed new source. In any event, the analysis of this type of information would insure that the decisions regarding the significance of any projected deterioration would be based upon the best information available.

The State would be required to make full disclosure of all pertinent information and solicit public participation in the determination of what constitutes significant deterioration. As a minimum, the State would serve public notice of the proposed construction or modification, would make full disclosure of source and State generated information, and would allow at least 30 days for public comment. However, the regulations for this alternative would not preclude the holding of public hearings if the proposal is of sufficient public interest. The intent of this requirement is to insure

that the definition of significant deterioration is based upon all pertinent air quality data, the attitudes and goals of the affected population, and the socio-economic conditions and requirements of the affected area.

The State would then determine whether the source would create significant deterioration of air quality. The regulations would provide sufficient legal authority for all States to prohibit construction or modification which could result in significant deterioration of air quality, but pertinent information would also be submitted to the Environmental Protection Agency for review. The Administrator could disapprove the State's determination of what constitutes Best Available Control Technology, or could disapprove the procedures by which the determination of significant deterioration was made, but so long as the required procedures were followed the Administrator would not have authority to reverse the State's judgment of what constitutes significant deterioration in any specific location.

Under this alternative, sufficient information, procedures, and legal authority would be provided to make a valid determination of what constitutes significant deterioration, in the view of the affected public, and to enforce the prevention of that deterioration regardless of any unique circumstances surrounding any individual case. However, sufficient safeguards would be included to insure that a State's determination that the resulting deterioration was not significant could not be used to circumvent other requirements dealing with National Ambient Air Quality Standards, New Source Performance Standards, State emission limitations, or any other legal requirements designed to protect the quality of the ambient air.

This approach has the major advantage that the governmental units and citizens most affected by decisions on maintenance of air quality would make those decisions, based upon conditions existing at that time, thereby ensuring that local requirements and preferences with regard to matters such as land use, economic development, and use of natural resources are taken into consideration. Thus, economic growth would not be arbitrarily restricted to conform to national views on nationwide deterioration, but, rather, would be subjected to State and local decisions as to the form, direction, extent, and distribution of such growth and as to the conditions to be imposed on the construction or modification of facilities which could have a significant impact on air quality.

A somewhat modified version of this plan is currently in restricted use in portions of several States. In these cases, the States have established extremely low ambient air quality standards for selected regions within their boundaries, in most cases to protect State parks, national forests, scenic vistas, etc. This is, of course, within the rights of all States,

but many States do not currently have adequate legal authority to prevent construction or modification unless the national ambient air quality standards are threatened. It would, therefore, be necessary to promulgate Federal regulations of the type presented herein to give all States the required legal authority until they can pass suitable State legislation.

Although this alternative is intuitively attractive for a variety of reasons, it is not without drawbacks. There is some justifiable concern that State and local agencies and populations could be subjected to undue pressure exerted by industries desirous of locating within a particular area, and that this pressure could cause definitions of "significant" which might not be in the best long-range interests of these populations. Additionally, the local definition plan uses what is essentially a "sliding baseline" in that deterioration is always measured relative to the current air quality. Hence, there is no control over the ultimate level of deterioration, which could progress in finite increments up to the level of the secondary standards. A final major disadvantage of this alternative is that the long range impact of deterioration is not completely restricted to the local area. The proposed regulations associated with this plan require public comment from within "the area significantly affected by the potential emissions." However, it is entirely possible that the cumulative effects of a large number of "growth-oriented" regions could have a significant impact on the air quality of neighboring "clean-air oriented" regions, and these neighboring regions would thereby lose control over their own environment. Although the feature that the State, rather than the local population, has final authority for the definition of significant tends to mitigate this concern, it nevertheless remains a problem which could lead to inequitable treatment of some areas.

IV. AREA CLASSIFICATION PLAN

One of the major problems associated with the previously discussed Air Quality Increment Plan involves the possible inequities resulting from establishment of a single air quality increment applicable nationwide. The fourth alternative proposed herein partially alleviates this problem by defining two nationwide air quality increments which would be applied to the appropriate areas of the State compatible with the long range growth patterns and development objectives associated with each of those areas. The application of this proposed alternative would be similar to that of the Air Quality Increment Plan except for the features noted herein.

The proposed regulations would require each State to identify each area of its territory as belonging to one of the two "zones" of allowable deterioration. The following table presents the proposed zones with their associated deterioration increments.

PERMISSIBLE DETERIORATION INCREMENTS (µg/m³)

	Particulate Matter		Sulfur Dioxide		
	Annual 24 Hour	Annual 24 Hour 3 Hour	Annual 24 Hour	5 Hour	26 Hour
Zone I-----	5	15	2	5	25
Zone II-----	10	30	15	100	300

Deterioration above the Zone II levels would constitute, in the Administrator's judgment, a significant deterioration in most areas of the country. This level is identical to that of the Air Quality Increment Plan and, as discussed under that Plan, would permit a reasonable amount of growth potential so long as well developed air pollution control strategies are applied. This increment would provide a strong incentive for improved control technology, would prevent construction of new sources in locations conducive to higher than normal ground level concentrations, would prevent clustering of major new sources, and would require that both new and existing sources employ increasingly effective control technology in order to maintain a reasonable growth capability for the region. The proposed regulations specify that the Zone II criteria would become effective nationwide upon promulgation of these regulations.

Zone I represents an extremely stringent deterioration criteria, and application of this increment would prohibit the introduction of even one small fossil fuel fired power plant, municipal incinerator, medium apartment complex (assuming oil heating), or any other medium scale residential or commercial development using normal emission control techniques. However, this does not necessarily mean that development would be totally prohibited: It means only that new emissions would be permitted only to the degree that current emissions are reduced. Strong incentives are therefore inherent for improved emission control technology and introduction of low-pollution development. Although Zone I could be applied to a semi-urban or urban area in which it was desired to inhibit further development; it is anticipated that Zone I would normally be applied to those ultra-clean areas such as national and state forests and parks, and other recreational areas in which it is desired to maintain essentially no deterioration of air quality.

The regulations proposed in support of this plan also contain provisions for exceptions to the required deterioration increments in special circumstances. It could be in the public interest to permit some isolated areas a higher increment in circumstances under which the resulting deterioration would not be considered significant. Each of these cases would require public hearings in the areas involved, and would require specific approval by the Administrator. It is expected that these cases would exist infrequently, but they might occur due to the unusual availability of raw materials in the area; or in order to support comprehensive, long-range development plans; or to avoid the necessity for lo-

cating relatively pollution-prone industries near populated areas where a larger deterioration increment might be available. As further insurance that the State's request for an exception is justified, the administrator would consider the extent to which the State has applied Zone I criteria as an expression of good faith efforts to comply with the intent of the proposed regulations.

The proposed regulations require that States accomplish initial zoning within six months from the date of promulgation of these regulations. Retention of the Zone II criteria in an area would be considered the norm, and the degree of public participation would be at the State's discretion. Assignment of Zone I would require that public hearings be held in the region affected due to the severe growth restrictions inherent in the Zone I criteria. If any State fails to submit the required plan, all areas of the State would remain under the Zone II criteria as assigned upon promulgation of these regulations.

Subsequent to submittal of the initial zoning plan, changes in the plan could be accomplished to accommodate changes in growth patterns and development plans; such proposed changes would be presented at public hearings in each of the affected areas.

It is important to note that the proposed regulations would not allow the Administrator to disapprove any assignment of zones made by the State so long as the required procedures are carried out. By requiring the establishment of these zones, and specifying the maximum allowable deterioration associated with each zone, it is not the Administrator's intention to establish how the land in any particular area should be used, nor to establish any particular relationship between current air quality and assigned zoning. Areas assigned to Zone I could retain an option for significant growth capability: The very stringent air quality criteria require only that any growth be restricted to a form which has a low air pollution potential. Use of the land is the prerogative of the State and local population, and hence complete flexibility is provided, consistent with prevention of significant deterioration as appropriate for each zone. In making the determinations necessary to implement this alternative, the States would be encouraged to consider many factors, including but not limited to; growth projections and local land use plans; existing land use; location of raw materials and markets; and existing constraints on land use imposed by other State, local, and Federal requirements.

Unfortunately, as with the Air Quality Increment Plan, the type of air quality data needed to accurately establish the baseline air quality for this alternative is not currently available in many clean areas of the country. It would therefore become necessary to estimate this information by use of diffusion modeling and other appropriate techniques. To eventually alleviate these problems, the plan would establish additional air qual-

ity monitoring requirements around new major sources.

Despite the data availability problems, this alternative has some very attractive features. Unlike the other ceiling plans proposed herein, this plan ensures that future developmental patterns can be based on rational planning rather than on previous growth patterns which form the basis for most other ceiling approaches. This alternative also seems superior to the "local definition" plan, in that it is not based on case-by-case local projections of growth patterns which may not be desirable from an overall point of view, but requires that the State establish long range growth patterns and goals. In essence, this plan puts emphasis on longer range strategic planning as opposed to short range case-by-case decisions. The plan also gives States the flexibility needed to meet their long range growth goals without the imposition of arbitrary constraints.

This alternative also has some drawbacks. The proposed regulations require that the State make very difficult and comprehensive decisions impacting on land use in a tight time frame. The results of these State decisions would have far reaching implications on the future of many States. There are no firm criteria which a State may use to make its decisions and as a result, the decisions would be somewhat subjective in nature. The required decisions also would force the States to exercise great care in establishing the boundaries between zones so that the effect of a source in a Zone II does not cause the air quality in a Zone I to increase more than allowed. This problem becomes more severe along State boundaries and would require cooperation among States. Nevertheless, of the available alternatives for preventing significant deterioration, this plan appears to be superior in many, if not all, respects.

OTHER PLANS OF INTEREST

Although the preceding plans (including variations and combinations of these) represent the more feasible alternatives for preventing significant deterioration, the Administrator has given a variety of other plans careful consideration. Two of the more interesting are based upon a volumetric emission density restriction, and application of an emission charge or penalty.

The application of a volumetric emission density restriction is the essential feature of a plan proposed by the Sierra Club. Under this plan, significant deterioration for most pollutants would be defined as either a small incremental increase, or a percentage increase in pollutant concentration, averaged either over that volume of air within one km of the source, or that ground level area within one km of the source, whichever gives the higher value. Although the impact of this criteria is highly dependent upon the instantaneous local meteorological conditions, the philosophy is essentially similar to that of more conventional air quality and emission limitation plans.

The fundamental difference is that the Sierra Club plan considers an exceptionally small area (or volume) on which to base the deterioration criteria. This requires that, in order to restrict regional deterioration to reasonable levels, the allowable increment applied to the one km baseline area must be very small. The result is that this plan would permit a large number of small sources to be uniformly distributed throughout the region; but would completely prohibit construction of conventional coal fired power plants and other major sources of the type listed in the proposed regulations, unless those sources were located in areas in which major improvements in air quality had been accomplished after the baseline level had been established. This feature would tend to drive all new major sources of air pollution into the more heavily populated sections of the country. This anomaly is the result of choosing too small an area (or volume) over which to average the emissions, and is no more a failure of the volumetric averaging technique than any technique in which emission density restrictions are applied to an excessively small area. Conversely, if too large an area is chosen, then the peak concentrations in a local area may become excessive even though total atmospheric loading is reduced. However, the volumetric averaging plan is not proposed herein primarily because the computation technique is unnecessarily complex and is only indirectly representative of the physical characteristics of pollution sources, the baseline data required (particularly for particulates) is largely nonexistent, the monitoring and control costs would be excessive, and simpler plans could be developed to achieve substantially the same results without the practical application problems inherent in the volumetric averaging concept.

A second type of plan containing interesting ramifications but which had to be rejected for practical reasons was one based on the imposition of emission charges. The general reasoning behind such a plan is that secondary NAAQS comprise adequate upper limits on pollutant concentrations, but air quality superior to those limits is desirable. The emission charge would provide a continuous incentive for sources to seek and apply emission controls to minimize their emission charges. The collective effect of these individual cost minimizations would be to maintain air quality at levels superior to NAAQS in most areas. The level of air quality maintained would be a function of the emission charge rate, the development potential of the area, and the state-of-the-art of emission control.

The major advantages of this plan are that the cost of emitting would be "internalized", i.e., it would be taken into consideration in the normal economic appraisal of plant design and location alternatives. Sources would have numerous options as to control method, cost, and degree of control from which to make the optimum choice. The state-of-

the-art of emission control would be continuously advanced. Finally, the means of enforcement would be charge collection for which there is ample precedent and experience.

Unfortunately, several problems attend such a plan, particularly in view of the requirement that "significant deterioration" be prevented in any portion of any State. If significant deterioration of air quality is to be prevented by the emission charge, some relationship between the charge rate and the resultant air quality must be found. Such a relationship is not presently available. Even if this relationship were available, the emission charge rate would have to vary from place to place to offset the variation in developmental potential offered by different land areas and the variable capacity of the air to disperse waste under different meteorological and topographical conditions. But most important, an emission charge would not guarantee that significant deterioration could not take place in some portions of some States. Consequently, the emission charge, while possessing some desirable attributes, does not appear to be a practical means of preventing significant deterioration of air quality.

PROBLEMS COMMON TO ALL DETERIORATION PLANS

Jurisdictional Ambiguities—There is a potential jurisdictional problem associated with all plans proposed to prevent significant deterioration. The problem could arise whenever a source in one State is degrading the air quality of a second State. The problem is compounded when small deterioration increments or ceilings are established because a relatively small external source may "use up" a large portion of the growth potential available to the neighboring regions. The region in question would have no apparent resource, and its own growth potential would thereby be curtailed. The recent court order has established the Administrator's authority to prevent significant deterioration regardless of the source's location, but the Administrator has no criteria by which he can dictate whether the allowable deterioration should be allocated to an internal or external source. Hence, in cases such as this, any allowable deterioration increment would have to be allocated on a "first come, first served" basis, regardless of the location of the source.

De Facto Land Use Decisions—It has been pointed out previously that all currently practical plans to prevent significant deterioration essentially impose restrictions on the use of the air resource, and hence, use of land. Depending upon the plan selected, these restrictions would be imposed by local, State, or Federal decisions. However, in all cases, there is a certain amount of flexibility inherent in the regulations regarding land use, and the States are encouraged to exploit this flexibility in order to make most effective use of the available resources. This exploitation is ex-

pected to take the form of State legislation permitting State determination of the type and amount of developmental growth authorized to "use" the allowable air quality increment. Complimentary to enactment of this legislation would be long range planning actions to determine the type of growth desired, any constraints on this growth in addition to air quality deterioration constraints, and any additional means for air quality improvements which might, in turn, make possible additional growth. In the absence of such State action, it can be anticipated that the allowable deterioration increment will be used up quite rapidly in many areas, and that this use would be made on a "first come—first served" basis without regard for the longer range requirements and goals of the region. In effect, Federal promulgation of any of the alternatives proposed herein will force States to develop and implement additional land use planning activities through which the available air resource can be allocated for the optimum purposes. These activities will be actively encouraged by the Administrator, and it is planned that eventually the prevention of significant deterioration will be accomplished solely through State Implementation Plan procedures, although such SIPs would have to be in accordance with Federal guidelines.

The Impact of Urban Sprawl—This problem refers to the characteristic trend of most urban areas to spread in to the surrounding countryside thereby creating gradual air quality deterioration due to residential heating and associated small but numerous sources of emission. There is no adequate deterioration plan which can automatically accommodate this deterioration, and yet urban sprawl can use up a large portion of any allowable deterioration increment. The periodic development of emission inventories, and routine air quality sampling, will track the effect of this sprawl, but it must also be projected into the future in order to insure that its impact, in addition to the impact of new major sources, does not violate the deterioration restrictions. For this reason, it may become desirable to include requirements for growth projections in the proposed regulations in a manner similar to those of the recently promulgated complex source regulations.

The Impact of Fuel Switching—Many sources have the capability to switch among various types of fuel—i.e., natural gas, low and high sulfur oil, low and high sulfur coal, etc.—thus altering their emission levels. Although there is generally sufficient low sulfur fuel available in conjunction with other emission reduction techniques, to attain and maintain the national standards nationwide there is not currently sufficient fuel of this type (particularly low sulfur coal) to satisfy all potential users. Accordingly it may become necessary for some source in relatively clean areas to temporarily switch to higher sulfur fuel in order to make available additional low sulfur

fuel for use in areas in which the ambient air quality could have an adverse impact on public health. Because pollutant emissions are approximately proportional to the sulfur content of the fuel (i.e., a switch from 1 percent to 3 percent sulfur coal would approximately triple sulfur oxides emissions) this procedure would tend to temporarily degrade air quality in clean areas. A preliminary review indicates that most plans to prevent deterioration could accommodate this temporary increase in emissions. However, it is conceivable that there may be unusual cases, as where a source might have to switch from natural gas to coal, which could not be accommodated within some proposed deterioration limits. The Administrator solicits all available information concerning cases of this type, and is interested in comments on the advisability of including variance procedures in the proposed regulations to accommodate temporary emission increases of this type.

The Right of Regional Self-Sufficiency—It is desirable that all participants in this rulemaking carefully consider the full impact of deterioration restrictions, particularly as they would influence relatively clean areas in which the allowable deterioration increments might be very small. Due in part to the threat to the NAAQS, most large urban areas can no longer provide enough electrical power to supply their own needs; their power must come from non-urban, relatively clean, areas. However, in the future it may develop that even non-urban areas will not be able to supply their own power needs due to the threat of significant deterioration. For example, Iowa can be considered as a typical agricultural State with only nominal heavy industry. It is estimated that by 1980, the rural areas of Iowa will require approximately 1,700 megawatts of additional power per year. The production of that power, with application of best available control technology and regionally available fuel, would produce approximately 160,000 tons of sulfur dioxide per year, or an approximately fifty percent increase in emissions over the 1970 levels for those areas. Any deterioration plan must consider factors such as these to insure that the impact on each individual region can be tolerated and is consistent with the public interest.

OPPORTUNITY FOR PUBLIC PARTICIPATION

The Administrator solicits widespread public involvement in all aspects of the significant deterioration issue, and interested individuals and groups are encouraged to actively participate in this rulemaking. In order to assist in the development of objective comments and debate, the Environmental Protection Agency's Office of Public Affairs and the Regional Offices will have available sets of technical documentation summarizing types and sizes of typical sources, typical emissions, estimated costs of emission controls, breakouts of total national emissions by type and type source, dis-

tribution of current emissions by AQCR, and associated data of value in assessing the impact of alternative deterioration plans. Copies of this information will be made available to the public upon request. Requestors should reference this issue of the FEDERAL REGISTER.

There are several questions on which EPA is particularly interested in receiving public comments and relevant data. One of the most important involves the concepts of "deterioration of air quality" and "significant deterioration of air quality." With respect to the term "deterioration," the question arises as to what type of change in ambient air quality represents "deterioration." With respect to "significant deterioration," questions arise as to whether it should be interpreted in the absolute or relative sense, and whether it should be determined on a national, State, or regional basis. Attention is therefore expressly directed to, and public comment requested on, the questions of what might appropriately be considered "deterioration" and, further, what degree of deterioration might appropriately be considered "significant."

Other questions on which public comment and relevant data are particularly requested include: whether, if an Air Quality Increment Plan or Emission Limitation Plan is adopted, the specific increments or limitations proposed herein are appropriate to prevent significant deterioration without severely disrupting growth and development; whether it is necessary and appropriate to require application of best available control technology as a minimum requirement of any plan for preventing significant deterioration; and whether the proposed definition of best available technology is appropriate. EPA also requests information which would explicitly define the possible economic impact of each of the proposed alternatives. Finally, the fact that four alternatives are specifically presented does not preclude interested parties from offering others for consideration.

Public hearings on these proposals are scheduled as follows:

Washington, D.C.: August 27 and 28
Time and place to be announced.
Atlanta: September 4 and 5; 10:00 a.m.
City Center
395 Piedmont Avenue, N.E.
Dallas: September 5 and 6; 9:00 a.m.
Environmental Protection
Agency
Suite 1000
Conference Rooms A and B
1600 Patterson Street
Denver: September 5 and 6; 9:00 a.m.
U.S. Post Office Auditorium
Room 269
1823 Stout Street
San Francisco: September 5 and 6; 9:00
a.m. to 5:00 p.m.
Hyatt Regency Hotel
Seacliff Room
Embarcadero Center

Written comments in triplicate may also be submitted to the Office of Air Quality Planning and Standards, Envi-

ronmental Protection Agency, Research Triangle Park, North Carolina 27711, Attn: Mr. Padgett. All relevant comments received not later than 90 days after the date of publication of this notice will be considered. Receipt of comments will be acknowledged but substantive responses will not be provided. Comments received will be available for public inspection during normal business hours at the Office of Public Affairs, 401 M Street, SW., Washington, D.C. 20460.

These alternative amendments are being proposed pursuant to an order of the U.S. Court of Appeals for the District of Columbia Circuit in the case of Sierra Club, et al., V. Administrator of EPA, case No. 72-1528. This notice of proposed rulemaking is issued under the authority of section 301(a) of the Clean Air Act as amended (42 U.S.C. 1857, et seq.).

Dated: July 12, 1973.

ROBERT W. FRI,
Acting Administrator,
Environmental Protection Agency.

Subpart A, Part 52, Chapter I, Title 40, Code of Federal Regulations, is proposed to be amended by adding to § 52.21 a new paragraph (b) and one of the paragraphs herein designated (c), (d), (e), and (f):

§ 52.21 Significant deterioration of air quality.

(a) Subsequent to May 31, 1972, the Administrator reviewed State implementation plans to determine whether or not the plans permit or prevent significant deterioration of air quality in any portion of any State where the existing air quality is better than one or more of the secondary standards. The review indicates that State plans generally do not contain regulations or procedures specifically addressed to this problem. Accordingly, all State plans are disapproved to the extent that such plans lack procedures or regulations for preventing significant deterioration of air quality in portions of States, where air quality is now better than the secondary standards. The disapproval applies to all States listed in Subparts B through DDD of this part. Nothing in this section shall invalidate or otherwise affect the obligations of States, emission sources, or other persons with respect to all portions of plans approved or promulgated under this part.

(b) For purposes of this section:

(1) The term "baseline air quality concentration" means the maximum air quality concentrations measured or estimated in an area in which the proposed source has a significant effect representative of the year 1972 plus the estimated increase in those concentrations caused by all sources granted approval for construction prior to the date of proposal of this section in the FEDERAL REGISTER but not operating during the year 1972.

(2) The term "baseline emissions" means the annual emissions for the year 1972 plus the estimated emissions from

all sources granted approval for construction prior to the date of proposal of this section in the FEDERAL REGISTER but not operating during the year 1972.

(3) The term "potential emission rate" means the total weight rate at which sulfur dioxide or particulate matter, in the absence of any air cleaning device, would be emitted from a stationary source when such source is operated at its rated capacity. Total weight rates shall be those actually expected for a specified source but in the absence of such information, it shall be estimated on the basis of the emission factors specified in "Compilation of Air Pollution Emission Factors," Office of Air Programs Publication No. AP-42, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina, February 1972.

(4) The term "air cleaning device" means any article, machine, equipment, or other contrivance, chemical or process, the use of which may eliminate, reduce or control the emission of air pollutants into the atmosphere.

(c) *Regulation for preventing significant deterioration of air quality through application of an air quality increment.*

(1) This paragraph applies to sources identified below, the construction or modification of which is commenced after the date of proposal of this paragraph in the FEDERAL REGISTER.

(i) Any new or modified stationary source of a type listed below:

(a) Fossil-Fuel Fired Steam Electric Plants of more than 1000 million B.t.u. per hour heat input.

(b) Coal Cleaning Plants (thermal dryers).

(c) Kraft Pulp Mill Recovery Furnaces.

(d) Portland Cement Plants.

(e) Primary Zinc Smelters.

(f) Iron and Steel Mill Metallurgical Furnaces.

(g) Primary Aluminum Ore Reduction Plants.

(h) Primary Copper Smelters.

(i) Municipal Incinerators capable of charging more than 250 tons of refuse per day.

(j) Sulfuric Acid Plants.

(k) Petroleum Refineries.

(l) Lime Plants.

(m) Phosphate Rock Processing Plants.

(n) By-Product Coke Oven Batteries.

(o) Sulfur Recovery Plants.

(p) Carbon Black Plants (furnace process).

(ii) Any new or modified stationary source not identified in subdivision (i) of this subparagraph having a total annual potential emission rate on any premises equal to or greater than 4000 tons for any of the following pollutants.

(a) Particulate matter.

(b) Sulfur dioxide.

(c) Nitrogen oxides.

(d) Hydrocarbons.

(e) Carbon monoxide.

(2) No owner or operator shall commence construction or modification of a source to which this paragraph is applicable unless:

(i) The State in which the source is or will be located determines in accordance with this paragraph:

(a) That the effect on air quality of the source or modification of the source considered with the effect on air quality of existing, new or modified sources, will not cause the air quality to be increased above the baseline air quality concentration by more than any of the following:

(1) 10 $\mu\text{g}/\text{m}^3$ of particulate matter, annual geometric mean.

(2) 30 $\mu\text{g}/\text{m}^3$ of particulate matter, 24-hour maximum.

(3) 15 $\mu\text{g}/\text{m}^3$ of sulfur dioxide, annual arithmetic mean.

(4) 100 $\mu\text{g}/\text{m}^3$ of sulfur dioxide, 24-hour maximum.

(5) 300 $\mu\text{g}/\text{m}^3$ of sulfur dioxide, 3-hour maximum.

(b) That the source or modified portion of the source will be constructed and operated to employ best available control technology for minimizing emissions of particulate matter, sulfur dioxide, nitrogen oxides, hydrocarbons, and carbon monoxide.

(ii) The Administrator approves the State's determination under subdivision (i) of this subparagraph.

(3) In making the determinations required by subparagraph (2) (i) of this paragraph, the State shall, as a minimum, require the source to submit: Site information, plans, descriptions, specifications, and drawings showing the design of the source, calculations showing the nature and amount of emissions, a description of the manner in which the source will be operated and controlled, the cost of control, measurements or estimates of existing air quality levels, and the impact that the construction or modification will have on air quality levels and the air environment around the source.

(4) (i) In determining best available control technology, the following shall be considered:

(a) Reasonably available control technology as defined in Appendix B to Part 51 of this chapter,

(b) The process, fuels, and raw materials employed,

(c) The engineering aspects of the application of various types of control techniques,

(d) Process and fuel changes, and

(e) The cost of the application of the control techniques, process changes, alternative fuels, etc.

(ii) A system of control which is determined by the State and approved by the Administrator to be adequate to comply with standards of performance for new stationary sources under Part 60 of this chapter may be deemed to constitute best available control technology.

NOTE: Under the alternative definition of Best Available Control Technology, as set forth in the preamble, subdivision (iii) would be eliminated.

(iii) In the case of sources identified at subparagraph (1) (i) (a) of this paragraph, best available control technology

for sulfur oxides shall consist, as a minimum, of a control strategy determined to be capable of complying with standards of performance for new stationary sources specified in Part 60 of this chapter. However, individual analysis of each new or modified source which considers the availability of fuel and the cost and efficiency of other or additional control strategies may result in additional control for individual plants.

(5) Subject to subdivision (x) of this subparagraph, the owner or operator of a source subject to the provisions of subparagraph (2) of this paragraph shall install, or cause to be installed, a minimum of two continuous ambient air quality monitoring instruments for sulfur dioxide and/or two intermittent ambient air quality monitoring instruments for particulate matter.

(i) The State shall specify which pollutant(s) the source shall monitor.

(ii) When source, meteorological and/or terrain conditions warrant, the State may require additional samplers above the minimum number specified in this paragraph.

(iii) Such systems shall include one site equipped to monitor wind speed and wind direction.

(iv) The instruments shall meet the performance and operating specifications of § 51.17(a) (1) of this chapter.

(v) The locations of such instruments shall be located in areas of expected maximum concentrations determined by meteorological diffusion modeling or best judgment.

(vi) The instruments shall be maintained, calibrated, and operated in accordance with the methods prescribed by the manufacturer of such instrument(s) and other procedures consistent with good engineering practice.

(vii) The owner or operator of the source subject to this paragraph shall maintain a record of all measurements required by this subparagraph. Measurement results shall be summarized monthly and reported to the State semi-annually, and shall be submitted within 45 days after the end of the reporting period. Reporting periods are January 1-June 30 and July 1-December 31, with the initial reporting period starting as indicated in subdivision (viii) of this subparagraph.

(viii) The continuous monitoring and recordkeeping requirements of this subparagraph shall become applicable 6 months after initial start-up of the source.

(ix) Information collected pursuant to this subparagraph shall be made available to the Administrator upon his request.

(x) The State may demonstrate to the Administrator that the existing air quality surveillance system in the area in which a source is to be constructed or modified meets the requirements of this subparagraph.

(6) (i) Prior to making the determinations required by subparagraph (2) (i) of this paragraph, the State shall provide opportunity for public comment on the information submitted by the owner or

operator and on the State's analysis of the effect of such construction or modification on ambient air quality. Opportunity for public comment shall include, as a minimum:

(a) Availability for public inspection, in at least one location in the region affected, of the information submitted by the owner or operator, and the State or local agency's analysis of the effect on air quality,

(b) a 30-day period for submittal of public comment, and

(c) a notice by prominent advertisement in the region affected of the location of the source information and analysis specified in subparagraphs (2) (i), and (3) of this paragraph.

(ii) Within 90 days from an owner or operator's submission of the information required under subparagraph (3) of this paragraph, the State shall publicly announce and transmit in writing to the Administrator its determinations under subparagraph (2) (i) of this paragraph, together with:

(a) Copies of all information prepared by the State under subparagraph (2) (i) of this paragraph; (b) a copy of the public notices issued in conformity with subdivision (1) of this subparagraph and (c) a statement that the State has complied with the requirements of this paragraph.

(7) (i) The Administrator will notify the State of his determination and the reasons for any disagreement under subparagraph (2) (ii) of this paragraph no later than 25 days following the State's submission of the information required under subparagraph (6) (ii) of this paragraph.

(ii) The State will notify the owner or operator in writing of the approval or denial to construct or modify a source within 120 days of the owner or operator's submission of the information required under subparagraph (3) of this paragraph.

(8) The Administrator may cancel an approval to construct if the construction is not begun within two years from the date of issuance, or if during the construction, work is suspended for one year.

(9) Approval to construct or modify shall not relieve any owner or operator of the responsibility to comply with all local, State, or Federal regulations which are part of the applicable plan.

(d) *Regulation for preventing significant deterioration of air quality through application of an emission ceiling.* (1) This paragraph applies to sources identified below, the construction or modification of which is commenced in any Air Quality Control Region (AQCR) classified Priority Ia or III with respect to sulfur dioxide and/or particulate matter, after the date of proposal of this paragraph in the FEDERAL REGISTER.

(i) Any new or modified stationary source of a type listed below:

(a) Fossil-Fuel Fired Steam Electric Plants of more than 1000 million B.t.u. per hour heat input.

(b) Coal Cleaning Plants (thermal dryers).

(c) Kraft Pulp Mill Recovery Furnaces.

(d) Portland Cement Plants.

(e) Primary Zinc Smelters.

(f) Iron and Steel Mill Metallurgical Furnaces.

(g) Primary Aluminum Ore Reduction Plants.

(h) Primary Copper Smelters.

(i) Municipal Incinerators capable of charging more than 250 tons of refuse per day.

(j) Sulfuric Acid Plants.

(k) Petroleum Refineries.

(l) Lime Plants.

(m) Phosphate Rock Processing Plants.

(n) By-Product Coke Oven Batteries.

(o) Sulfur Recovery Plants.

(p) Carbon Black Plants (furnace process).

(ii) Any new or modified stationary source not identified in subdivision (i) of this subparagraph having a total annual potential emission rate on any premises equal to or greater than 4000 tons for any of the following pollutants:

(a) Particulate matter.

(b) Sulfur dioxide.

(c) Nitrogen oxides.

(d) Hydrocarbons.

(e) Carbon monoxide.

(2) No owner or operator shall commence construction or modification of a source to which this paragraph is applicable unless:

(i) The State in which the source is or will be located determines in accordance with this paragraph:

(a) That the source or modified portion of the source considered with the cumulative effect on emission levels of all existing, new or modified stationary sources will not cause the maximum allowable emissions as determined by subparagraph (9) of this paragraph to be exceeded.

(b) That the source or modified portion of the source will be constructed and operated to employ best available control technology for minimizing emissions of particulate matter, sulfur dioxide, nitrogen oxides, hydrocarbons, and carbon monoxide.

(ii) The Administrator approves the State's determination under subdivision (i) of this subparagraph.

(3) In making the determinations required by subparagraph (2) (i) of this paragraph, the State shall, as a minimum, require the source to submit: Site information, plans, descriptions, specifications, and drawings showing the design of the source, calculations showing the nature and amount of emissions, a description of the manner in which the source will be operated and controlled, and the cost of control.

(4) (i) In determining best available control technology, the following shall be considered:

(a) Reasonably available control technology as defined in Appendix B to Part 51 of this chapter.

(b) The process, fuels, and raw materials employed,

(c) The engineering aspects of the application of various types of control techniques,

(d) Process and fuel changes, and

(e) The cost of the application of the control techniques, process changes, alternative fuels, etc.

(ii) A system of control which is determined by the State and approved by the Administrator to be adequate to comply with standards of performance for new stationary sources under Part 60 of this chapter may be deemed to constitute best available control technology.

(iii) In the case of sources identified at subparagraph (1) (i) (a) of this paragraph, best available control technology for sulfur oxides shall consist, as a minimum, of a control strategy determined to be capable of complying with standards of performance for new stationary sources specified in Part 60 of this chapter. However, individual analysis of each new or modified source which considers the availability of fuel and the cost and efficiency of other or additional control strategies may result in additional control for individual plants.

NOTE: Under the alternative definition of Best Available Control Technology, as set forth in the preamble, subdivision (iii) would be eliminated.

(5) (i) Prior to making the determinations required by subparagraph (2) (i) of this paragraph, the State shall provide opportunity for public comment on the information submitted by the owner or operator and on the agency's review of such information. Opportunity for public comment shall include, as a minimum:

(a) Availability for public inspection, in at least one location in the region affected, of the information submitted by the owner or operator, and the State or local agency's analysis of such information.

(b) A 30-day period for submittal of public comment, and

(c) A notice by prominent advertisement in the region affected of the location of the source information and analysis specified in subparagraphs (2) (i), and (3) of this paragraph.

(ii) Within 60 days from an owner or operator's submission of the information required under subparagraph (3) of this paragraph, the State shall also publicly announce and transmit in writing to the Administrator its determinations under subparagraph (2) (i) of this paragraph, together with:

(a) A copy of the public hearing notices issued in conformity with subdivision (1) of this subparagraph and

(b) A statement that the State has complied with the requirements of this paragraph.

(6) (i) The Administrator will notify the State of his determination and reasons for any disagreement under subparagraph (2) (ii) of this paragraph no later than 25 days following the State's submission of the information required under subparagraph (5) (ii) of this paragraph. (ii) The State will notify the

owner or operator in writing of the approval or denial to construct or modify a source within 90 days of an owner or operator's submission of the information required under subparagraph (3) of this paragraph.

(7) The Administrator may cancel an approval to construct if the construction is not begun within two years from the date of issuance, or if during the construction, work is suspended for one year.

(8) Approval to construct or modify shall not relieve any owner or operator of the responsibility to comply with all local, State, or Federal regulations which are part of the applicable plan.

(9) The maximum allowable emissions for an Air Quality Control Region shall be the following:

(i) For particulate matter the product of the area (square miles) for an AQCR and 3 tons of particulate matter/year/square mile or 120 percent of the baseline emissions for particulate matter, whichever is greater.

(ii) For sulfur oxides the product of the area (square miles) of an AQCR and 10 tons of sulfur dioxide/year/square mile or 120 percent of the baseline emissions for sulfur dioxide, whichever is greater.

(10) The State shall make available to the Administrator upon his request:

(i) The baseline emission inventory for particulate matter and sulfur dioxide, and

(ii) An annually updated emission inventory for each affected AQCR for all pollutants to which this paragraph is applicable.

(e) *Regulation for preventing significant deterioration of air quality through a local definition of significant deterioration.* (1) This paragraph applies to sources identified below, the construction or modification of which is commenced after the date of proposal of this paragraph in the FEDERAL REGISTER.

(i) Any new or modified stationary source of a type listed below:

(a) Fossil-Fuel Fired Steam Electric Plants of more than 1000 million B.t.u. per hour heat input.

(b) Coal Cleaning Plants (thermal dryers).

(c) Kraft Pulp Mill Recovery Furnaces.

(d) Portland Cement Plants.

(e) Primary Zinc Smelters.

(f) Iron and Steel Mill Metallurgical Furnaces.

(g) Primary Aluminum Ore Reduction Plants.

(h) Primary Copper Smelters.

(i) Municipal Incinerators capable of charging more than 250 tons of refuse per day.

(j) Sulfuric Acid Plants.

(k) Petroleum Refineries.

(l) Lime Plants.

(m) Phosphate Rock Processing Plants:

(n) By-Product Coke Oven Batteries.

(o) Sulfur Recovery Plants.

(p) Carbon Black Plants (furnace process).

(ii) Any new or modified stationary source not identified in subdivision (i) of this subparagraph having a total an-

nual potential emission rate on any premises equal to or greater than 4000 tons for any of the following pollutants.

(a) Particulate matter.

(b) Sulfur dioxide.

(c) Nitrogen oxides.

(d) Hydrocarbons.

(e) Carbon monoxide.

(2) No owner or operator shall commence construction or modification of a source to which this paragraph is applicable unless:

(i) The State in which the source is or will be located determines in accordance with this paragraph:

(a) That the source or modified portion of the source will be constructed and operated to employ best available control technology for minimizing emissions of particulate matter, sulfur dioxide, nitrogen oxides, hydrocarbons, and carbon monoxide.

(b) That particulate matter and sulfur dioxide emissions from the source when controlled by best available control technology will not cause significant deterioration in air quality;

(ii) The Administrator approves the State's determination under subdivision (i) (a) of this subparagraph.

(iii) The Administrator approves the procedure employed by the State in making the determination required by subdivision (i) (b) of this subparagraph.

(3) No owner or operator shall operate a source to which this paragraph applies unless the emission control system determined to constitute best available control technology and approved by the Administrator under this paragraph is fully installed and properly functioning.

(4) No determination or approval under this paragraph shall relieve any source from compliance with any local, State or Federal requirement which is part of the implementation plan, including any standard of performance under Part 60 of this chapter.

(5) (i) In determining best available control technology, the following shall be considered:

(a) Reasonably available control technology as defined in Appendix B to Part 51 of this chapter.

(b) The process, fuels, and raw material employed.

(c) The engineering aspects of the application of various types of control techniques.

(d) Process and fuel changes, and

(e) The cost of the application of the control techniques, process changes, alternative fuels, etc.

(ii) Except as provided in subdivision (iii) of this subparagraph a system of control which is determined by the State and approved by the Administrator to be adequate to comply with standards of performance for new stationary sources under Part 60 of this chapter may be deemed to constitute best available control technology.

(iii) In the case of sources identified at subparagraph (1) (i) (a) of this paragraph, best available control technology for sulfur oxides shall consist, as a minimum, of a control strategy determined to

be capable of complying with standards of performance for new stationary sources specified in Part 60 of this chapter. However, individual analysis of each new or modified source which considers the availability of fuel and the cost and efficiency of other or additional control strategies may result in additional control for individual plants.

Notes: Under the alternative definition of Best Available Control Technology, as set forth in the preamble, subdivision (iii) would be eliminated.

(6) In making the determinations required by subparagraph (2) (i) of this paragraph, the State shall, as a minimum, require the source to submit: site information, plans, descriptions; specifications, and drawings showing the design of the source, calculations showing the nature and amount of emissions, a description of the manner in which the source will be operated and controlled, the cost of control, an estimate of existing air quality levels, and the impact that the construction or modification will have on air quality levels and the air environment around the source.

(7) (i) Prior to making the determinations required by subparagraph (2) (i) of this paragraph, the State shall provide opportunity for public comment on the information submitted by the owner or operator and on the agency's analysis of the effect of such construction or modification on ambient air quality. Opportunity for public comment shall include, as a minimum:

(a) Availability for public inspection, in at least one location in the region affected, of the information submitted by the owner or operator, and the State or local agency's analysis of the effect on air quality.

(b) A 30-day period for submittal of public comment, and

(c) A notice by prominent advertisement in the region affected of the location of the source information and analysis specified in subparagraphs (2) (i), and (3) of this paragraph.

(ii) Within 90 days from an owner or operator's submission of the information required under subparagraph (3) of this paragraph, the State shall also publicly announce and transmit in writing to the Administrator its determinations under subparagraph (2) (i) of this paragraph, together with: (a) copies of all information prepared by the State under subparagraph (2) (i) of this paragraph; (b) a copy of the public notices issued in conformity with subdivision (i) of this subparagraph and (c) a statement that the State has complied with the requirements of this paragraph.

(8) (i) The Administrator will notify the State of his determination and reasons for any disagreement under subparagraph (2) (ii) of this paragraph no later than 25 days following the State's submission of the information required under subparagraph (6) (ii) of this paragraph.

(ii) The State will act within 120 days on an owner or operator's submission of

the information required under subparagraph (6) of this paragraph and will notify the owner or operator in writing of the approval or denial to construct or modify a source.

(9) The Administrator may cancel an approval to construct if the construction is not begun within two years from the date of issuance, or if during the construction, work is suspended for one year.

(1) *Regulation for preventing significant deterioration of air quality through application of area classification.* (1) This paragraph applies to sources identified below, the construction or modification of which is commenced after the date of proposal of this paragraph in the FEDERAL REGISTER.

(1) Any new or modified stationary source of a type listed below:

(a) Fossil-Fuel Fired Steam Electric Plants of more than 1000 million B.t.u. per hour heat input.

(b) Coal Cleaning Plants (thermal dryers).

(c) Kraft Pulp Mill Recovery Furnaces.

(d) Portland Cement Plants.

(e) Primary Zinc Smelters.

(f) Iron and Steel Mill Metallurgical Furnaces.

(g) Primary Aluminum Ore Reduction Plants.

(h) Primary Copper Smelters.

(i) Municipal Incinerators capable of charging more than 250 tons of refuse per day.

(j) Sulfuric Acid Plants.

(k) Petroleum Refineries.

(l) Lime Plants.

(m) Phosphate Rock Processing Plants.

(n) By-Product Coke Oven Batteries.

(o) Sulfur Recovery Plants.

(p) Carbon Black Plants (furnace process).

(11) Any new or modified stationary source not identified in subdivision (1) of this subparagraph having a total annual potential emission rate on any premises equal to or greater than 4000 tons for any of the following pollutants:

(a) Particulate matter.

(b) Sulfur dioxide.

(c) Nitrogen oxides.

(d) Hydrocarbons.

(e) Carbon monoxide.

(2) For purposes of this paragraph areas of a State classified as Zone I or Zone II shall be limited to increases in pollutant concentrations shown below:

AREA CLASSIFICATION

Pollutant	AREA CLASSIFICATION	
	Zone I	Zone II
Particulate matter:		
Annual geometric mean	5	10
24-hour maximum	10	30
Sulfur dioxide:		
Annual arithmetic mean	2	15
24-hour maximum	5	100
3-hour maximum	25	300

(3) (i) All areas of all States are classified as Zone II as of the effective date of this regulation.

(11) The State may, within six (6) months subsequent to the effective date of this regulation:

(a) Submit to the Administrator, after a public hearing has been held, a designation showing certain areas of the State which are classified Zone I.

(b) Submit for the Administrator's approval plans showing certain limited areas of the State which may be allowed to increase concentrations of particulate matter and sulfur dioxide up to the national ambient air quality standards provided that:

(1) Public hearings are held.

(2) Appropriate documentation is submitted to justify such a request. This documentation shall include an explanation of the special characteristics of the area which demonstrates why this area should be allowed to increase in concentration up to the national standard. This explanation shall include such materials as developmental plans, location of raw materials such as mineral deposits, markets, growth and economic projections. In addition, the State must demonstrate that they considered classifying as Zone I areas of the State of recreational, ecological, and scenic value.

(4) No owner or operator shall commence construction or modification of a source to which this paragraph is applicable unless:

(1) The State in which the source is or will be located determines in accordance with this paragraph:

(a) That the effect on air quality concentrations of the source or modification considered with the effect on air quality concentrations of all other existing, new, and modified sources will not cause the baseline air quality concentration in any zone of the State to be increased above the limits shown in subparagraph (2) of this paragraph.

(b) That the source or modified portion of the source will be constructed and operated to employ best available control technology for minimizing emissions of particulate matter, sulfur dioxide, nitrogen oxides, hydrocarbons, and carbon monoxide.

(11) The Administrator shall approve the State's determination under subdivision (1) of this paragraph.

(5) In making the determinations required by subparagraphs (4) (1) of this paragraph, the State shall, as a minimum, require the source to submit: Site information, plans, descriptions, specifications, and drawings showing the design of the source, calculations showing the nature and amount of emissions, a description of the manner in which the source will be operated and controlled, the cost of control, an estimate of existing air quality levels, and the impact that the construction or modification will have on air quality levels and the air environment around the source.

(6) (i) In determining best available control technology, the following shall be considered:

(a) Reasonably available control technology as defined in Appendix B to Part 51 of this chapter.

(b) The process, fuels, and raw materials employed.

(c) The engineering aspects of the application of various types of control techniques.

(d) Process and fuel changes, and
(e) The cost of the application of the control techniques process changes, alternative fuels, etc.

(11) A system of control which is determined by the State and approved by the Administrator to be adequate to comply with standards of performance for new stationary sources under Part 60 of this chapter may be deemed to constitute best available control technology.

(111) In the case of sources identified at subparagraph (1) (1) (a) of this paragraph, best available control technology for sulfur oxides shall consist, as a minimum, of a control strategy determined to be capable of complying with standards of performance for new stationary sources specified in Part 60 of this chapter. However, individual analysis of each new or modified source which considers the availability of fuel and the cost and efficiency of other or additional control strategies may result in additional control for individual plants.

NOTE: Under the alternative definition of Best Available Control Technology, as set forth in the preamble, subdivision (111) would be eliminated.

(7) The owner or operator of a source subject to the provisions of subparagraph (4) of this paragraph shall install, or cause to be installed, a minimum of two continuous ambient air quality monitoring instruments for sulfur dioxide and/or two intermittent ambient air quality monitoring instruments for particulate matter.

(1) The State shall specify which pollutant(s) the source shall monitor.

(11) When source, meteorological and/or terrain conditions warrant, the State may require additional samplers above the minimum number specified in this paragraph.

(111) Such systems shall include one site equipped to monitor wind speed and wind direction.

(1v) The instruments shall meet the performance and operating specifications of § 51.17(a) (1) of this chapter.

(1v) The locations of such instruments shall be located in areas of expected maximum concentrations determined by meteorological diffusion modeling or best judgment or in any other area specified by the State.

(1vi) The instruments shall be maintained, calibrated, and operated in accordance with the methods prescribed by the manufacturer of such instrument(s) and other procedures consistent with good engineering practice.

(1vii) The owner or operator of the source subject to this paragraph shall maintain a record of all measurements required by this subparagraph. Measurement results shall be summarized monthly and reported to the State semi-annually, and shall be submitted within 45 days after the end of the reporting period. Reporting periods are January 1-June 30, July 1-December 31, with the

PROPOSED RULES

initial reporting period starting as indicated in subdivision (viii) of this subparagraph.

(vii) The continuous monitoring and recordkeeping requirements of this subparagraph shall become applicable six months after initial start-up of the source.

(ix) Information collected pursuant to this subparagraph shall be made available to the Administrator upon his request.

(x) The State may demonstrate to the Administrator that the existing air quality surveillance system in the area in which the source is to be constructed or modified meets the requirements of this subparagraph.

(8) (i) Prior to making the determinations required by subparagraphs (4) (i) of this paragraph, the State shall provide opportunity for public comment on the information submitted by the owner or operator and on the agency's analysis of the effect of such construction or modification on ambient air quality. Opportunity for public comment shall include, as a minimum:

(a) Availability for public inspection, in at least one location in the region affected, of the information submitted by the owner or operator, and the State or local agency's analysis of the effect on air quality.

(b) A 30-day period for submittal of public comment, and

(c) A notice by prominent advertisement in the region affected of the location of the source information and analysis specified in subparagraph (4) (i) of this paragraph.

(ii) Within 90 days from an owner or operator's submission of the information required under subparagraph (5) of this paragraph, the State shall also publicly announce and transmit in writing to the Administrator its determination under subparagraph (4) (i) of this paragraph, together with:

(a) Copies of all information prepared by the State under subparagraph (4) (i) of this paragraph,

(b) A copy of the public notices issued in conformity with subdivision (i) of this subparagraph, and

(c) A statement that the State has complied with the requirements of this paragraph.

(9) (i) The Administrator will notify the State of his determination and reasons for any disagreement under subparagraph (4) (ii) of this paragraph no later than 25 days following the State's submission of the information required under subparagraph (8) (ii) of this paragraph. (ii) The State will notify the owner or operator in writing of the approval or denial to construct or modify a source within 120 days of the owner or operator's submission of the information required under subparagraph (5) of this paragraph.

(10) The Administrator may cancel an approval to construct if the construction is not begun within two years from the date of issuance, or if the construction work is suspended for one year.

(11) Approval to construct or modify shall not relieve any owner or operator of the responsibility to comply with all local, State, or Federal regulations which are part of the applicable plan.

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PART II



ENVIRONMENTAL PROTECTION AGENCY

■

APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

Prevention of Significant Air
Quality Deterioration

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 52]

(FRL 254-4)

APPROVAL AND PROMULGATION OF IM- PLEMENTATION PLANS

Prevention of Significant Air Quality Deterioration

On May 31, 1972 (37 FR 10842), the Administrator of the Environmental Protection Agency published initial approvals and disapprovals of State Implementation Plans submitted pursuant to section 110 of the Clean Air Act, as amended in 1970.

On November 9, 1972 (37 FR 23636), all State Implementation Plans were disapproved insofar as they failed to provide for the prevention of significant deterioration of existing air quality. This action was taken in response to a preliminary injunction issued by the District Court for the District of Columbia Circuit, which also required the Administrator to promulgate regulations as to any state plan which either permits the significant deterioration of air quality in any portion of any state, or fails to take the measures necessary to prevent such significant deterioration.

Accordingly, on July 16, 1973 (38 FR 18986), an initial notice of proposed rulemaking was published which set forth four alternative plans for preventing significant deterioration, and which solicited widespread public involvement in all aspects of the significant deterioration issue. Public involvement was considered essential because the issue of what constitutes "significant" deterioration, and what measures should be employed to prevent such deterioration, must be resolved as a public policy issue with full recognition and consideration of its potential social and economic as well as environmental implications. This balancing of the social and economic considerations with the environmental implications is considered necessary to fulfill the mandate of the Clean Air Act to "protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." (Emphasis added)

The specific regulations therein are a modification of the originally proposed area classification plan, and are being repropoed to focus attention and solicit comment on the detailed procedural and technical aspects prior to promulgation to correct the deficiencies in State Implementation Plans outlined in the disapproval notice on November 9, 1972. These regulations would be implemented by the States pursuant to the authority contained in the Clean Air Act, as amended. Under the Act the Administrator is authorized to implement and enforce the regulations in cases where States are unwilling to request or accept the delegated authority.

To facilitate development of State plans to implement the general policy set forth in these regulations, in the near

future the Administrator intends to publish guidelines for the preparation, adoption, and submittal of State Implementation Plan provisions with respect to the prevention of significant deterioration (40 CFR 51). These additional guidelines will provide criteria for submission of State plans to prevent significant deterioration. The State plans need not be identical to the regulations proposed herein, but should be developed to accommodate more appropriately individual conditions and procedures unique to specific State and local areas. States are urged to develop and submit individual plans as revisions to State Implementation Plans as soon as possible. When individual State Implementation Plan revisions are approved as adequate to prevent significant deterioration of air quality, the applicability of the regulations proposed herein will be withdrawn for that State.

ORIGINALLY PROPOSED ALTERNATIVES

In the July 16, 1973, notice of proposed rulemaking (38 FR 18986), the Administrator proposed four alternative plans to prevent significant deterioration of air quality. These plans were intended to define the range of reasonable approaches to the problem and stimulate discussion on appropriate courses of action. The four proposed alternative plans were:

Air Quality Increment Plan—This plan would have prevented significant deterioration of air quality through application of a single nationwide incremental increase in concentrations of total suspended particulate (TSP) and sulfur dioxide (SO₂) over those levels which existed in 1972. The sizes of the increments were selected to balance reasonable economic growth with minimal environmental deterioration.

Emission Limitation Plan—This plan would have limited total emissions of TSP and SO₂ over a relatively large area and indirectly prevented the significant deterioration of air quality. This plan offered some flexibility to States to distribute emissions throughout the area over which the emissions were to be limited.

Local Definition Plan—This plan would have prevented significant deterioration by requiring local determination, on a case-by-case basis, of the significance of the air quality impact of major new sources. This plan recognized the variability between areas and called for a subjective decision making procedure to be implemented at the local level.

Area Classification Plan—This plan called for the establishment of "zones" of different allowable incremental increases in TSP and SO₂. "Zone I" allowed for a very small incremental increase which would permit almost no new heavy industrial growth using current technology. "Zone II" used the same increment as in the Air Quality Increment Plan and allowed for what the Administrator considered a reasonable mix of well planned and sited construction. The plan also included provisions wherein individual

areas could experience deterioration up to the national standards. At the time of proposal the Administrator recognized that this plan appeared to be superior to the others.

All four proposed plans would have been implemented through a preconstruction review of sixteen specified source categories to determine whether or not these sources would cause a violation of the constraints of each plan. Also, each plan called for application of best available control technology on all new sources covered by the regulations.

ACTIVITIES SINCE PROPOSAL

The proposal to prevent significant deterioration of air quality has stimulated a considerable amount of interest throughout the country. To encourage a complete dialogue, the Administrator initiated several subsequent activities to evaluate more fully the broad range of social and economic implications involved. Among the principal activities undertaken were:

Public Hearings—Public hearings were held in Washington, D.C. on August 27, 28, and 29; in Atlanta, Georgia on September 4 and 5; in Dallas, Texas on September 5 and 6; in Denver, Colorado on September 5, 6, and 7; and in San Francisco, California on September 5 and 6. Over 160 people made presentations at these hearings, and the hearing records are available for inspection at the Freedom of Information Office, Environmental Protection Agency, 401 M Street, S.W., Washington, D.C.

Public Comments—A 90-day public comment period was conducted during which over 300 written comments were received. Many of these comments were quite detailed, and demonstrated a great deal of understanding and concern within both the private and industrial sectors. All public comments received are available for inspection at the Freedom of Information Office.

Additional Consultations—Because of their involvement with and special understanding of the difficult problems related to implementation of any policy to prevent significant deterioration of air quality, the Administrator and his staff have consulted with a variety of individuals and groups which have a special interest in, or knowledge of, the pertinent factors associated with these regulations. Included in these consultations have been State governors and their official representatives, mayors and their official representatives, representatives from local governmental agencies, members of Congress and Congressional staff members, State and local air pollution control officials, representatives of environmental groups, representatives of industry and commerce, and officials of other Federal agencies.

The Administrator feels that the outcome of these efforts has been to stimulate a complete, open and frank dialogue on all aspects of the issue of significant air quality deterioration. As stated in the proposed rulemaking, there is perhaps no other environmental issue that imposes

upon the Administrator a greater obligation to develop fully all points of view and relevant facts. The review of public comments and hearing testimony, the extensive consultations, and the many additional studies and analyses undertaken and evaluated have resulted in valuable information which has been used in formulating the regulations proposed herein.

These regulations are in the form of a proposal because, due to the lack of precise direction either in the Clean Air Act or in the Court order, the thrust of the initial proposals was to focus on the conceptual basis for regulations. The comments received on the proposed regulations therefore tended primarily to discuss conceptual issues such as the roles of federal and state/local governments, rather than detailed comments regarding implementation of the regulations. Accordingly, the Administrator feels that a reappraisal of the regulation enclosed herein is essential to properly explore all aspects of this issue and to focus more clearly on procedural and technical issues. The Administrator has submitted for consideration an amendment to the Act which would eliminate this requirement. This amendment is pending before the Congress. Although EPA does not agree with this amendment, EPA urges that it be given the fullest consideration and proposes the present regulations at this time without any intent to delay or influence such full consideration. The proposal herein is necessary because the Court has ruled that the current Clean Air Act requires the Administrator to prevent significant deterioration, and this requirement must be met even though it is possible that Congress may provide additional guidance and/or legislative changes in the future.

CONCEPTUAL CONSIDERATIONS

In the notice of proposed rulemaking, attention was drawn to the fact that any plan to prevent significant deterioration of air quality might have a major influence on land use patterns in many areas of the country. The development of proper land use planning to ensure protection of the environment is one of the most important tasks yet to be undertaken. Comprehensive land use planning is a complex process including many variables, only one of which is air quality. Development of land use plans in which air quality represents a single overriding criterion is not, in the Administrator's judgment, a desirable course of action for most areas. The regulations proposed below are therefore designed to inject consideration of air quality as one of many constraints on land use decisions, but not to mandate land use decisions based solely on air quality. In this regard, the "significance" of any air quality deterioration is defined in terms of the proper and desired use of an area as well as the magnitude of pollutant concentrations. The intent is not to restrict or prohibit economic growth, but rather to ensure that desirable growth is planned and managed in

a manner which will minimize adverse impacts on the environment.

As was pointed out in the initial proposed rulemaking, determination of that level of deterioration which constitutes "significant" deterioration is basically a subjective decision, because the primary and secondary National Ambient Air Quality Standards are required to be protective of all known adverse effects on public health and welfare in a nationwide context. Response to the initial proposed rulemaking confirmed that consideration of varying social, economic, and environmental factors in different areas would result in varying definitions of what constitutes significant deterioration. None of the information received during the public comments period would enable the Administrator to justify any but a subjective method for defining when increases in the concentration of pollutants become "significant." Strong sentiment was expressed at public hearings, in written comments, and during consultations that States and localities should be given the maximum degree of flexibility in making judgments as to when increases in concentrations become "significant," because the judgments must be based on considerations which vary from locality to locality.

Stemming from concern over the impact of regulations to prevent significant deterioration on land use patterns, and the necessarily subjective nature of any determinations in this regard, the roles of Federal, State and local governments are very important. Any policy to prevent significant deterioration involves difficult questions regarding how the land in any area is to be used. Traditionally, these land use decisions have been considered the prerogative of local and State governments, and in the regulations promulgated herein, the primary opportunity for making these decisions is reserved for the States and local governments. The States, acting pursuant to federal regulations, would exercise the authority to prevent significant deterioration of air quality, and this authority could be delegated to the local level if desired. In the Administrator's judgment, this matter normally should not be handled at the Federal level, but should become a matter for discussion and decision making at a governmental level in close contact with the area. However, if States are unwilling to accept this delegation of authority, the Administrator is prepared to implement and enforce these regulations in order to prevent significant deterioration of air quality. Further, even in cases where States fully accept the delegated authority, the Administrator may review, within very narrow limits, certain decisions made pursuant to these regulations.

The Clean Air Act places primary responsibility for the prevention and control of air pollution on the States and local governments. Accordingly, several broad options are available to States in designating an agency to exercise the authority which would be exercised pursuant to these regulations. One option would be to place responsibility for these regulations in a State-level agency; an-

other option would be to assign responsibility to appropriate units of local government; a third would be to assign responsibility to a regional planning or multi-functional agency.

Because of the impact these regulations may have on land use, the Administrator encourages the States, wherever possible, to delegate substantial authority under these regulations to appropriate local governmental units. Such delegation should be subject to appropriate conditions (such as effective and coordinated review on the appropriate regional scale, citizen involvement, ultimate control by general purpose local governments, etc.). Additionally, the Administrator encourages States to allow local general purpose governments, subject to similar conditions, to request designation of a local government body as the reviewing authority. If a State chooses to exercise authority at the State level, the Administrator encourages States to consult with all affected local governmental units carrying out these regulations. However, the Administrator emphasizes that the ultimate responsibility for assuring successful implementation of these regulations would lie with the State; if a State cannot or does not desire to implement the regulations herein, the Administrator would perform or delegate these responsibilities.

Because of the many inherent interrelationships between State efforts to prevent significant deterioration of air quality under these regulations and other state activities related to planning for land use, development, and environmental quality, special efforts to enhance intergovernmental coordination must be effected in each state. The regulations require consultation between the agency designated by the Governor to implement this effort and other relevant agencies. If the unit designated is not an air pollution control agency, the designated unit must consult with the air pollution control agency; similarly, if the designated unit does not have continuing responsibilities for land use planning, it must consult with the appropriate state and/or local land use planning agencies. In this context, "land use planning agency" is to be construed quite broadly to include economic development or regional planning entities whose activities and responsibilities are appropriate to the specific decisions being made under these regulations.

Furthermore, coordination among other planning procedures, requirements, and agencies is encouraged to the maximum extent possible, particularly with respect to designation or re-designation of areas under these regulations. In particular, the agency designated by the Governor in carrying out its area classification responsibility should ensure coordination with the following four processes as appropriate to the specific state/local setting:

An Air Quality Maintenance Plan and its decision-making procedures.

An areawide waste treatment management unit created under Section 208 of

the Federal Water Pollution Control Act (FWPCA).

The A-95 Review Process.

The Environmental Impact Statement under the National Environmental Policy Act (or equivalent State requirement).

Many areas designated Class III under these regulations would have the potential to exceed national ambient air quality standards during the 1975-1985 period. This will require that they be designated Air Quality Maintenance Areas (AQMA's). In these areas coordination between implementation of these significant deterioration regulations and the Air Quality Maintenance Plan effort will be particularly important.

Section 208 of the FWPCA provides for designation of certain portions of a water basin as requiring areawide waste treatment management. These are areas having a water quality control problem that cannot be alleviated without an areawide approach aimed at integrating controls over municipal and industrial waste water, storm sewer runoff, nonpoint source pollutants, land use, and growth. The 208 planning agency must be a representative organization whose membership includes but is not limited to elected officials of local governments having jurisdiction in the planning area. Activities of these agencies involve projections of land use and growth patterns and control over new growth as necessary to ensure attainment and maintenance of water quality standards. Their decisions may affect locations of the 19 source categories covered in these significant deterioration regulations. Concepts and approaches developed in such water planning/land use analyses should be related to appropriate decisions in the significant deterioration effort.

The review process established under Office of Management and Budget Circular No. A-95 provides a structure for coordinated planning by strengthening communication among different agencies and governmental levels. This review process has potentially wide applicability through State, regional, and metropolitan clearinghouses that administer the review and comment process. The A-95 process can be regarded as a step toward regional comprehensive planning. Although the A-95 process is required when Federal grants and funds are involved, it could be utilized as an appropriate structure for inter-governmental coordination during the area classification and reclassification phases of implementing these regulations.

Section 102(2)(c) of the National Environmental Policy Act of 1969 requires an Environmental Impact Statement (EIS) to be filed with the Council on Environmental Quality by Federal agencies proposing major projects. The relationship of the proposed action to land use plans, policies, and controls in the project area and how conflicts with Federal, State, and local land use have been resolved must be discussed. Although an EIS is only required with respect to major Federal actions, some State laws impose similar requirements on private develop-

ments. Twelve States and Puerto Rico have adopted broad requirements for EIS's on State actions; similar requirements have been under consideration in another 21 States and the District of Columbia. State EIS requirements are, for the most part, modeled on section 102(3)(c) of NEPA. However, significant differences exist from State to State. Some apply EIS's to local, as well as to State agencies; some require EIS's for private actions for which a government permit is required. Federally required EIS's are coordinated through the appropriate State, regional, or metropolitan A-95 clearinghouses discussed above. The EIS process may be useful in State decisions on the merits of re-classifying an area.

TECHNICAL CONSIDERATIONS

Potential Economic Impact. The requirement to prevent significant deterioration does not mean that economic growth of undeveloped areas must be arbitrarily restricted. Several studies by EPA and other Federal agencies, and additional data contained in public comments, evaluated various aspects of the proposed plans. The studies were characterized by two basic approaches: analysis of impact in specific prototype regions, and analysis of impact on isolated new industrial and energy-related sources. Copies of the analyses and contract reports are available for public inspection at the EPA Freedom of Information Office.

Based on these studies, the Administrator has concluded that the restrictions on deterioration of air quality proposed for Class II areas in the regulations herein would be unlikely to prevent what, in the Administrator's judgment, represents most forms of normal growth and economic development, provided that reasonable siting practices and pollution control measures are employed. However, unusually high growth urban areas, and some large industrial operations, could be adversely impacted if constrained by the increment of the original Air Quality Increment Plan. In many areas, the limitations proposed under the original Emission Limitation Plan could adversely restrict economic growth: this restriction would be most severe for coal-fired power plants. However, it must be emphasized that results of analyses such as these are sensitive to the assumptions made as to individual site locations, facility configuration, meteorological conditions, etc., and changes in these assumptions for any specific analysis could result in major changes in the results.

Many public comments expressed concern that any regulations to prevent significant deterioration of air quality inherently must have a major adverse impact on all forms of growth and economic development, especially in regard to the development of energy-related sources. However, the available analyses have confirmed that the incremental increases in concentration allowed under the Air Quality Increment Plan (Similar to Class II in the regulations proposed herein) would not necessarily

create this adverse impact under most conditions, although in the regulations proposed herein, the 3-hour increment for sulfur dioxide has been increased to ensure that it is no more stringent than the 24 hour increment for large point sources under most meteorological and terrain conditions.

Subsequent to the close of the formal comment period on the original proposal, concern was expressed by the Department of Commerce and the Federal Energy Administration regarding the appropriateness of the Class II increments, particularly to the extent that the Class II increments might restrict construction of new coal-fired power plants and other economic growth in Class II areas. The Class II increments have been established at a level such that, in the judgment of the Administrator, deterioration above that level would constitute a significant deterioration in most areas of the country. With reference to coal-fired power plants, the increments would normally permit construction of new power plants with capacities ranging up to approximately 1000 megawatts, although there would be wide variations in the actual limiting capacity due to the wide variations in terrain and meteorological conditions. Because the average capacity of new coal-fired power plants is projected to be approximately 1000 megawatts (the average size of existing plants is approximately 300 megawatts) the Administrator continues to believe that the level of the Class II increments is appropriate. This level would require that new plants of greater than average capacity normally be located only in Class III areas. Further, typical coal gasification facilities, oil shale processing facilities, and petroleum refineries would not be expected individually to exceed the Class II increments in most areas. However, large concentrations of new industrial sources and large new pollution-prone facilities, particularly those which may lead to new development in the vicinity, would in many cases be permitted only in Class III areas under the regulations proposed herein. The Federal Energy Administration, the Department of Commerce and the Treasury Department have specifically suggested that the incremental levels set forth in the proposed regulations be doubled, and that doing so would still adequately protect Class II areas against significant deterioration. Due to the concern so expressed, the Administrator specifically solicits comments on the desirability of increasing the level of the Class II increments proposed herein.

The Department of Health, Education, and Welfare has expressed two major concerns about the enforcement of air quality levels more stringent than the existing primary and secondary ambient standards. First, it fears adverse health impacts if metropolitan areas which now exceed even the primary standards are delayed in their attainment of those standards by their inability to shift pollution sources to outlying areas. Second, the Department is concerned that a disproportionate share of the costs and few

of the benefits of the non-deterioration policy would accrue to persons of limited economic means and residential mobility. These persons would be particularly vulnerable to such adverse impacts as curtailed economic growth, altered urban and rural development trends, constrained national capacity to absorb anticipated population increases, and higher prices for energy and manufactured goods. These impacts could compound the difficulties faced by all levels of government in responding to the needs of the poor, the elderly, racial minorities, and persons otherwise disadvantaged. The Administrator recognizes the concern expressed by the Department of Health, Education, and Welfare that adverse impacts could accrue to persons of limited economic means and residential mobility. Specific comments are solicited on this issue, with emphasis on any factual data relative to the issue. However, it is emphasized that there is no feature in these proposed regulations which would authorize any delays in attainment of the national standards in any area, irrespective of how that area, or any other area, would be classified under these proposed regulations.

Data Considerations. The following information is based on data collected by EPA and supported by public comment. The background information to support these conclusions is available for inspection at the EPA Freedom of Information Office.

1. Measurement Accuracy: Although the federal reference method for suspended particulates is adequate for use in measuring the extremely small increments often associated with prevention of significant deterioration, the federal reference methods for other criteria pollutants at low (clean environment) concentrations suffer varying degrees of inadequacy in that the precision of the current methods is not adequate to reliably distinguish between readings approaching the small increments proposed. For example, if a twenty-four hour reading for sulfur dioxide were 100 $\mu\text{g}/\text{m}^3$, the actual twenty-four hour average can be expected to lie between 53 $\mu\text{g}/\text{m}^3$ and 147 $\mu\text{g}/\text{m}^3$, which is comparable to the 100 $\mu\text{g}/\text{m}^3$ increment proposed for the Air Quality Increment Plan. Extensive modification of existing methods, or development of new measurement technology, would be required in order to precisely measure the increments as proposed. However, current instrumentation would be adequate to calibrate and improve current diffusion modeling techniques and to measure compliance with ambient air quality standards.

2. Air Quality Data: Monitoring data on suspended particulate concentrations are the only data extensive enough in clean areas to support meaningful analyses. The major conclusion which can be drawn from these data is that vast numbers of measurements would be required to precisely determine a baseline level, and then further extensive measurements would be required to establish any degree of deterioration from that level.

3. Data Variability: Normal random variations in pollutant concentration in clean areas, especially for particulate matter, are often of greater magnitude than the incremental increases proposed for use under the original Air Quality Increment Plan. For example, the 1968 maximum concentration at the Grand Canyon for particulates was 126 $\mu\text{g}/\text{m}^3$ and the annual average was 31 $\mu\text{g}/\text{m}^3$. In 1969 the maximum concentration was 33 $\mu\text{g}/\text{m}^3$ and the annual average was 17 $\mu\text{g}/\text{m}^3$. These differences were caused by random variations due primarily to normal meteorological factors, and exceed the allowable air quality increments proposed in the original Air Quality Increment Plan.

4. Modeling and Simulation Accuracy: Current diffusion modeling techniques, when uncalibrated and used in the absence of baseline air quality data, can exhibit random errors as high as a factor of two for short term concentrations and a factor of 1.5 for annual averages when compared with known concentrations of pollutants. It should be noted that in assessing most average concentrations, particularly those resulting from multiple sources, significantly better accuracy can be obtained. However, this is not the type of application normally associated with the significant deterioration concept which calls for pre-construction review of individual new sources. It should also be noted, however, that data obtained from current diffusion modeling techniques, while not corresponding to actual conditions in the ambient air, do provide a consistent and reproducible guide which can be used in comparing the relative impact of a source.

Based on these factors concerning the reliability of available field instrumentation and the normal variability of air quality data, it is the Administrator's judgment that a measured incremental increase in concentration over a measured baseline normally cannot be used as the criterion in assessing the significance of a new facility's impact on air quality. However, the use of diffusion modeling as an indicator of a source's compatibility with the land use desires of an area is a valid use of such models.

Most public comments concurred that measured data should not be used as the sole criterion for assessing the incremental increase. Some comments have disputed it, but a review of studies cited in those comments has shown that the measurement methods employed in these studies are quite complex and expensive, and require highly skilled operators and subsequent detailed analysis. These procedures are not currently suitable for the type of widespread field use required to prevent significant deterioration on a nationwide basis.

SUMMARY OF REGULATIONS

The regulations proposed herein represent a modification to the Area Classification Plan as proposed in 38 FR 12986. As proposed, the regulations incorporate four basic features:

1. Provisions are made whereby areas would be designated under three classi-

fications: Class I applies to areas in which practically any change in air quality would be considered significant; Class II applies to areas in which deterioration normally accompanying moderate well-controlled growth would be considered insignificant; and Class III applies to those areas in which deterioration up to the national standards would be considered insignificant.

2. The impact of a proposed new source on the applicable "deterioration increment" would be assessed through conventional new source review procedures (i.e., a pre-construction review) applied to proposed facilities in nineteen specific major source categories. The impact of smaller sources and area sources would be included in the "deterioration increments" at the time of review for construction or expansion of one of the specified source categories.

3. The "deterioration" increments in Class I and II areas are firm ceilings which cannot be exceeded by any new major source. However, procedures are included so that areas, both large and small, can be reclassified to allow introduction of sources not compatible with the initial classification, in cases where it is determined that the resulting deterioration would not be "significant".

4. Although the determination of what constitutes "significant" deterioration is intended to be made by the State under these regulations, the Administrator retains review authority over certain State actions.

The regulations as proposed herein take the same general form as the proposed Area Classification Plan, and in the subsequent discussion only the major changes are emphasized.

Sources Subject to the Regulations. The list of sources subject to review has been expanded to include three additional source types—fuel conversion plants (such as coal gasification and oil shale plants), primary lead smelters, and sintering plants. The requirement for review of all sources with potential emission rates in excess of 4,000 tons/year has been deleted because the requirement generally is superfluous.

It is important to note that in this type of approach it is not possible to conduct a pre-construction review of each small source (such as a private home), but rather to concentrate the effort on the important large sources. These regulations do not require pre-construction review of sources other than those specifically listed, but require that these large sources, for which pre-construction review will be carried out, consider the impact of small sources constructed since the effective date of these regulations in determining their incremental impact and comparing it to the allowable increment. This provision is not intended to restrict the activities of States in development of their own source lists for State plans to prevent significant deterioration.

The term "expanded source" has been defined in these regulations in order to avoid possible confusion with the more commonly used term "modified source".

An expanded source is defined as one which intends to increase production through a major capital expenditure. This term deliberately excludes from review under these regulations any fossil fuel-fired electric power plant which increases emissions solely due to switching from a low sulfur to a higher sulfur content fuel. Fuel switching by power plants is being adequately handled under existing federal and state controls, and to impose additional federal controls on these plants would be inconsistent with the recently enacted Energy Supply and Environmental Coordination Act.

The Energy Supply and Environmental Coordination Act of 1974 was not intended to resolve the significant deterioration issue. Nevertheless, it was intended to permit a mechanism by which EPA's Clean Fuels policy could be implemented to the extent that States agree to do so. Accordingly, it would be inappropriate for these proposed regulations to inhibit fuel switching due to a federally imposed "Deterioration Increment," even though all States would have the opportunity to reclassify to a higher classification. It should be noted, however, that States generally do retain the option to inhibit or prevent fuel switching at their discretion.

In actual practice, the regulation proposed herein would permit a power plant which switches fuel to "use up" the entire available deterioration increment, and in some cases exceed the increment, thereby precluding introduction of other major sources in the area unless the area is reclassified.

Area Classification Procedures. The concept of classifying increases in air quality has been only slightly modified from the earlier proposal. The allowed incremental increases in Class I areas are identical to those in the proposed "Zone" I. The allowed increases in Class II areas are similar to those of the proposed "Zone" II: The 3-hour increment has been increased to insure that it is no more stringent than the 24-hour increment under most meteorological and terrain conditions. A Class III area has been specified to formalize the "exception" procedures of the proposed plan. The terminology has been changed from "zoning" to "classification" to avoid confusion with conventional zoning concepts. Under conventional practices, a zone is a relatively small area (e.g., a city block or portion of a county). An area classified under the regulations herein initially would be a much larger area, often consisting of, as a minimum, several large counties. Initial classification of smaller individual areas does not appear feasible because the carryover of pollution from one small area to another could not be adequately controlled.

A Class I designation would involve those areas where almost no change from current air quality patterns is desired. Class II designation would indicate areas where moderate change is desirable but where stringent air quality constraints are nevertheless desired. Class III designation would indicate areas where major industrial or other

growth is desired and where increases in concentrations up to the national standards would be insignificant. The basic purpose of this classification procedure would be to require a conscious decision, made publicly with public input, that the intention of the State and the desire of the local population is to provide for the general type of air quality implied by the classification.

The enclosed regulations would designate all areas as Class II effective upon promulgation. Individual States will have sufficient authority to redesignate any area without need for specific new State enabling legislation. Areas may be redesignated as Class I, II or III by the State (or Federal Land Managers or Indian governing bodies as appropriate) provided that at least one public hearing, at which facts relevant to the area's classification may be presented, is held in the area affected and the Administrator is provided with a summary of the information presented at the public hearing. These designations can be accomplished at any time, and can be modified subsequently by the State in the same manner they were set.

States would be encouraged to perform appropriate redesignations as soon as possible. The initial designation as Class II is intended to represent only a tentative determination of what significant deterioration means in most areas, and is subject to a further determination—which only the States can appropriately make—concerning the economic and other factors that may justify a somewhat different level of deterioration as being "significant."

The Administrator would normally approve any redesignation except in the following four cases: (1) where the required procedures were not followed; (2) where the decision was based on inaccurate technical data; (3) where the redesignation authority has arbitrarily and capriciously disregarded relevant environmental, social or economic considerations; or (4) where a State is unwilling to implement the new source review procedures specified in these regulations. There are no limits on how often an area can be redesignated.

For redesignations of Federal or Indian lands, the normal procedures for States would be modified to be consistent with divisions of authority among Federal, State and Indian governing bodies. Nothing in these regulations would convey authority to States over Federal or Indian lands where such authority is not already present in other statutes, but it is anticipated that cooperative procedures will be developed among interested parties to implement these regulations.

Areas should be considered for redesignation as Class I in cases where the location of any polluting industry within the area is inconsistent with current or planned uses for the area, or where it is desirable to protect the area from any further deterioration because it is one of exceptional scenic or recreational value or is ecologically fragile, or where no further major industrial growth is de-

sired irrespective of the existing air quality.

Although the increments for Class II are larger than for Class I, the allowable deterioration associated with a Class II designation is minor, and the Class II air quality increments are smaller than the random variations in air quality which are normally caused by natural (predominately meteorological) factors. These Class II increments are sufficiently small that they preclude introduction of certain major sources of air pollution, although they do permit introduction of what the Administrator has determined generally represents a reasonable amount of well planned and controlled industry so long as the individual facilities are not unusually large, or are not clustered in one small area.

Areas should be considered for redesignation as Class III where they are intended to experience rapid and major industrial or commercial expansion (including areas in which extensive mineral development is desired), but only in cases where the resulting air quality deterioration would not be considered "significant". In many cases, areas (or portions of areas) which are redesignated as Class III can be expected to satisfy the criteria for designation as an Air Quality Maintenance Area. However, States must ensure that proper consideration is given to maintenance of the national standards in all areas, irrespective of the specific definition given to "significant" deterioration.

It is important to recognize that the area classifications do not necessarily imply current air quality levels or current land use patterns. Instead, the classifications imply the desired degree of change from current levels and patterns. Accordingly, Class III could be applied to a currently pristine area, and Class I could be applied to a less clean area.

The regulations are structured to permit very large areas to initially be redesignated uniformly. The desire for relatively small localities to depart from the general criteria of the surrounding area to allow construction of individual sources which could exceed the incremental increases can be accommodated through the flexibility of the reclassification procedures.

These regulations do not impose new requirements on sources proposed for construction in areas designated as Class III. In these areas, the existing procedures for attainment and maintenance of national standards are intended to prevent "significant" deterioration. Since sources in Class III areas are not subject to review under these regulations, States should take care in their redesignation procedures to ensure that Class III areas are sized and situated in such a manner so as to prevent carryover into adjoining areas which are intended to be restricted to Class I or Class II increments.

Source Review Procedures. Introduction of specified new sources, or major expansion of existing sources, are prohibited in Class I and II areas unless: (1) Best Available Control Technology will be applied on those sources for which new source performance

standards are not applicable, and (2) the applicable increments will not be exceeded. If the air quality impact of a new source plus the impact of all other developments since the date of promulgation is expected to exceed the incremental increase allowed by the area designation, the source must either be denied a permit to construct or, if it is determined that the resulting deterioration would be insignificant in view of the social and economic benefits of the source's construction, the area affected by the source's emissions may be redesignated to a higher numeric designation. Under no circumstances, regardless of the classification of the area, would the regulations permit the approval for construction of a source which may interfere with the attainment of maintenance of any national standard.

In the case where proposed Federal or Indian facilities require review under these regulations, the Administrator will normally retain review responsibility and will consult with the State as appropriate.

Procedures for Maintaining the Increment. The regulations proposed herein specify 1973 air quality, with appropriate adjustments to account for sources approved or constructed prior to promulgation, as the baseline. It is necessary to use 1973 air quality data because later data are not yet available in complete form. However, the availability of actual baseline data in relatively clean areas is of secondary importance in these regulations. As discussed previously, current air quality measurements taken in clean areas show large random variations, and it is unclear how a measured baseline could be meaningful in view of these large random variations in background concentrations.

In actual practice, although the regulations do not specifically preclude the use of measured air quality as a method for assessing the available increment, it is anticipated that assessment of the available increment will normally be accomplished through an accounting procedure whereby modeling results for individual sources will be used to keep track of the available (or "unused") increment as sources and emissions are increased or decreased. Therefore, an accurately measured baseline is not an essential consideration in implementing these regulations although the concept is retained for use in those few situations where it may be desired.

It should be noted that the deterioration increment is conceptually applied to the air quality levels existing on the date of promulgation rather than to a level existing at some time in the past (e.g., 1970 or 1972) as was considered in the original proposal. The effect of prior control activities in the area does not constrain the options available for either restricting or encouraging economic growth. These considerations are incorporated in the subjective decisions which must be made during the area classification deliberations.

Air Quality Monitoring Requirements. In the originally proposed plan, all new

major sources were required to conduct air quality monitoring in their vicinity. This was an essential feature because the proposed plan required that accurate air quality information be available in order to assess the "significance" of subsequent sources.

Under the regulations proposed herein, there is no similar need for such precise air quality information, because the air quality assessment is based primarily upon pre-construction modeling results. Although additional air quality data are nearly always of value, there is no justification for requiring sources to conduct monitoring under these proposed regulations. Therefore, the monitoring requirement has been deleted.

It should be noted that the impacts of sources which are not subject to the review procedures are not necessarily reviewed unless a major source proposes to locate in the area. This feature is necessary because the impact of the very large numbers of very small sources could only be assessed by either modeling or air quality measurement. To model each individual source during an individual pre-construction review would be an extremely laborious task, and the end result would be of questionable accuracy. If air quality measurement were attempted, the combination of measurement inaccuracies and random variability in background concentrations would normally mask the effects of the sources of interest. Therefore, the regulations consider the air quality impact of relatively small sources only in conjunction with the impact of large sources which are proposed for construction.

Best Available Control Technology. In the original proposal, two alternative definitions of Best Available Control Technology (BACT) were discussed. Under both alternatives, a case-by-case review to determine BACT was required of each source for which new source performance standards were not applicable. Under the first alternative, the attainment of NSPS was determined to be equivalent to application of BACT for all sources except for sulfur dioxide emissions from fossil fuel-fired steam electric power plants; for these plants a case-by-case review was required to determine if emissions could be reduced to below NSPS. Under the second alternative, fossil fuel-fired steam electric power plants were treated like all other sources for which NSPS are applicable.

In the regulations proposed herein, the second alternative is incorporated: power plants would not be subjected to the special BACT review because requiring such a review might arguably be inconsistent with the Congressional intent of requiring national standards of performance for new sources. Further, the requirement for application of BACT for control of hydrocarbons, oxides of nitrogen, and carbon monoxide has also been deleted because this requirement was inconsistent with the restriction (explained below) of these regulations to particulate matter and sulfur dioxide.

Procedures for Resolving Jurisdictional Disputes. In the notice of proposed rule-

making, it was noted that the regulations could result in inequitable growth potential along State boundaries because a source approved for construction in one State could "use up" much or all of the growth potential of another. The transport of pollutants across State lines was a major issue raised by the States which filed amicus curiae briefs in the original litigation.

The regulations herein would require that a State notify an adjacent State at any time that it is reviewing a proposed source which could affect air quality in the adjacent State. It is anticipated that States will arrange bilateral and multi-lateral procedures to resolve differences. It is not appropriate to place the Administrator in the role of arbitrator in interstate disputes because he would have no criteria on which to base his decisions. The Environmental Protection Agency can and will provide technical assistance and make findings of fact; but, if the differences cannot be resolved, relief should be sought through the courts. The 1972 Supreme Court decision in *Illinois vs. City of Milwaukee* may provide a particularly effective mechanism for resolving such interstate differences. The court held that the Federal District Courts would apply a Federal "common law", based on equitable "nuisance" principles, to require one State to terminate unreasonable pollution affecting another.

Effective Date for Source Review. The initial proposals stated that the regulations would be effective as of the date of initial proposal. It has become apparent that such a date would place an inequitable burden on sources which had commenced construction during the period from July 16, 1973 (the date of initial proposal) to the actual promulgation, because during that time these sources have had no knowledge regarding which of the alternative plans would be promulgated, and hence have had no knowledge of the criteria which would be imposed.

The regulations herein would be effective upon promulgation, but apply only to sources for which construction or expansion is commenced after six months subsequent to the date of promulgation. For these regulations, "commenced" is given the same definition as in 40 CFR 60 concerning applicability of New Source Performance Standards.

The intent of this provision is to avoid severe disruption of sources which are in the final planning and review process at the time of promulgation. If the regulations were applied to these sources they would be required, in many cases, to re-plan and re-enter the review process to comply with the significant deterioration criteria, and it is considered unlikely that any major environmental benefits would be gained. Additionally, the regulations require rather extensive review procedures to be developed either by the States or by EPA, and the requirement to delegate the Administrator's authority to those States which are willing to implement these regulations directly will also require time. Accordingly, the six-month time period is intended to allow

sufficient time to initiate and develop adequate review procedures, and actually accomplish the necessary review, without imposing a moratorium on construction of new sources.

DISCUSSION OF ADDITIONAL PUBLIC COMMENTS

Substantial public comment was received suggesting that the proper course of action would be to request legislative relief from the Congress, i.e., remove from the Clean Air Act the basis for the Court's finding of a requirement to prevent significant deterioration of air quality. Congressional debate and consideration of this issue is currently underway, and will continue; however, the Courts have ordered the Administrator to prevent significant deterioration under the Clean Air Act as presently enacted, and the regulations proposed herein are intended to accomplish that objective in a manner which is in the best interest of the public.

Substantial public comment was also received indicating that additional pollutants (specifically the "automotive pollutants") should be included in the regulations. After careful consideration of the arguments, the Administrator has concluded that ongoing programs are adequate to prevent any significant deterioration due to sources of carbon monoxide, hydrocarbons or nitrogen oxides for the following reasons:

First, the Federal Motor Vehicle Emission Standards are expected to result in sizeable reductions in emissions of those pollutants on an area-wide basis for many years into the future.

Second, a basic requirement for sources under the enclosed concept is the application of Best Available Control Technology (BACT). This level of technology is already required on automobiles in order to comply with the Motor Vehicle Emission Standards, and further actual area-wide emission reductions under the enclosed regulations would be impractical.

Third, carbon monoxide has no identifiable or noticeable effects at concentration levels below the current standards. Unlike TSP and SO₂, it has no observable esthetic impact. Since there are no suspected effects at levels below the standards, it is not reasonable to consider those levels to be "significant."

Fourth, hydrocarbons and oxides of nitrogen are precursors to photochemical oxidants and nitrogen dioxide, but the transformation from the former to the latter takes place over a relatively long time period. It is possible for local concentrations of vehicular activity to result in increased localized emissions of hydrocarbons and oxides of nitrogen, but by the time these emissions are transformed into photochemical oxidants and nitrogen dioxide, the resultant pollutants would be dispersed over a wide area. The motor vehicle emission standards are intended to reduce area-wide concentrations of these pollutants, and no area-wide significant deterioration is expected to result from localized increased vehi-

cular activity (i.e., the effect of area-wide emission reductions would overwhelm any effect of localized emission increases except as already provided for in the indirect source regulations (38 FR 15836, 39 FR 7270) 1. Further, the source-receptor relationship of these pollutants is difficult to define in other than highly urbanized areas, particularly when only a single isolated source is involved, and hence the procedures appropriate for analysis of SO₂ and TSP would be inappropriate for analysis of hydrocarbons and oxides of nitrogen. However, it may become desirable to control deterioration due to these pollutants, as well as due to possible additional pollutants for which national standards might be set in the future; if this occurs, appropriate revisions to these regulations would be made.

Other Plans Proposed. Some of the public comments received contained alternative proposals by which significant deterioration could be defined and prevented. Most of these proposals were relatively minor variations on one or more of the four proposed alternatives. However, a few groups developed comprehensive plans which differed in concept from the plans proposed by the Administrator.

1. *The Sierra Club Plan.*—The Sierra Club and many other environmental groups advocated a volume averaging approach in which concentrations of pollutants are limited not by ground level measurements, but rather by an average concentration through a spherical space measured within a one kilometer radius from the top of the stack. This plan represents an entirely different concept from the approach used for attainment and maintenance of ambient air quality standards and would require implementation of a unique set of procedures.

As discussed in preceding sections, current air quality monitoring techniques are marginally accurate at low ground level concentrations. The monitoring required by the Sierra Club plan is even less precise, requiring instrumented aircraft and remote sensing devices which are currently of very limited availability. The diffusion modeling required by the proposal in very clean areas is relatively simple. However, in multiple source areas where it would be desired to take into account emissions from existing sources, the capability does not exist to perform the type of modeling required.

In addition to the difficulties of implementing a volume averaging plan such as proposed by the Sierra Club, the economic impact of the Sierra Club plan would be extremely severe. The type of control technology assumed by the plan's authors is not generally available, and will not be available in the near future. Use of the Sierra Club plan would greatly inhibit increased utilization of U.S. coal reserves and could possibly, through restrictions on emissions of oxides of nitrogen, essentially preclude the use of fossil fuel for power production in large new sources. However, irrespective of the potentially adverse impact of this plan

on the Nation's welfare, the plan contains a major conceptual problem: that is, if implemented, the plan would force the use of air pollution considerations as the single overriding factor in land use decisions, with no provisions allowed for other environmental, social, or economic considerations.

2. *The NRDC Plan.*—The Natural Resources Defense Council (NRDC) proposed a per capita emission plan. Under this plan the total emissions in clean areas, plus a five percent increase, would be divided by the total population in clean areas to arrive at the allowed per capita emissions. The total emissions allowed in any area would then be calculated as (the population in the area) times (the per capita emission rate). The primary advantages claimed for this proposal are the emphasis on emissions rather than air quality, and the relationship between the level of emissions and the population served. The latter advantage cited by NRDC would in many cases represent a major disadvantage. Because part of the motivation to prevent significant deterioration is concern for currently unquantified but suspected low level effects, it does not seem reasonable to force new polluting development to locate in areas of high population.

This plan would tend to prevent development of currently needed natural resources such as low sulfur coal and oil shale which are located in areas of very low population. In addition, the location of many other facilities such as smelters, paper mills, phosphate rock processing, and oil shale retorting are determined by the location of natural resources, not by the population served. Under the per capita emission plan it is unlikely that facilities such as these could be built.

The Administrator has given careful consideration to all of the advice, comments, and suggestions which have been offered in support of this rulemaking activity and recognizes and appreciates the time and effort which has been expended by a large number of organizations and individuals. This extensive public participation has been of inestimable value in the development of the regulations which are proposed herein.

There are several questions on which EPA is particularly interested in receiving public comments and relevant data. These include the adequacy of State and local resources to implement the regulations, the interface of these proposed requirements on State and local governments with other Federal and State programs such as the Rural Development Act, and the appropriateness of the air quality increments associated with Class II areas.

Written comments in triplicate may be submitted to the Office of Air Quality Planning and Standards, Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attn. Mr. Padgett. All relevant comments received not later than September 26, 1974 will be considered, and receipt of comments will be acknowledged. Comments received will be available for public inspection.

tion during normal business hours at the Office of Public Affairs, 401 M St., S.W., Washington, D.C. 20460.

These regulations are being proposed pursuant to an order of the U.S. District Court for the District of Columbia Circuit in the case of *Sierra Club et al. vs. Administrator of EPA*, issued May 30, 1973, case number 72-1528 (344 F. Supp. 253). This notice of proposed rulemaking is issued under the authority of section 301(a) of the Clean Air Act as amended (42 U.S.C. 1857g(a) 1).

Dated: August 15, 1974.

JOHN QUARLES,
Acting Administrator.

Subpart A, Part 52, Chapter I, Title 40, Code of Federal Regulations, is proposed to be amended as follows:

Section 52.21 is revised by designating the first paragraph (a) and adding paragraphs (b), (c), (d), (e), and (f) to read as follows:

52.21 Significant deterioration of air quality.

(a) *Plan Disapproval.* Subsequent to May 31, 1972, the Administrator reviewed State implementation plans to determine whether or not the plans permit or prevent significant deterioration of air quality in any portion of any State where the existing air quality is better than one or more of the secondary standards. The review indicates that State plans generally do not contain regulations or procedures specifically addressed to this problem. Accordingly, all State plans are disapproved to the extent that such plans lack procedures or regulations for preventing significant deterioration of air quality in portions of States where air quality is now better than the secondary standards. The disapproval applies to all States listed in Subparts B through DDD of this part. Nothing in this section shall invalidate or otherwise affect the obligations of States, emission sources, or other persons with respect to all portions of plans approved or promulgated under this part.

(b) *Definitions.* For purposes of this section:

(1) The phrase "baseline air quality concentration" refers to both sulfur dioxide and particulate matter and means the sum of ambient concentration levels existing during 1973, those future concentrations estimated to result from sources granted approval for construction or expansion but not yet operating prior to the effective date of this paragraph, and all other concentration increases estimated to result from new sources operating between January 1, 1974, and the effective date of this paragraph. These concentrations can be measured or estimated where appropriate for the area of impact and for all time periods covered by the defined increments. In the case of the maximum three-hour and twenty-four hour concentrations, only the second highest concentrations should be considered.

(2) The phrases "expansion" or "expanded source" refer to any source which

intends to increase production through a major capital expenditure.

(3) The phrase "Administrator" means the Administrator of the Environmental Protection Agency or his designated representative.

(4) The phrase "Federal Land Manager" means the head, or his designated representative, of any Department or Agency of the Federal government which administers federally-owned land, including public domain lands.

(5) The phrase "lands of exclusive federal legislative jurisdiction" means lands over which the federal government has received, by whatever method, all governmental authority of the State, with no reservation made to the State except the right to serve process resulting from activities which occurred off the land involved.

(6) The phrase "Indian Reservation" means any federally-recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.

(7) The phrase "Indian Governing Body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

(8) "Construction" means fabrication, erection, or installation of an affected facility.

(9) "Commenced" means that an owner or operator has undertaken a continuous program of construction or expansion or that an owner or operator has entered into a binding agreement or contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or expansion.

(c) *Area designation and deterioration increment.* (1) This paragraph applies to all States listed in Subpart B through DDD of this part and to all lands of exclusive federal legislative jurisdiction and Indian Reservations.

(2) (i) For purposes of this paragraph, areas designated as Class I or Class II shall be limited to the following increases in pollutant concentrations over baseline air quality concentration:

Area designations		
Pollutant	Class I ($\mu\text{g}/\text{m}^3$)	Class II ($\mu\text{g}/\text{m}^3$)
Particulate matter:		
Annual geometric mean.....	5	10
24-hour maximum.....	10	30
Sulfur dioxide:		
Annual arithmetic mean.....	2	15
24-hour maximum.....	5	100
5-hour maximum.....	25	700

(ii) For purposes of this paragraph, areas designated as Class III shall be limited to concentrations of particulate matter and sulfur dioxide no greater than the national ambient air quality standards.

(3) (i) All areas are designated Class II as of the effective date of this paragraph. Any redesignation shall be determined by the respective States, Federal Land Managers, or Indian governing bodies, as provided below, subject to approval by the Administrator.

(ii) The State may submit to the Administrator a proposal to redesignate areas of the State Class I, Class II, or Class III, provided that:

(a) At least one public hearing is held in or near the area affected and this public hearing is held in accordance with procedures established in § 51.4 of this chapter, and

(b) A summary of the information submitted at the public hearing(s) for the redesignation is provided to the Administrator.

(iii) For lands owned by the Federal Government other than lands of exclusive federal legislative jurisdiction, the State shall propose a redesignation to the Federal Land Manager. This redesignation shall be submitted for approval by the Administrator, provided that:

(a) The requirements of subdivision (ii) of this subparagraph are complied with,

(b) The Federal Land Manager is in agreement with the redesignation, and

(c) All redesignation of Federal land is carried out in a manner consistent with adjacent State and privately owned land.

(iv) A Federal Land Manager may request that the State redesignate Federal lands, or areas affecting Federal lands, and the State shall proceed in accordance with subdivision (iii) of this subparagraph unless the State determines such redesignation would not be in the best public interest.

(v) In the event that disputes between the State and Federal Land Manager over implementation of subdivisions (iii) and (iv) of this subparagraph cannot be resolved, the Executive Office of the President will designate a classification for the area.

(vi) For lands of exclusive federal legislative jurisdiction, the Federal Land Manager shall be responsible for redesignation of such lands, and he may submit to the Administrator a proposal to redesignate areas of such lands Class I, Class II, or Class III, provided that:

(a) At least one public hearing is held in or near the area affected and this hearing is held in accordance with procedures established in § 51.4 of this part, and

(b) A summary of the information submitted at the public hearing(s) for the redesignation is provided to the Administrator, and

(c) Such redesignation is proposed after consultation with the affected State(s).

(vii) Nothing in this section is intended to convey authority to the States over Indian Reservations where such authority is not granted under other laws. For Indian Reservations, the appropriate Indian governing body may submit to the Administrator a proposal to redesignate areas Class I, Class II, or Class III, provided that:

(a) At least one public hearing is held in or near the area affected and this hearing is held in accordance with pro-

cedures established in § 51.4 of this chapter, and

(b) A summary of the information submitted at the public hearing(s) for the redesignation is provided to the Administrator, and

(c) Such redesignation is proposed after consultation with the affected State(s) and, for those lands held in trust, with the approval of the Secretary of the Interior.

(viii) The Administrator shall approve, within 60 days, any redesignation proposed pursuant to this subparagraph as follows:

(a) Any redesignation proposed pursuant to subdivisions (ii), (iii), or (iv) of this subparagraph shall be approved unless the Administrator determines (1) that the requirements of subdivisions (ii) through (iv) of this subparagraph have not been complied with, (2) that the State has arbitrarily and capriciously disregarded relevant environmental, social or economic consideration in any redesignation, or (3) that the State has not requested delegation of responsibilities for carrying out this section.

(b) Any redesignation proposed pursuant to subdivision (vi) of this subparagraph shall be approved unless he determines (1) that the requirements of subdivision (vi) of this subparagraph have not been complied with, or (2) that a Federal Land Manager has arbitrarily and capriciously disregarded relevant environmental, social or economic considerations in any redesignation.

(c) Any redesignation submitted pursuant to subdivision (vii) of this subparagraph shall be approved unless he determines (1) that the requirements of subdivision (vii) of this subparagraph have not been complied with, or (2) that an Indian governing body has arbitrarily and capriciously disregarded relevant environmental, social, or economic considerations in any redesignation.

(ix) If the Administrator disapproves any proposed area designation under this subparagraph, the State, Federal Land Manager or Indian governing body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the Administrator or reconsidering any area designation determined by the Administrator to be arbitrary and capricious.

(d) *Review of new sources.* (1) This paragraph applies to any new or expanded stationary source of a type identified below in any area designated as Class I or Class II, which has not commenced construction or expansion prior to six months subsequent to the effective date of this paragraph.

(i) Fossil-Fuel Fired Steam Electric Plants of more than 1000 million B.T.U. per hour heat input.

(ii) Coal Cleaning Plants (thermal dryers).

(iii) Kraft Pulp Mill Recovery Furnaces.

(iv) Portland Cement Plants.

(v) Primary Zinc Smelters.

(vi) Iron and Steel Mill Metallurgical Furnaces.

(vii) Primary Aluminum Ore Reduction Plants.

(viii) Primary Copper Smelters.

(ix) Municipal Incinerators capable of charging more than 250 tons of refuse per day.

(x) Sulfuric Acid Plants.

(xi) Petroleum Refineries.

(xii) Lime Plants.

(xiii) Phosphate Rock Processing Plants.

(xiv) By-Product Coke Oven Batteries.

(xv) Sulfur Recovery Plants.

(xvi) Carbon Black Plants (furnace process).

(xvii) Primary Lead Smelters.

(xviii) Fuel Conversion Plants.

(xix) Sintering Plants.

(2) No owner or operator shall commence construction or expansion of a source subject to this paragraph unless the Administrator determines that, on the basis of information submitted pursuant to subparagraph (3) of this paragraph:

(i) The effect on air quality concentrations of the source or expanded portion of the source considered with the effect on air quality concentrations of all other new and expanded sources subject to this paragraph and the estimated changes in air quality caused by general commercial, residential, industrial and other growth in the area affected by the proposed source since the date of promulgation of these regulations will not cause the air quality concentration in any area to be increased above the limits shown in paragraph (c) (2) of this section.

(ii) For sources for which standards of performance for new sources have not been proposed under part 60 of this chapter, the source or expanded portion of the source will apply and operate the best available control technology for minimizing emission of particulate matter and sulfur dioxide. In determining best available control technology for each new or expanded source subject to this section, the Administrator shall consider the following:

(a) The process, fuels, and raw material available and intended to be employed.

(b) The engineering aspects of the application of various types of control techniques.

(c) Process and fuel changes.

(d) The cost of the application of the control techniques, process changes, alternative fuels, etc.,

(e) Any applicable State and local emission limitations, and

(f) Locational and siting considerations.

(3) In making the determinations required by subparagraph (2) of this paragraph, the Administrator shall, as a minimum, require the owner or operator of the source subject to this paragraph to submit: site information, plans, descriptions, specifications, and drawings showing the design of the source, calculations showing the nature and amount of emissions, any other information necessary to determine compliance with any ap-

plicable standards of performance for new sources specified in Part 60 of this chapter or any other applicable emission regulations, and the impact that the construction or expansion will have on sulfur dioxide and particulate matter air quality levels. In addition, the owner or operator of the source shall provide information on the nature and extent of general commercial, residential, industrial and other growth which has occurred in the area affected by the source's emissions since the effective date of this paragraph and the estimated impact of such development on ambient concentrations of particulate matter and sulfur dioxide.

(4) (i) Where a new or expanded source is located on Federal lands, such source shall be subject to the procedures set forth in paragraphs (d) and (e) of this section. Such procedures shall be in addition to applicable procedures conducted by the Federal Land Manager for administration and protection of the affected Federal lands. Where feasible, the Administrator will coordinate his review and hearings with the Federal Land Manager to avoid duplicate administrative procedures.

(ii) New or expanded sources which are located on Indian Reservations shall be subject to procedures set forth in paragraphs (d) and (e) of this section. Such procedures shall be administered by the Administrator in cooperation with the Secretary of the Interior.

(iii) Whenever any new or expanded source is subject to action by a Federal agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321), review by the Administrator conducted pursuant to this paragraph shall be coordinated with the broad environmental reviews under that Act, to the maximum extent feasible and reasonable.

(e) *Procedures for Public Participation.* (1) (i) Prior to making the determinations required by paragraph (d) of this section, the Administrator, within 30 days after submittal of an application by the owner or operator, shall provide opportunity for public comment on the information submitted by the owner or operator, on the owner or operator's analysis of the effect of such construction or expansion on ambient air quality and the Administrator's proposed approval or disapproval of the owner or operator's application. Opportunity for public comment shall include, as a minimum:

(a) Availability for public inspection, in at least one location in the area affected by the source's emissions of the information submitted by the owner or operator, and the Administrator's analysis of effect on air quality.

(b) A 30 day period for submittal of public comment, and

(c) A notice by prominent advertisement in the area affected by the source's emissions of the location of the information and analysis specified in paragraph (d) of this section.

(ii) A copy of the notice required under this subparagraph (c) (i) shall be sent to officials and agencies having cognizance over the location where the source will be situated, as follows: State and local air pollution control agencies, the chief executives of the city and county; any comprehensive regional land use planning agency, and any State, Federal Land Manager, or Indian governing body whose lands will be significantly affected by the source's emissions.

(iii) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. All comments shall be made available for public inspection in at least one location in the area in which the source would be located.

(iv) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for approval or denial. Such notification shall be made available for public inspection in at least one location in the area in which the source would be located and shall include the conditions under which the source shall operate. These conditions shall include but shall not be limited to specifications of the allowed emission rate and/or the design and operating characteristics of the control equipment required on the source and any reporting requirements as determined by the Administrator.

(v) The Administrator may extend each of the time periods specified in subdivisions (i), (iii), or (iv) of this subparagraph (c) (1) by no more than 30

days, or such other period as agreed to by the applicant and the Administrator.

(2) Any owner or operator who constructs or operates a stationary source not in accordance with the application, as approved and conditioned by the Administrator, or any owner or operator of a stationary source subject to this paragraph who commences construction or expansion six months after promulgation of this regulation without applying for and receiving approval hereunder, shall be subject to enforcement action under section 113 of the Act.

(3) Approval to construct or expand shall become invalid if construction or expansion is not commenced within 18 months after receipt of such approval or if construction is discontinued for a period of 18 months or more. The Administrator may extend such time period upon a satisfactory showing that an extension is justified.

(4) Approval to construct or expand shall not relieve any owner or operator of the responsibility to comply with the control strategy and all local, State and Federal regulations which are part of the applicable State implementation plan.

(f) *Delegation of Authority.* (1) The Administrator shall have the authority to delegate responsibility for implementing the procedures for conducting source review pursuant to paragraphs (d) and (e) of this section, in accordance with subparagraphs (2), (3), and (4) of this paragraph (f).

(2) Where the Administrator delegates the responsibility for implementing the procedures for conducting source review pursuant to this section to any agency, other than a regional office of the Environmental Protection Agency, the following provisions shall apply:

(i) Where the agency designated is not

an air pollution control agency, such agency shall consult with the appropriate State or local air pollution control agency prior to making any determination required by paragraph (d) of this section. Similarly, where the agency designated does not have continuing responsibilities for land use planning, such agency shall consult with the appropriate State or local land use planning agency prior to making any determination required by paragraph (d) of this section.

(ii) A copy of the notice pursuant to paragraph (e) (1) (i) (c) of this section shall be sent to the Administrator through the appropriate regional office.

(3) The Administrator's authority for implementing the procedures for conducting source review pursuant to this section shall not be delegated, other than to a regional office of the Environmental Protection Agency, for new or expanded sources which are owned or operated by the Federal government or for new or expanded sources located on Federal lands; except that, with respect to the latter category, where new or expanded sources are constructed or operated on Federal lands pursuant to leasing or other Federal agreements, the Federal Land Manager may at his discretion, to the extent permissible under applicable statutes and regulations, require the lessee or permittee to be subject to a designated State or local agency's procedures developed pursuant to paragraphs (d) and (e) of this section.

(4) The Administrator's authority for implementing the procedures for conducting source review pursuant to this section shall not be redelegated, other than to a regional office of the Environmental Protection Agency, for new or expanded sources which are located on Indian reservations.

[FR Doc.74-19340 Filed 8-26-74;8:45 am]

APPENDIX C

Testimony of DEQ to EPA

10-1-74

COMMENTS OF THE STATE OF OREGON, DEPARTMENT OF ENVIRONMENTAL QUALITY, UPON
THE ENVIRONMENTAL PROTECTION AGENCY'S PROPOSED RULES FOR PREVENTION OF
SIGNIFICANT AIR QUALITY DETERIORATION (39 Federal Register, Pages 30999
Et Seq)

The Department of Environmental Quality has reviewed EPA's latest proposed rules for the Prevention of Significant Air Quality Deterioration. This is the second time DEQ has testified on rules proposed by EPA for preventing significant deterioration, and we have included our previous comments, which we reaffirm at this time, as an appendix to these comments.

We agree with the addition of three new source types to be subject to review under the regulations: primary lead smelters, fuel conversion plants, and scinterring plants. We would like, however, to see added to the list combustion turbine electric electric generating facilities, which are being built in the Pacific Northwest to add peak load generating capability. Also, we favor reinstatement of the general category of any source with a potential emission rate greater than a certain size for any of the five major pollutants: sulfur dioxide, particulate matter, carbon monoxide, oxides of nitrogen, and hydrocarbons. As we commented previously, limiting this category to sources which emit more than 4,000 Tons/year of one of these five pollutants seems too high, especially if these numbers refer to emissions after control facilities are installed. We believe the limitations should be in the area of 1,000 Tons/year of annual emissions.

We are supportive of EPA's effort in the latest proposal to better define "commenced" and "expansion" and to clarify the conditions under which the EPA administrator would delegate his authority to states.

Although it is more apparent in the preamble discussion than in the language of the proposed regulations themselves, we are pleased to note that EPA now more readily accepts that diffusion modeling techniques are a method of obtaining reliable comparisons of increases in ambient air quality caused by large sources with the proposed allowable increments for Class 1 and Class 2 areas. It is imperative that we approach this significant deterioration question with the best tools available to us, which in most situations demands the use of diffusion modeling.

The preamble indicates that "preconstruction modeling" will be the only technical basis for determining whether a source of emissions will increase ambient air quality more than the applicable increment. However, by (apparently) actively discouraging actual monitoring of ambient air quality and meteorological conditions during the preconstruction review process (by the deletion of previously included source monitoring requirements), EPA has eliminated both information necessary to perform modeling as well as all objective basis for calibrating any model that is used. Without preconstruction establishment of stations to measure wind speed and wind direction, no local meteorological data will be available for modeling. Without preconstruction establishment stations to measure ambient air quality, no data will exist with which to calibrate any model used to predict the air quality impact of a source on an area.

In addition, preconstruction modeling, as apparently envisioned by EPA in these regulations, could only predict the increase in ambient air quality associated with a source, and would do this based on largely hypothetical wind data. Actual air quality levels which would be expected to be experienced in the area would not be ascertainable, because source contributions are not related to the baseline air quality in existence before the source would be established. In an extreme case, it would be possible for a National Secondary Ambient Air Quality Standards to be violated unknowingly, due to modeling error, in a supposed "non-deterioration" area. This situation could be avoided, and a much better assessment of overall impacts on local air quality could be obtained, by relating source impacts to baseline air quality. Again, a requirement for preconstruction monitoring of ambient air quality in the area would be a prerequisite for establishment of baseline air quality.

Oregon is also concerned that in the present proposals best available control technology is required only for sources for which national new source performance standards have not been promulgated, and then only for sulfur dioxide and particulates. As EPA notes elsewhere, photochemical smog, formed largely by the combination of hydrocarbons and oxides of nitrogen over time and large areas, is particularly susceptible to spreading over state lines, making unilateral control within a state ineffective. Oregon is among

the states which require an equivalent of best available control technology to be provided on all sources of air pollution in the state. See Oregon Administrative Rules, Chapter 340, Section 20-001: "Highest and best practicable treatment and control required." Oregon, therefore, concurred with the original EPA proposal to extend this requirement nationwide, at least for areas where air pollution was below secondary standards. We would therefore urge the reinstatement of requirements that all new sources subject to review apply best available control technology for sulfur dioxide, particulate matter, carbon monoxide, oxides of nitrogen, and hydrocarbons.

Oregon's chief concern with the proposed regulations involves the lack of constraints on the type and number of Class 3 areas. While designation of a few Clean Air Areas as Class 3 may be needed for special case situations, nothing in the proposed regulations would prevent the redesignation of every portion of every state in the nation to Class 3. This could effectively undermine the whole idea of preventing significant deterioration in Clean Air Areas. We urge EPA to establish objective criteria, applicable nationwide, for the designation of Class 3 areas. For example, Class 3 areas may be justified where important large mineral deposits require development, where comprehensive land use planning reliably predicts substantial urban growth in Clean Air Areas, or where local air quality is already reasonably close to the secondary standard. Unless such criteria are established for designating Class 3 areas, and are applicable nationwide, EPA risks encouraging two unfortunate consequences. First, some states may be tempted to create pollution havens where clean air is sacrificed to attract economic growth. Second, in each state maximum pressure will be created to designate as Class 3 as much land as possible in order to preserve economic and land use planning flexibility. This pressure will be great precisely because each state will assume every other state, acting in an absence of national guidelines, will be doing the same thing.

Oregon would much prefer, and considers it more consistent with the idea of preventing significant deterioration in Clean Air Areas, to proceed in a simpler more direct manner. In general, it would seem quite workable to designate acknowledged wild and recreational areas (such as National Parks,

forests, etc) as Class 1 areas, subject to redesignation only under extraordinary circumstances. The rest of the land area could be automatically Class 2, with procedures and objective criteria spelled out for redesignating a limited amount of this area as Class 3. This would greatly simplify the initial classification required to implement significant deterioration regulations, and would much more effectively prevent significant deterioration of air quality on a nationwide basis. Significant deterioration regulations should be above all, flexible and consistent nationwide. Their procedures should be triggered only when a source of sufficient size seeks entry into an area where the ambient air quality is substantially below the secondary standard.

Many states and EPA have expressed a concern that air quality restraints should not dominate land use planning and economic development. We agree. Any environmental control policy places some limits on land use. Perhaps the cumulative effect of increases environmental controls over air, land, and water pollution has hastened the advent of land use planning, by creating an awareness of the limitations of our earth eco-system. Offering special protection to our remaining Clean Air Areas may encourage, but need not dominate or distort, our country's inevitable progression toward more comprehensive land use planning. We appreciate the opportunity to comment on these proposed regulations, and summarized below are specific recommendations regarding the latest proposed regulations to prevent significant deterioration of air quality:

1. Require that new sources which emit more than 1,000 Tons/year of sulfur dioxide, particulate matter, carbon monoxide, oxides of nitrogen, or hydrocarbons, be subject to review under regulations to prevent significant deterioration of air quality.
2. Require that all new sources subject to review apply best available control technology for sulfur dioxide, particulate matter, carbon monoxide, oxides of nitrogen, or hydrocarbons.
3. Require that combustion turbine electric generating facilities be included in the list of sources subject to review under these regulations.
4. Require that new sources subject to review establish both meteorological and ambient air quality monitoring stations

in the area of the proposed location, and continuously monitor and report air quality in that area prior to submission of a permit application for a specified time period as required by state air quality agencies (where no prior monitoring data exists, this period should be at least one year).

5. Require that new sources subject to review utilize diffusion modeling techniques to estimate both baseline air quality in the area of the proposed location and the incremental increase in pollutant concentrations above baseline air quality attributable to the proposed facility.
6. Severely limit the Class 3 area designations by establishing objective criteria, applicable nationwide, for designations of Class 3 areas.

APPENDIX D

**Department Letter of Notification
and Press Release**

Dear :

In compliance with Rules of Practice and Procedure 11-045, notification is hereby given that the Department of Environmental Quality is in receipt of a petition from OSPIRG in which you may have interest.

Under the rule, you have 15 days in which to submit written data, views or arguments regarding the petition.

The Environmental Quality Commission has scheduled oral presentations of the petitioner's views for 11:00 am, November 22, in Room 20, State Capitol Building, Salem, Oregon, as part of the monthly meeting of the Commission.

Cordially,

KESSLER R. CANNON
Director

KRC:cm

Enclosures: 11-040, Petition

Ivan Congleton
Executive Vice President
Associated Oregon Industries
1149 Court Street, N.E.
Salem, Oregon 97301

Larry Williams
Executive Director
Oregon Environmental Council
2637 S. W. Water Avenue
Portland, Oregon 97201

Mrs. John Millet
President
League of Women Voters
1330 N. E. 10th Street
Grants Pass, Oregon 97526

Hugh Bannister
Western Environmental Trade
Association
100 S. W. Market Street
Suite 610
Portland, Oregon 97201

Mr. P. Jerry Orrick
Executive Secretary
Association of Oregon Counties
P. O. Box 2051
Salem, Oregon 97308

Mr. Donald Jones
Executive Director
League of Oregon Cities
1201 Court, N.E.
Salem, Oregon 97301

Mr. Arnold M. Cogan
Director
Department of Land Conservation
& Development
1175 Court Street, N.E.
Salem, Oregon 97310

Mr. Michael D. Roach, Director
Mid-Willamette Valley Air
Pollution Authority
2585 State Street
Salem, Oregon 97301

Mr. Verner J. Adkison
Director
Lane Regional Air Pollution
Authority
16 Oakway Mall
Eugene, Oregon 97401

Mr. William P. Hutchison, Jr.
President
Northwest Environmental
Defense Center
10015 S.W. Terwilliger Blvd.
Portland, Oregon 97219

Edward J. Whelan
Director
Department of Economic
Development
Ninth Floor, Loyalty Building
317 S. W. Alder Street
Portland, Oregon 97204

Mr. Bob Straub
c/o Straub Campaign Headquarters
S. W. 10th and Alder Streets
Portland, Oregon 97205

Honorable Victor Atiyeh
c/o Atiyeh Campaign Headquarters
712 S. W. 12th
Portland, Oregon 97205

Art Heizenrader
Oregon Concrete & Aggregate
Producers Association, Inc.
2187 S.W. Main Street
Portland, Oregon 97205

Holway R. Jones
Chairman
Pacific Northwest Chapter
Sierra Club
25 Skyline Park Loop
Eugene, Oregon 97405

Honorable Bernard Byers
Presiding Chairman
Legislative Interim Committee on
Environmental, Agricultural
& Natural Resources
1997 Santiam
Lebanon, Oregon 97355

Honorable Mark O. Hatfield
United States Senator
Senate Office Building
Washington, D.C. 20510

Honorable Bob Packwood
United States Senator
Senate Office Building
Washington, D.C. 20510

Honorable Wendell Wyatt
United States Representative
House Office Building
Washington, D.C. 20515

Honorable Al Ullman
United States Representative
House Office Building
Washington, D.C. 20515

Honorable Edith Green
United States Representative
House Office Building
Washington, D.C. 20515

Honorable John Dellenback
United States Representative
House Office Building
Washington, D.C. 20515

Dr. Clifford V. Smith
Administrator
Region X
Environmental Protection Agency
1200 Sixth Avenue
Seattle, Washington 98101

Mr. Ray Underwood
Legal Counsel
Department of Justice
State Office Building
Portland, Oregon 97201

Honorable Nancie Fadeley
Legislative Interim Committee on
Environmental, Agricultural
& Natural Resources
260 Sunset Drive
Eugene, Oregon 97403

Honorable Ted Hallock
Legislative Interim Committee on
Environmental, Agricultural
& Natural Resources
2445 N. W. Irving
Portland, Oregon 97210

Mr. Jack Kalinoski
Public Affairs Manager
Associated General Contractors
of America, Inc.
1008 N. E. Multnomah
Portland, Oregon

Mr. Leland Johnson
President
Portland Chamber of Commerce
824 S. W. 5th Avenue
Portland, Oregon 97201

John Vlastelicia

EQC

14 Council of Governments

B..J. Seymour
229-5327

Department of Environmental Quality
1234 S.W. Morrison
Portland, Oregon 97205

November 5, 1974; For Immediate Release:

Comments were invited today on preserving clean air where Oregon is already ahead of federal requirements.

The Department of Environmental Quality said today the issue would be presented to the Environmental Quality Commission at its November 22 meeting.

More than a year ago Oregon urged the federal government to adopt a uniform non-degradation policy nationwide. No federal policy has been adopted, due largely to the problem of defining what constitutes "significant deterioration of air quality."

Now Oregon is being asked to adopt a program of its own. The Oregon Student Public Interest Research Group (OSPIRG) last week petitioned the Environmental Quality Commission for state action on the issue.

Under Commission rules, the public has ten days to submit additional comments on the issue before it goes to the Commission. EQC action is required within 30 days of the time the petition is received.

Any decision on the non-degradation question has implications for economic development and land use planning since a strict definition of "significant deterioration" could mean no growth in the areas where it applies.

November 1, 1974

William P. Hutchison, Jr.
President, Northwest Environmental
Defense Center
914 Corbett Building
Portland, Oregon 97204

Dear Mr. Hutchison:

This is to advise you in accordance with the Department Rules of Practice and Procedure 11-045, that you have fifteen (15) days in which to supplement your petition relating to the prevention of significant deterioration of air quality with additional written data, views or arguments as you may deem necessary.

Also enclosed for your information is a copy of a letter the Department has sent to other persons believed to have an interest in the proceeding.

Sincerely,

KESSLER R. CANNON
Director

EWH:kok
Enclosure

November 1, 1974

Oregon Student Public Interest
Research Group
408 S.W. 2nd Avenue
Portland, Oregon 97204

Attn: John Ullman, Ph.D.

Dear Mr. Ullman:

This is to advise you in accordance with the Department Rules of Practice and Procedure 11-045, that you have fifteen (15) days in which to supplement your petition relating to the prevention of significant deterioration of air quality with additional written data, views or arguments as you may deem necessary.

Also enclosed for your information is a copy of a letter the Department has sent to other persons believed to have an interest in the proceeding.

Sincerely,

KESSLER R. CANNON
Director

WH:kok
Enclosure

11-035 ACTION OF THE COMMISSION OR DIRECTOR. (1) Following the rule-making hearing by the Commission, or after receipt of the report of the presiding officer, the Commission may adopt, amend, or repeal rules within the scope of the notice of intended action.

(2) Following the public informational hearing by the Director, or within a reasonable time after receipt of the report of the presiding officer, the Director shall take action upon the matter. Prior to or at the time of such action, the Director shall issue a written report in which he addresses separately each substantial, distinct issue raised in the hearings record.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



**DEPARTMENT OF
ENVIRONMENTAL QUALITY**

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

TOM McCALL
GOVERNOR

October 31, 1974

KESSLER R. CANNON
Director

John Ullman, Ph.D.
OSPIRG Staff Scientist
411 Governor Building
408 S. W. 2nd Avenue
Portland, Oregon 97204

Dear Doctor Ullman:

Mr. B. A. McPhillips, Chairman of the Environmental Quality Commission has made your petition an agenda item for 11:00 a.m., November 22 at the monthly meeting of the Commission, Room 20, State Capitol Building, Salem, Oregon. The Commission looks forward to your discussion of the issues involved.

Cordially,

KESSLER R. CANNON
Director

KRC:cm

cc: Environmental Quality Commission



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OSPIRG

OREGON STUDENT PUBLIC INTEREST RESEARCH GROUP

"A BALANCE FOR THE PUBLIC INTEREST"

411 GOVERNOR BUILDING · 408 SW 2ND AVENUE
PORTLAND, OREGON 97204 (503) 222-9641

October 28, 1974

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED

OCT 30 1974

OFFICE OF THE DIRECTOR

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

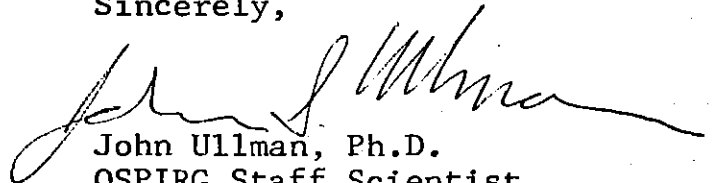
Dear Mr. Cannon:

OSPIRG and the Northwest Environmental Defense Center hereby submit the enclosed petition for adoption of rules relating to prevention of significant deterioration of air quality for consideration by the Environmental Quality Commission.

I request that within the time set in ORS 183.390 the Environmental Quality Commission give notice of intended action on this matter.

You will note that these proposed rules contain standards for only two air contaminants, particulates and sulfur dioxide. I believe it would be very desirable to develop similar standards for other important contaminants as well. I would therefore hope that you would instruct your staff to develop feasible standards for the following additional air contaminants: Nitrogen oxides, hydrocarbons, and carbon monoxide.

Sincerely,



John Ullman, Ph.D.
OSPIRG Staff Scientist

Enclosure

Oregon Student Public Interest Research Group: Clackamas Community College/ Clatsop Community College/ Eastern Oregon College/ Lane Community College/ Oregon College of Education/ Oregon State University/ Oregon Technical Institute/ Pacific University/ Portland Community College/ Portland State University/ Southern Oregon College/ Southern Oregon Community College/ University of Oregon/ University of Portland/ Willamette University.

IN THE MATTER OF THE ADOPTION OF OAR)
340 20-048, ESTABLISHING RULES FOR THE)
PREVENTION OF FURTHER SIGNIFICANT)
DETERIORATION OF AIR QUALITY IN AREAS)
IN WHICH AIR POLLUTION DOES NOT EXCEED)
THE SECONDARY STANDARD OF PUBLIC)
LAW 91-604)

PETITION TO ADOPT OAR
340 20-048
AIR POLLUTION CONTROL

1. Petitioners' names and addresses are the Oregon Student Public Interest Research Group (OSPIRG), 408 S.W. Second Avenue, Portland, Oregon 97204, and the Northwest Environmental Defense Center, (NEDC), 10015 Southwest Terwilliger Blvd., Portland, Oregon, 97219.

2. Petitioners' are both incorporated as a non-profit corporations in the State of Oregon. The members of the OSPIRG board of directors are elected by the students at 15 colleges and universities in Oregon, which colleges and universities enroll over 75,000 students. The membership of NEDC is composed primarily of Oregon residents who are concerned with preserving and protecting the natural environment of Oregon and the Pacific Northwest.

3. The enjoyment of areas of the State of Oregon having clean air by members of the boards of directors of petitioners', as well as by other citizens of the State of Oregon, is adversely affected by the failure of the Environmental Quality Commission to adopt rules to protect air which is not polluted to the secondary standards of The Clean Air Act Amendments of 1970 (Public Law 91-604).

4. ORS 468.305 mandates the Department of Environmental Quality to develop a means for preventing the pollution of air in areas where pollution does not now exist, but may exist in the future. The DEQ has not adopted a plan for the prevention of degradation of air which is not now polluted. Failure to adopt such a plan in the five years since ORS 468.305 was promulgated in 1969 constitutes a violation of this law.

Adoption of the rules proposed below by petitioners would satisfy the requirements of ORS 468.305 and would fulfill the purpose of Public Law 91-604, section 101(b)(1).

5. OAR Chapter 340 20-048 as petitioner proposes it would read as follows:

20-048 - PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY

20-048.01 - REQUIREMENT Air which is not polluted to the limits of the secondary ambient standards of the Federal Environmental Protection Agency will be protected from further significant deterioration. The limitations listed in 20-048.02 and 20-048.03 will be used to define significant deterioration. In all cases, the more stringent limitations will apply.

20.048.02 POLLUTANT INCREMENT LIMITATIONS

(1) Areas of the state which have air quality better than the quality defined by the secondary ambient standards of the Federal Environmental Protection Agency (EPA) shall be designated as Zone I or Zone II and limited to increases in pollutant concentrations over 1972 levels as shown below:

AREA CLASSIFICATION

Pollutant :	Zone I	Zone II
	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
Particulate matter:		
Annual geometric mean	5	10
24-hour maximum	10	30
Sulfur dioxide:		
Annual arithmetic mean	2	15
24-hour maximum	5	100
3-hour maximum	25	300

(2) Effective as of the date of promulgation of this regulation: All state parks, forests, scenic areas, and wildlife refuges as well as all National Parks, National Forests, National Wildlife Refuges and lands administered by the U. S. Bureau of Land Management are hereby designated Zone I.

(3) The Commission shall, within six months of the date of promulgation of this regulation, classify the remaining appropriate areas Zone I or Zone II.

20-048.03 - EMISSION CEILINGS

(1) Within six months of the date of promulgation of this regulation the DEQ shall divide the state into State Air Quality Control Regions (SAQCR). These regions shall include all Zone I and Zone II areas described in paragraph (1).

(2) The maximum allowable emissions for a SAQCR shall be the following:

(a) For particulate matter the product of the area (square miles) for a SAQCR and three tons of particulate matter/year/square mile or 120 percent of the baseline emissions for particulate matter, whichever is least.

(b) For sulfur oxides the product of the area (square miles) of a SAQCR and 10 tons of sulfur dioxide/year/square mile or 120 percent of the baseline emissions for sulfur dioxide, whichever is least.

(3) Baseline emissions for purposes of determining maximum allowable emissions shall be the total emissions for a SAQCR in 1972.

20-048.04 - DETERMINATIONS OF DIRECTOR. In any SAQCR no owner or operator shall commence construction or modification of a source having a total annual potential emission rate on any premises equal to or greater than 100 tons for any of the following pollutants: particulate matter, sulfur dioxide, nitrogen oxides, hydrocarbons, or carbon monoxide, unless the Director determines that the effect on air quality of the source or modification of the source considered with the effect on air quality of existing, new or modified sources, will not cause the air quality to deteriorate such that the limitations in 20-048.02 are exceeded; and that the emission ceilings in 20-048.02(2) are not exceeded; and that the source or modified portion of the source will be constructed and operated to employ best available control technology for minimizing emissions of particulate matter, sulfur dioxide, nitrogen oxides, hydrocarbons, and carbon monoxide.

20-048.05 - INFORMATION REQUIREMENTS. In making the determinations required by 20-048.04, the Director shall, as a minimum, require the source to submit: Site information, plans, descriptions, specifications, and drawings showing the design of the source, calculations showing the nature and amount of emissions, a description of the manner in which the source will be operated and controlled, the cost of control, measurements of existing air quality levels, and the impact that the construction or modification will have on air quality levels and the air environment around the source.

20-048.06 - BEST AVAILABLE CONTROL TECHNICAL CRITERIA. In determining best available control technology the following shall be considered:

- (1) Reasonably available control technology as defined by applicable regulations of the Environmental Protection Agency.
- (2) The process, fuels, and raw materials employed.
- (3) The engineering aspects of the application of various types of control techniques, process changes, alternative fuels, etc.

26-048.07 - MONITORING.

(1) The owner or operator of a source subject to the provisions of 20-048.04 shall install, or cause to be installed, a minimum of two continuous ambient air quality monitoring instruments for sulfur dioxide and/or two intermittent ambient air quality monitoring instruments for particulate matter.

(2) The Director shall specify which pollutant(s) the source shall monitor.

(3) When source, meteorological and/or terrain conditions warrant, the Director may require additional samplers above the minimum number specified in this paragraph.

(4) Such systems shall include one site equipped to monitor wind speed and wind direction.

(5) The instruments shall meet the performance and operating specification of applicable regulations of the Environmental Protection Agency.

(6) The locations of such instruments shall be located in areas of expected maximum concentrations determined by meteorological diffusion modeling or best judgment.

(7) The instruments shall be maintained, calibrated, and operated in accordance with the methods prescribed by the manufacturer of such instrument(s) and other procedures consistent with good engineering practice.

(8) The owner or operator of the source subject to this paragraph shall maintain a record of all measurements required by this section. Measurement results shall be summarized monthly and reported to the Department semi-annually, and shall be submitted within 45 days after the end of the reporting period. Reporting periods are January 1 - June 30 and July 1 - December 31, with the initial reporting period starting as indicated in subsection (9) of this section.

(9) The continuous monitoring and recordkeeping requirements of this section shall become applicable 15 months before construction of the source so that data for a pre-construction base-line may be obtained.

20-048.08 - PUBLIC NOTICE AND HEARING. Prior to making the determinations required by 20-048.04, the Director shall provide opportunity for public comment on the information submitted by the owner or operator and on the Director's analysis of the effect of such construction or modification on ambient air quality. Opportunity for public comment shall include, as a minimum:

(1) Availability for public inspection, in at least one location in the region affected, of the information submitted by the owner or operator, and the Director's analysis of the effect on air quality,

(2) a 60-day period for submittal of public comment, and

(3) a notice by prominent advertisement in the region affected of the location of the source information and analysis specified in 20-048.05.

20-048.09 - NOTIFICATION. The Director will notify the owner or operator in writing of his approval or denial to construct or modify a source within 150 days of the owner or operator's submission of the information required under 20-048.05.

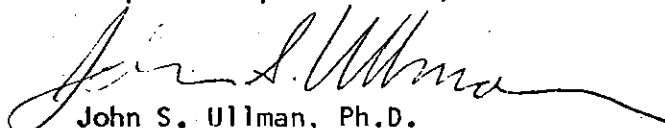
20-048.10 - CANCELLATION OF APPROVAL. The Director may cancel an approval to construct if the construction is not begun within two years from the date of issuance, or if during the construction, work is suspended for one year.

20-048.11 - OTHER REQUIREMENTS. Approval to construct or modify shall not relieve any owner or operator of the responsibility to comply with all local, State, or Federal regulations which are part of the applicable plan.

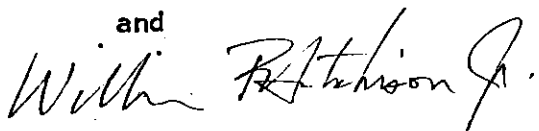
WHEREFORE, petitioner requests the Environmental Quality Commission after due notice and hearing, to adopt the foregoing proposed rules as permanent rules.

Dated this 30 day of October, 1974.

Respectfully submitted,


John S. Ullman, Ph.D.
OSPIRG Staff Scientist

and


William P. Hutchison, Jr.
President, Northwest Environmental
Defense Center
Representing Petitioners

APPENDIX E

Attorney General's Office Letter



DEPARTMENT OF JUSTICE

PORTLAND DIVISION

555 STATE OFFICE BUILDING
PORTLAND, OREGON 97201
TELEPHONE: (503) 229-5725

November 5, 1974

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

Re: Compliance with ORS 468.305 (General Comprehensive
Plan for Control or Abatement of Air Pollution)

Dear Kess:

It has been claimed by OSPIRG and NEDC that the Department has failed to adopt a plan in the five years since ORS 468.305 was enacted by the Legislature in 1969 and that this failure constitutes a violation of this statute.

ORS 468.305 (formerly ORS 449.782) was enacted in 1969 by the State Legislature. That statute provides as follows:

"Subject to policy direction by the commission, the department shall prepare and develop a general comprehensive plan for the control or abatement of existing air pollution and for the control or prevention of new air pollution in any area of the state in which air pollution is found already existing or in danger of existing. The plan shall recognize varying requirements for different areas of the state." (Emphasis supplied)

The federal Clean Air Amendments of 1970 required each state to adopt plans providing for implementation, maintenance and enforcement of the National Ambient Air Quality Primary and Secondary Standards in each air quality control region within the state.

November 5, 1974

Following presentation at public hearings and approval in December of 1971 by the Environmental Quality Commission and by the Governor, the Comprehensive Clean Air Act Implementation Plan for Oregon (consisting of two large volumes) was submitted to the Environmental Protection Agency of the United States on January 25, 1972, for approval, which was given by EPA on May 31, 1972. Oregon was one of the few in the nation receiving early approval.

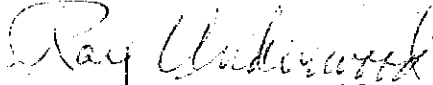
The Implementation Plan addresses itself to the air quality problems of five federally-designated Air Quality Control Regions covering all of Oregon as shown on the attached Figure I-2.

On April 13, 1973, the Governor submitted to the Environmental Protection Agency a volume entitled "Portland Transportation Control Strategy" pursuant to which Oregon expects to meet its commitments to attain and maintain National Ambient Air Standards in the Portland Metropolitan Area.

In my opinion, the preparation by the DEQ and the approval by the EQC of the Clean Air Act Implementation Plan and the Portland Transportation Control Strategy constituted compliance, and timely compliance, with the requirements of ORS 468.305. While persons may disagree with the adequacy or may complain of some of the details of such plans, the preparation and adoption of these plans constituted a good-faith effort to carry out the provisions of ORS 468.305.

Further, it is noteworthy that EPA has not yet adopted final rules regarding significant deterioration of air quality pursuant to the Clean Air Amendments of 1970 and the case of Sierra Club v. Ruckelhaus, 344 F. Supp. 253 (1972), rules which are essential before the DEQ can recommend and the EQC can adopt rules relating thereto.

Sincerely,


RAYMOND P. UNDERWOOD
Chief Counsel
Portland Office

ej
Enc.

cc: Mr. Harold Patterson
Mr. Wayne Hanson

NORTHWEST
AIR QUALITY
CONTROL
REGION
No. 192

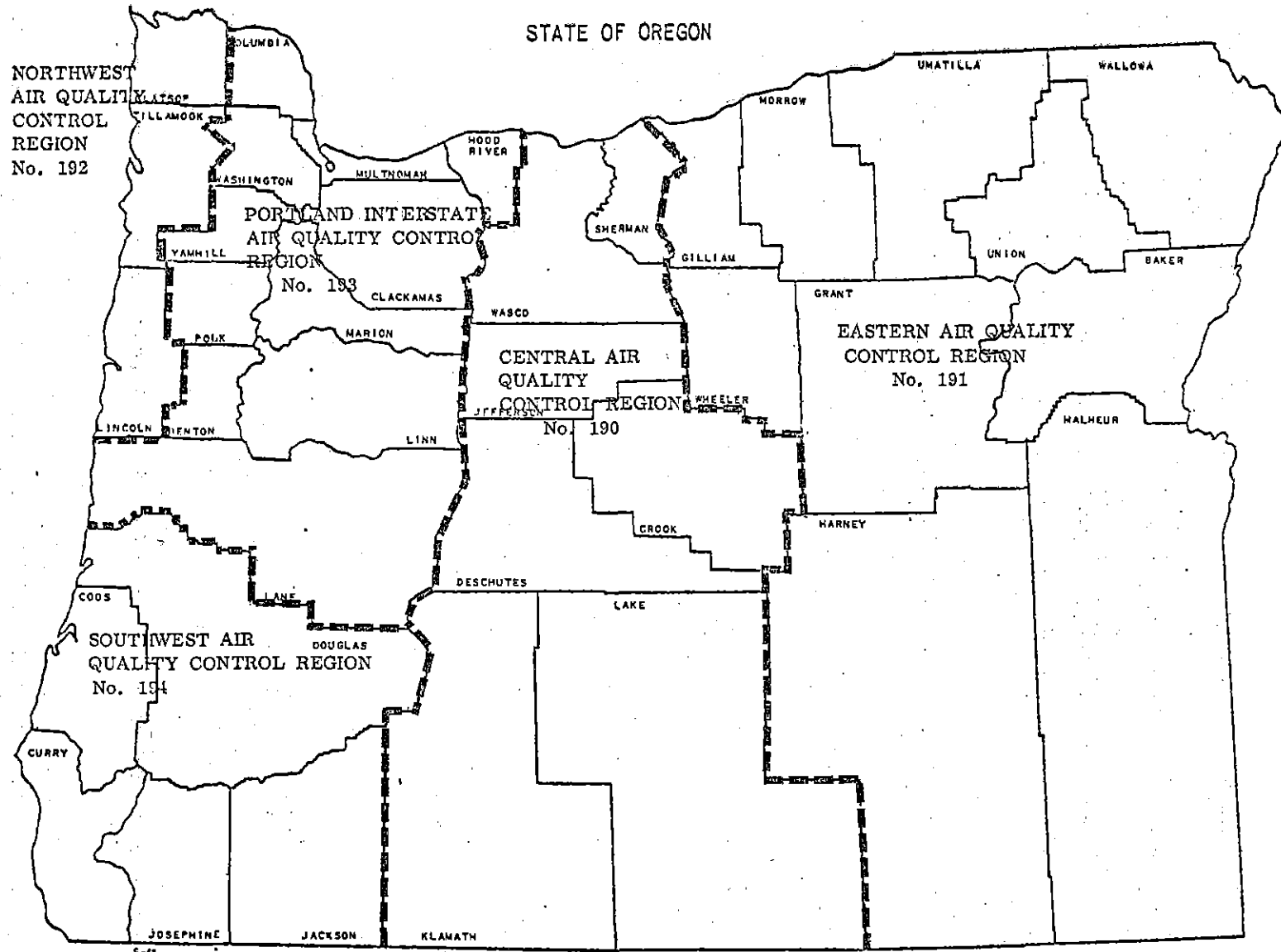


Figure I-2

OREGON
FEDERAL AIR QUALITY CONTROL REGIONS



ENVIRONMENTAL QUALITY COMMISSION

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

TOM McCALL
GOVERNOR

B. A. McPHILLIPS
Chairman, McMinnville

GRACE S. PHINNEY
Corvallis

JACKLYN L. HALLOCK
Portland

MORRIS K. CROTHERS
Salem

RONALD M. SOMERS
The Dalles

KESSLER R. CANNON
Director

MEMORANDUM

To: ENVIRONMENTAL QUALITY COMMISSION
From: Director
Subject: Agenda Item No. I, November 22, 1974, EQC Meeting

Open Burning Regulations Proposed Rule Change Authorization for Public Hearing

Background

On June 21, 1974, the Commission approved a 120-day extension to portions of the open burning rules contained in OAR Chapter 340, Section 28-015. In addition at that time certain problems were pointed out in the ability to achieve compliance with other sections of the rules contained in OAR Chapter 340, Section 23-010 relating to open burning. Several interdepartmental meetings have been held and consideration given to viewpoints presented from all areas of the state.

Recommendation

It is the recommendation of the Director that a public hearing be authorized at the next Environmental Quality Commission meeting to be held December 20, 1974 for the purpose of taking public testimony prior to the adoption of proposed rule changes.

KESSLER R. CANNON
Director

LDB:nf 11-12-74



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ENVIRONMENTAL QUALITY COMMISSION

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Salem

RONALD M. SOMERS
The Dalles

KESSLER R. CANNON
Director

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. J, November 22, 1974 EQC Meeting

Request for a Public Hearing on the Modifications to the
Air Contaminant Discharge Permit of Weyerhaeuser Company,
Springfield, Kraft Pulp and Paper Mill, SIC 2631, File No. 20-8850

Background

The Weyerhaeuser Company pulp and paper Air Contaminant Discharge Permit was issued on August 2, 1973, and expires on July 1, 1975.

Following issuance of the permit in a letter dated October 29, 1973, the company proposed to control particulate emissions by installing an electrostatic precipitator on the lime kilns. The problem with this proposal was that the final compliance date extended beyond the regulatory compliance date. A public hearing was held on March 5, 1974 which considered the issuance of a variance. The hearing officer's recommendation to grant a variance was approved by the Commission on March 22, 1974. An addendum to the permit including the schedule of installation for the electrostatic precipitator and limits for the lime kiln, was issued at this time.

Because of permit wording inconsistent with regulatory language, the Department in a letter dated February 22, 1974 informed the company that total reduced sulfur emission limits would be applicable when the existing permit expired.



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Subsequently the Department received a "Notice of Construction and Application for Approval" for changes to the Number 3 recovery furnace black liquor oxidation system on July 2, 1973. Additional information on these changes was subsequently requested and received, September 3, 1974.

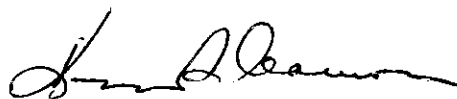
The Department reviewed the information and approved the proposal by letter dated October 4, 1974. The letter also advised of the intent to modify and enclosed three modified pages of the Air Contaminant Discharge Permit. The modified pages were also made current by eliminating dates which have been passed or otherwise become obsolete. The modification included the schedule that the company had submitted for completion of the recovery furnace project and a schedule for lime kiln total reduced sulfur emission compliance after the electrostatic precipitator is installed.

Following receipt of the letter and modified permit, the Weyerhaeuser Company met with representatives of the Department on October 18, 1974 to discuss objections to the modified permit. Because of these objections, the Department amended the modified permit and submitted the changes to the company by telephone.

The initial proposed modified permit and/or changes were not acceptable to the company and Weyerhaeuser requested a hearing by letter dated October 23, 1974.

Director's Recommendation

It is recommended that authorization to hold a public hearing on the proposed modifications to the Weyerhaeuser Company Air Contaminant Discharge Permit be granted.



KESSLER R. CANNON
Director

CRC:h

11/13/74



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KESSLER R. CANNON
Director

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. K, November 22, 1974

Proposed Hazardous Waste Disposal Site License for
Chem-Nuclear Systems, Inc.

BACKGROUND

As the Commission recalls, the Department presented a staff report and recommendations concerning the issuance of a license to Chem-Nuclear Systems, Inc. at the October 25, 1974 Commission meeting. The 14 day waiting period required by the Department's rules has elapsed and the Commission should now be in a position to reach a decision on whether or not to issue the proposed license. The Department has received no additional comments on the proposed license during the 14 day period, except for verbal comments from AEC that were forwarded to the Commission by memorandum from the Director on November 5, 1974. A copy of that memorandum is attached for reference. It should be noted also that the Department's rules (OAR 340, 62-036(6)) afford the license applicant an opportunity for hearing if the Commission refuses to issue the proposed license.

DIRECTOR'S RECOMMENDATION

The Director recommends that the Commission make its decision at the November 22, 1974 meeting on the issuance of the proposed license for Chem-Nuclear, Inc. It is further recommended that the Commission authorize the Director to formally notify Chem-Nuclear of the Commission's decision and of the applicant's right for a hearing if the license is refused.

KESSLER R. CANNON
Director

PHW:mm
11/8/74

Attachment (1): Memo to Environmental Quality Commission



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State of Oregon

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

To: Environmental Quality Commission
cc: Pat Wicks

From: Kess

Subject: AEC Non-proliferation policy

Date: November 5, 1974

The issue of whether or not the AEC has a non-proliferation policy has been raised at several hearings on the Chem-Nuclear license application. The AEC responded 11/5/74. Mr. G.W. Kerr, Chief, Agreements and Exports Branch, AEC, Washington, D.C., called, and related the following:

1. The AEC does not have a non-proliferation policy, and therefore cannot supply a letter or outline of the policy.
2. The AEC has recommended that individual states, in looking at the ramifications of applications for licenses for storage disposal, and burial of wastes, consider the issues of non-proliferation.
3. The AEC feels that a cost-benefit analysis of a given site and operation is a matter which would greatly assist in determining a site and application.
4. The AEC itself has not undertaken such a cost-benefit analysis, but does have personnel available to help states and would respond favorably if asked.
5. The procedure AEC would prefer to be followed, would be for the applicant with state concurrence, offering to undertake a cost-benefit analysis, and the AEC would then provide assistance.

MINUTES OF THE SIXTY-THIRD MEETING

of the

OREGON ENVIRONMENTAL QUALITY COMMISSION

November 22, 1974

Public notice having been given to the news media, other interested persons and the Commission members as required by law, the sixty-third meeting of the Oregon Environmental Quality Commission was called to order by the Chairman at 9 a.m. on Friday, November 22, 1974, in Room 309 State Capitol, Salem, Oregon.

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

The Department was represented by Director Kessler R. Cannon; Deputy Director Ronald L. Myles; Assistant Directors Frederick M. Bolton (Enforcement), Wayne Hanson (Air Quality), Harold L. Sawyer (Water Quality), and Kenneth H. Spies, (Land Quality); Regional Administrators Verner J. Adkison (Midwest), Richard P. Reiter (Southwest), and E. Jack Weathersbee (Northwest); staff members John E. Core, Dr. Robert L. Gay, John F. Kowalczyk, Harold M. Patterson, Ernest A. Schmidt, Barbara J. Seymour, Shirley G. Shay, Fredric A. Skirvin, Paul M. Stolpman, Richard L. Vogt, Jr., Dr. Warren C. Westgarth, Patrick H. Wicks; and Chief Counsel Raymond P. Underwood.

MINUTES OF THE OCTOBER 25, 1974 COMMISSION MEETING

Dr. Crothers asked that an addition be made to the October 25th minutes to include in Mr. Wayne Kuhn's testimony on the proposed interim policy for the Portland metropolitan area, Mr. Kuhn's statement that business would gladly absorb the cost of the low-sulfur residual fuel proposed for production by CIRI.

With that addition, it was MOVED by Mr. Somers, seconded by Dr. Crothers and carried to approve the minutes of the October 25, 1974 Commission meeting, held in Portland.

PROGRAM ACTIVITY REPORT FOR THE MONTH OF OCTOBER 1974

It was MOVED by Mr. Somers, seconded by Dr. Phinney and carried to give confirming approval to staff actions, as reported by Mr. Myles, regarding the 136 domestic sewage, 24 industrial waste, 29 air quality control, and ten solid waste management projects:

Water Quality Control - Water Quality Division (76)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10- 1-74	Springfield	Gateway Park, 3rd Addition	Prov. app.
10- 1-74	Green S.D.	Poteet sewer project	Prov. app.
10- 1-74	Eugene	Storey Blvd. sewer extension	Prov. app.
10- 1-74	NTCSA	C.O. #B-6, Sch. IV sewers	Approved
10- 2-74	Bly S.D.	C.O. #2 and 3 - STP project	Approved
10- 3-74	Sunriver	Mountain Village West No. II sewers	Prov. app.
10- 3-74	Grants Pass	C.O. #1 thru 10 - STP contract	Approved
10- 3-74	Milwaukie	C.O. #4 - Milwaukie int. project	Approved
10- 4-74	Veneta	Pioneer Park and Hunter Court sewers	Prov. app.
10- 4-74	Florence	20th Street sewer extension	Prov. app.
10- 4-74	Florence	Rhododendron Drive sewer	Prov. app.
10- 8-74	Scio	Pump Station relocation project	Prov. app.
10- 8-74	Odell S.D.	Lenz Road sewer system expansion	Prov. app.
10- 9-74	Bly S.D.	Mill Lunchroom sewer extension	Prov. app.
10- 9-74	Bend	Addenda Nos. 3 and 4 - grit works project	Approved
10-10-74	Sunriver	Sky Park Addition sewers	Prov. app.
10-11-74	Ashland	Revised Plans - Grandview Drive sewer	Prov. app.
10-11-74	Corvallis	Edgewood Park Estates, 2nd Addition sewers	Prov. app.
10-14-74	Portland	Gertz-Schmeer sewer system	Prov. app.
10-14-74	Tri-City S.D.	Phase 5 - sewer improvements	Prov. app.
10-15-74	Bly S.D.	C.O. #1 and 2, Schedule B	Approved
10-15-74	Arlington	C.O. #1 STP project	Approved
10-15-74	Astoria	Schedules A, B and C - 10 change orders	Approved
10-15-74	Eugene	Willagillespie Area sewers	Prov. app.
10-15-74	Seneca	C.O. #2 - sewage lagoon project	Approved
10-15-74	Black Butte Ranch	Pump Station No. 9	Prov. app.
10-15-74	Bend	Canyon Park, 1st Addn. sewers	Prov. app.
10-16-74	Metolius	Addenda Nos. 1 and 2 - sewerage project	Approved
10-17-74	Ontario	City Water Plant Sewer	Prov. app.
10-17-74	Tri-City	Addendum No. 1 - Phase V sewers	Prov. app.
10-18-74	Rogue River	Woodville Heights Subdivision sewers	Prov. app.
10-18-74	Lake County	Weyerhaeuser - Camp 9 - 0.8 acre non-overflow sewage lagoon	Prov. app.
10-18-74	N. Umpqua S.D.	Amacher Park sewers	Prov. app.
10-22-74	BCVSA	First Street and Orchard Home Drive sewers	Prov. app.

Water Quality Control - Water Quality Division (continued)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10-22-74	Gold Beach	11th Street sewer	Prov. app.
10-25-74	Central Point	Scenic Village Subdivision sewers	Prov. app.
10-25-74	Sutherlin	Orval Allen Property sewer extension	Prov. app.
10-28-74	Forest Grove	C.O. #2 STP project	Approved
10-28-74	Coos Bay	Sewer inspection and sealing - Phase 2	Prov. app.
10-28-74	Portland	C.O. #8 - STP project	Approved
10-28-74	BCVSA	White City - Cascade Village #16 sewers	Prov. app.
10-30-74	Warrenton	Hendrickson Mobile Home Park	Prov. app.
10-30-74	Astoria	C.O. #15 - Schedule A	Approved
10-30-74	Josephine County	Harbeck-Fruitdale; Brandy Lane and Fixen-Hansen sewers	Prov. app.
10-31-74	NTCSA	C.O. B-7 and B-8, Schedule IV sewerage project	Approved
10-31-74	Grants Pass	C.O. #11 - 14 - STP project	Approved

Water Quality Control - Northwest Region (60)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10- 3-74	West Linn	Portland Avenue L.I.D. sanitary sewers	Prov. app.
10- 3-74	Tualatin	Western Metro sewer extension (west of 65th Avenue)	Prov. app.
10- 3-74	Troutdale	Sanitary force main connection to a city manhole	Prov. app.
10- 3-74	Gresham	Casa-De-Lass sanitary sewers	Prov. app.
10- 4-74	Lake Oswego (Tryon)	Revised Forest Glen Subdivision sanitary sewers	Prov. app.
10- 8-74	Tualatin	Conrad veneer property sanitary sewers	Prov. app.
10 -9-74	Turner	A Sewerage Plan Report for Turner	Pending
10-14-74	Portland N.	Gertz-Schmeer sewerage system including lift stations, wastewater pump station and sanitary sewers	Prov. app.
10-14-74	CCSD #1 (Gladstone)	Monte Carlo Heights Subdivision sanitary sewer	Prov. app.
10-18-74	Salem (Willow and E. Salem Sewer and Drainage District 1)	Mackel Construction Company shopping center sanitary sewer at Silverton Road and Lancaster Drive	Prov. app.
10-18-74	Canby	N. Juniper Street and NE. 1st Ave. sanitary sewers	Prov. app.
10-22-74	Gresham	Gresham Clinic sanitary sewers	Prov. app.
10-22-74	Gresham	Camelot Plat 3 Subdivision sanitary sewers	Prov. app.
10-22-74	USA (Aloha)	Tanasbrook Development Neighborhood "C", sanitary sewer line C-1 revision, sanitary sewer line C-2	Prov. app.

Water Quality Control - Northwest Region (cont)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10-22-74	Independence	Independence Airpark final phase of 84 lots sanitary sewers	Prov. app.
10-23-74	West Linn	Hidden Springs Ranch No. 2 sanitary sewers	Prov. app.
10-24-74	St. Helens	Kaiser Gypsum Co., Inc., sanitary sewage disposal modifications	Prov. app.
10-25-74	USA (Durham)	Preliminary plans for Cedar Hills trunk sewer	Prov. app.
10-25-74	Twin Rocks S.D.	Stark Street sanitary sewer extension lots E-5 and E-5-1	Prov. app.
10-28-74	USA (Somerset West)	Somerset West Commercial Center sanitary sewer	Prov. app.
10-28-74	USA (Forest Grove)	Forest Grove STP C.O. #2	Prov. app.
10-29-74	Portland S.W.	S.W. Fairvale Court north of S.W. Pendleton Street sanitary sewer	Prov. app.
10-31-74	Tualatin	Revised Shawnee Plains sanitary sewers	Pending
10-31-74	Portland	S.E. Harney Street sanitary sewers	Pending
10-31-74	USA (Aloha)	Ray Sullivan sanitary sewer extension	Pending
10-31-74	USA (Beaverton)	Carolwood I sanitary sewers	Pending
10-31-74	USA (Aloha)	CO-JO No. 2 sanitary sewers	Pending
10-31-74	USA (Aloha)	Hyland Hills Center - Phase 1 construction sanitary sewers	Pending

Water Quality Control - Industrial Projects - Water Pollution Control Division (2)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10- 3-74	Ontario	Ore-Ida Foods wastewater control facilities	Prov. app.
10-21-74	Wasco	T and H Farms animal waste facilities	Prov. app.

Water Quality Control - Industrial Projects - Northwest Region (22)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10- 1-74	Yamhill County	Austin Warner animal waste disposal system holding tank	Approved
10- 1-74	Tillamook County	Joe Davis animal waste disposal system holding tank	Approved
10- 2-74	Tillamook County	Gary Manning animal waste disposal system holding tank	Approved
10- 3-74	Tillamook County	William Gates animal waste disposal system holding tank	Approved

Water Quality Control - Industrial Projects - Northwest Region (cont)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10- 3-74	Yamhill County	<u>Cascade Steel</u> wastewater control facilities modification	Approved
10- 3-74	Columbia County	<u>Ernest Obermeyer</u> animal waste disposal system holding tank	Approved
10- 4-74	Columbia County	<u>Francis Wright</u> animal waste disposal system holding tank	Approved
10- 4-74	Clackamas County	<u>Ted Wilson</u> animal waste disposal system holding tank	Approved
10- 4-74	Columbia County	<u>Ross Winans</u> animal waste disposal system holding tank	Approved
10- 4-74	Columbia County	<u>Melvin Kelley</u> animal waste disposal system holding tank	Approved
10- 7-74	Portland	<u>Pennwalt Corp.</u> asbestos settling ponds	Pending
10- 7-74	Tillamook County	<u>James Trent</u> animal waste disposal system holding tank	Approved
10- 7-74	Tillamook County	<u>Hugh Skarda</u> animal waste disposal system holding tank	Approved
10- 8-74	Washington County	<u>Gary Duyck</u> animal waste disposal system holding tank	Approved
10- 8-74	Washington County	<u>Robert Vandehey</u> animal waste disposal system holding tank	Approved
10- 8-74	Washington County	<u>Louis Hillecke</u> animal waste disposal system holding tank	Approved
10-17-74	Portland	<u>Bird and Son</u> study for recirculating cooling water	Approved
10-17-74	Portland	<u>Chipman Chemical</u> Rhodia Defuser	Approved
10-21-74	Columbia County	<u>Ronald W. Bone</u> animal waste disposal system holding tank	Approved
10-23-74	Willamina	<u>U.S. Plywood</u> water pollution abatement modification	Approved
10-29-74	Tillamook County	<u>Daryl Johnston</u> animal waste disposal system holding tank	Approved

Air Quality Control - Air Quality Control Division (8)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10- 4-74	Portland	<u>Tri-Met Employee Parking</u> 100-space parking facility	Req. add. info.
10- 9-74	Beaverton	<u>Hyland Hills Shopping Center</u> 471-space parking facility	Req. add. info.
10-10-74	Portland	<u>Presbyterian Church of Laurelhurst</u> 68-space parking facility	Cond. app.
10-10-74	Beaverton	<u>Payless Distribution Center</u> 156-space parking facility	Cond. app.
10-18-74	Springfield	<u>Carrow's Restaurant</u> 67-space parking facility	Cond. app.
10-21-74	Beaverton	<u>Tektronix, Inc.</u> modification to existing parking facilities	Cond. app.
10-22-74	Portland	<u>Burger King Restaurant</u> 57-space parking facility	Req. add. info.
10-25-74	Multnomah County	<u>Sommerwood</u> 588-space residential parking facility	Req. add. info.

Air Quality Control - Northwest Region (19)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10- 1-74	Yamhill County	<u>Publishers Paper, Newberg</u> new digester	Drafting letter of approval
10- 4-74	Multnomah County	<u>Rhodia-Chipman Division</u> dichlorophenol distillation expansion	Processing
10- 7-74	Multnomah County	<u>Medford Corporation</u> greenwood chip storage and distribution center	Processing
10- 8-74	Multnomah County	<u>Rich Manufacturing</u> baghouse	Approved
10- 8-74	Multnomah County	<u>Chamberlain's Pet Crematorium</u> cremation incinerator	Proposed permit being drafted
10-10-74	Washington County	<u>Western Foundry</u> control of furnace, sand handling, cleaning room	Approved
10-10-74	Multnomah County	<u>Ross Island Sand and Gravel</u> concrete batch plant	Approved
10-11-74	Clackamas County	<u>Oregon Portland Cement</u> paving of vehicular traffic areas	Drafting approval letters
10-11-74	Columbia County	<u>Charter Energy Company</u> new oil refinery	Evaluating trade- offs and effect on ambient air quality
10-15-74	Multnomah County	<u>ESCO - Plant #3</u> new 4-ton induction furnace	Reviewing emission cal- culations
10-16-74	Multnomah County	<u>Oregon Steel Mills, Front Street</u> baghouse with canopy	Awaiting info on hooding design and capture efficiency

Air Quality Control - Northwest Region (cont)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10-18-74	Multnomah County	<u>Portland Steel Mills</u> new steel mills	Drafting proposed permit
10-24-74	Multnomah County	<u>J. Arlie Bryant, Inc.</u> portable rock crusher	Proposed permit issued
10-28-74	Yamhill County	<u>Publishers Paper, Newberg</u> new hog fuel boiler	Approved
10-28-74	Multnomah County	<u>Columbia Independent Refinery, Inc.</u> oil refinery	Evaluating trade-off benefits
10-29-74	Multnomah County	<u>Layton Funeral Home</u> cremation incinerator	Evaluating source test results
10-29-74	Multnomah County	<u>Oregon Steel Mills, Rivergate</u> pellet metallizing	Reviewing emmissions calculations
10-29-74	Multnomah County	<u>Teeples & Thatcher, Inc.</u> sawdust cyclones	Reviewing request to temporarily use existing cyclone while installing bag filter to exhaust inside building
10-31-74	Multnomah County	<u>Ross Island Sand and Gravel</u> concrete batch plant	Approved

Land Quality - Solid Waste Management Division (7)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10- 2-74	Marion County	<u>Woodburn Landfill</u> existing site, closure plan	Approved
10- 4-74	Benton County	<u>Coffin Butte Landfill</u> existing domestic site, operational plans	Prov. app.
10-14-74	Douglas County	<u>Camas Valley Transfer Station</u> new transfer station, construction and operational plans	Approved
10-18-74	Coos County	<u>Hempstead Sludge Lagoon</u> existing domestic site, construction plan	Approved
10-22-74	Curry County	<u>Agness Transfer Station</u> new transfer station, construction plans	Approved
10-23-74	Coos County	<u>Joe Ney Disposal Site</u> existing domestic site, operational plan	Prov. app.
10-24-74	Linn County	<u>Albany Landfill</u> existing domestic site, closure plan	Approved

Land Quality - Northwest Region (3)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10- 2-74	Marion County	<u>Woodburn Sanitary Landfill</u> new garbage landfill, operational plan	Approved

Land Quality - Northwest Region (cont)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
10-16-74	Multnomah County	<u>Resource Recovery ByProducts</u> new transfer station, operational plan	Approved
10-28-74	Clatsop County	<u>Crown Zellerbach - Lewis and</u> <u>Clark Log Sorting Yard</u> expansion of existing wood waste landfill, operational plan	Approved

TAX CREDIT APPLICATIONS

Mr. Myles presented the Department's review of the 11 tax credit applications submitted for this meeting and the tax credit application of Weyerhaeuser Company, Springfield (T-580) deferred from the October 25th meeting. With respect to the Weyerhaeuser application, Mr. Somers informed the Commission of the telephone call he received on November 15th from Mr. Jerry Harper, Environmental Manager of Weyerhaeuser's Oregon activities (Springfield). Mr. Harper subsequently sent Mr. Somers a package of materials pertaining to the tax credit application which Mr. Somers made a part of the permanent record of the meeting. In addition, Mr. Somers asked for confirmation that the furnace was constructed at the direction of the Department. Mr. Patterson of the Air Quality Division stated that Weyerhaeuser did install the furnace to meet departmental requirements.

Discussion followed on whether or not there was a net gain to the company from the new furnace since, as Mr. Somers pointed out, the Legislature directed the Commission to deduct from tax credits the benefits received by the applicants. Both Mr. Patterson and Mr. Allan Coleman, Technical Director at the Weyerhaeuser Springfield kraft mill, stressed that all kraft mills burn their liquor for fuel, as an economic necessity, in order to recover the chemicals. The furnace for which the tax credit application was made performs the same function as the furnaces it replaced but in addition better controls the odorous emissions resulting from burning kraft liquor. Mr. Harper pointed out that when the furnace was installed in 1969, it was the first of its kind in the area.

Dr. Crothers asked Mr. Harper if the furnace would have been purchased if there had not been a problem of pollution. Both Weyerhaeuser representatives replied negatively.

Mr. Somers maintained that the Commission had "to draw a line on furnaces that go into plants" and directed the staff to develop a formula for evaluating them in terms of the portion that goes into heating and the portion that goes into pollution control.

It was MOVED by Dr. Crothers, seconded by Mr. Somers and carried to approve the issuance of tax credit certificates for the following applicants for the pollution control facilities described in the following applications and bearing the costs as listed with 80 percent or more of the cost in each case being allocated to pollution control:

<u>App. No.</u>	<u>Applicant</u>	<u>Claimed Cost</u>
T-580	Weyerhaeuser Company, Paperboard Manufacturing	\$8,511.981.00
T-571	Kaiser Gypsum Company, Inc.	71,324.00
T-572	Kaiser Gypsum Company, Inc.	67,283.00
T-582	Timber Products	102,924.22
T-586	Georgia-Pacific Corporation	50,081.00
T-589	Georgia-Pacific Corporation, Toledo Division	40,605.00
T-597	Hanna Nickel Smelting Company	183,519.00
T-598	Hanna Nickel Smelting Company	2,513.639.00
T-599	Hanna Nickel Smelting Company	18,620.00
T-600	Hanna Nickel Smelting Company	21,414.00
T-601	Hanna Nickel Smelting Company	72,497.00

It was also the Director's recommendation to deny issuance of a tax credit certificate to Portland Mobile Home Court (T-547 with a claimed cost of \$25,182.00) and the Commission concurred with the recommendation.

PRESENTATION OF RENEWAL CUP PLAQUES

Renewal plaques for Oregon CUP recipients, American Can Company and Publishers Paper Company, for the calendar year 1975, were presented by Chairman McPhillips to Mr. George Wagner and Mr. Jim James of American Can, and Mr. Pete Schnell of Publishers.

Mr. McPhillips said that Pacific Northwest Bell was underwriting the cost of the Oregon CUP awards for 1974.

STATUS REPORT ON PROPOSED REFINERIES AND PROPOSED COMPANION FUELS USE POLICY

Mr. Kowalczyk said that three environmental impact statements had been received two weeks ago from Cascade Energy (Rainier) for a 30,000 barrel/day refinery, Charter Oil (Columbia County) for a 52,000 barrel/day refinery,

and Columbia Independent Refinery, Inc. (Portland) for a 100,000 barrel/day refinery. The status report to the Commission was a preliminary analysis of these documents.

Mr. Kowalczyk presented the staff report which was distributed to the Commission at the meeting. Mr. Kowalczyk explained that Table II was intended to illustrate potential demands for fuel oil to supply the operations listed and that these potential demands would probably exceed typical yearly projections for the future because of increased interruptible natural gas service.

Following the reading of the staff report, Dr. Phinney asked whether CIRI's possible difficulty in meeting ambient air criteria was projected with or without the benefit of tradeoffs. Mr. Kowalczyk replied that it was projected with tradeoffs included, but that at the 100,000 barrel/day capacity, the company possibly could impact on the downtown Portland area in terms of the 25 percent incremental increase in the margin of safety between the ambient standards and the ambient projections.

Mr. McPhillips called on witnesses who indicated they wished to comment on the staff report.

Mr. Roger Ulveling of Columbia Independent Refinery, said he had no major objections to the staff report and did not wish to comment at this time.

Dr. Wayne Kuhn, representing the Portland Chamber of Commerce, said he was pleased with the staff report and the proposed time table because "we are certainly interested in going forward with sound developments." He had two observations: He suggested that the ability of any of the three companies to financially and technically carry out their proposals should be included in the report; and he said he was acutely aware that there is a great deal of work underway throughout the petroleum industry on the question of sulfur reduction and that he is confident that by the second phase of expansion there will be sound technical methods for further reducing sulfur in fuels. He said the Chamber of Commerce of Portland is on record for supporting methods of reducing pollution and "very much in favor" of the work that is being done.

Mr. Herbert Bowerman of Robert Brown Associates (Carson, California), representing Charter Oil Company, said his company has been working on the

environmental assessment for Charter. With respect to the financial and technical viability of the company, referred to by Mr. Kuhn, Mr. Bowerman said that Charter is a very large company and has the expertise to make the proposed project work. He said the proposed refinery would be a new source of pollutants, but that the diesel fuel produced at the refinery and used for its operation would produce the lowest possible emissions. This diesel fuel would be made from North Slope crude oil expected to be available within three years which would coincide with the projected completion of the refinery at St. Helens.

Mr. McPhillips said that a letter to the Commission had been received from Mr. Lloyd Anderson, Executive Director of the Port of Portland, urging the Commission to expedite the issuance of a draft permit for Columbia Independent Refinery. (A copy of Mr. Anderson's letter has been made a part of the permanent record of the meeting.)

There were no further witnesses and no action was required by the Commission.

PROPOSED AMBIENT AIR STANDARD FOR LEAD

It was MOVED by Mr. Somers and seconded by Mrs. Hallock to dispense with the reading of the staff report and proceed directly to the Director's Recommendation. Mr. Cannon suggested that the Conclusions as well as the Director's Recommendation be read. Mr. Somers with the concurrence of Mrs. Hallock amended his motion accordingly. The motion was then voted upon and carried.

Mr. Johnson read the Conclusions and presented the Director's Recommendation, given below:

It is the recommendation of the Director that the following standard be adopted for concentrations of lead in the ambient air:

Standard: The lead concentration measured at any sampling station, using sampling and analytical methods on file with the Department, shall not exceed 5.0 ug/m³ as an arithmetic average concentration of all samples collected during any one calendar month period. This standard if adopted shall become section 31-055 of the Oregon Administrative Rules. (Under-scored material added at the meeting.)

For purposes of discussion, Mr. Somers MOVED that the Director's recommendation be adopted; seconded by Dr. Phinney.

Mr. Somers commented on a letter from Mr. Charles J. Merten, Esq., on behalf of several petitioners, dated November 19, 1974, which was sent to each member of the Commission and made a part of the permanent record of the meeting, in which Mr. Merten proposed a standard of 2.0 ug/m^3 . He expressed dissatisfaction with the Department's proposed standard on the basis that it was not stringent enough. Mr. Somers asked Dr. Crothers about the human body's capacity to rid itself of lead accumulation. Dr. Crothers said that the body gets rid of lead very slowly but that it can be removed. He added that by far the most common source of lead poisoning outside of industry was lead-based paint, which is no longer used. He noted that the possibility of lead poisoning was further reduced by the requirement of lead-free gasoline for new model cars. He added that there are no recorded cases of lead poisoning in Oregon, and that the existing ambient lead levels throughout the state were well below 5.0 ug/m^3 except near freeways.

Commissioners discussed the possibility of a lower standard. Mrs. Hallock asked if 3.0 ug/m^3 had ever been exceeded. Mr. Johnson replied that only one monthly average overall on all the sampling done in the state had exceeded 3.0 ug/m^3 , and that was at a downtown Portland sampling station. He added that 5.0 ug/m^3 was the lowest level the Department could reasonably defend as contributing to a health hazard.

Mr. Somers asked whether the Commission would unduly restrict economic growth in the state if a standard of 3.0 ug/m^3 were adopted. Mr. Johnson replied that in the case of industries, restrictions would come in the permit conditions. Dr. Phinney observed then that restrictions in highway construction seemed necessary.

Dr. Crothers MOVED that the standard be amended to 4.0 ug/m^3 ; seconded by Mr. Somers.

Mrs. Hallock MOVED that the standard be amended to 3.0 ug/m^3 ; seconded by Dr. Phinney.

Voting on the latter amendment first, Mrs. Hallock and Dr. Phinney voted in favor, Dr. Crothers and Mr. Somers against. The Chairman broke the tie by voting in favor of the amendment.

The main motion was then voted upon and carried.

OSPIRG/NEDC PETITION ON SIGNIFICANT DETERIORATION OF AIR QUALITY

Mr. Somers MOVED to dispense with the reading of the staff report and to have Mr. Patterson comment on the petition submitted by the Oregon Student Public Interest Research Group (OSPIRG) and the Northwest Environmental Defense Center (NEDC) and respond to questions. There was no objection and the Chairman said the request would be granted as a matter of procedure. Mr. Patterson read the "Comments" portion of the staff report and discussion followed.

Mr. Patterson also noted that the Department had received a copy of a news release dated November 15, 1974, issued by the Sierra Club Legal Defense Fund, Inc., to the effect that the Sierra Club would resume its lawsuit against the EPA unless that agency enforces the Clean Air Act.

The Chairman called for public testimony, stating that the time limit for discussion of this agenda item would be held to an hour.

John S. Ullman, Ph.D., OSPIRG Staff Scientist, submitted a prepared statement which he read into the record (a copy has been attached to the permanent record of the meeting). In summary, Dr. Ullman's testimony was directed to OSPIRG's assertion "that Oregon can and should move immediately to prevent further deterioration of the state's clean air," and offered the following points in support of this view: the importance of protecting Oregon's scenic areas in order to prevent pollution levels approaching the federal secondary standard; the necessity for Oregon to adopt standards because "the EPA will soon adopt extremely weak regulations" which will be challenged in court by the Sierra Club; the insufficiency of present state regulations to protect clean air; the attraction of clean industry and the stimulation for developing clean energy sources that the maintenance of clean air should provide. Dr. Ullman then summarized the major features of the rules proposed by OSPIRG and responded to questions from the Commission members. He said the proposed rules were drafted by himself and

Neil Robblee of OSPIRG and were based on DEQ's statement to the EPA made in San Francisco in October 1973, and further that no other state has adopted standards. He said that the proposed rules represent a basic plan, that the specific limitations in the rules would have to be worked out, but that OSPIRG liked their basic idea of increment limitations and emissions ceilings as stated in their proposed rules.

Mr. Somers said that many people are concerned with this problem which affects the entire state and thought all interested parties should sit down, work out their differences, and submit proposed rules that would be subject to a public hearing. Dr. Ullman agreed that such a discussion would be worthwhile.

Mr. Thomas C. Donaca, representing the Air Quality Committee of the Associated Oregon Industries, said he disagreed with the petitioner's contention that Oregon has not lived up to its responsibilities as outlined in ORS 468.305, and that the proposed rules are aimed at further controlling the already controlled sources which have shown a decrease in particulate and sulfur dioxide emission levels. Mr. Donaca said that other area sources have continued to grow and the rules proposed would not alleviate the air quality problems they create.

Mr. Somers noted that the Commission does not have the authority to control all the factors, referred to by Mr. Donaca, which contribute to significant deterioration of the air.

Testimony had been submitted to the Commission prior to the meeting by Ms. Norma Jean Germond representing The League of Women Voters of Oregon, and by Mrs. Mary Ann Donnell, President of the Oregon Environmental Council (copies of which have been made a part of the permanent record). They had previously indicated they wished to testify at the meeting but instead asked that they be permitted to relinquish their time to Mr. Thomas Guilbert.

Mr. Guilbert stated that he concurred with Mr. Underwood's letter and with Mr. Donaca's statement that the Department had complied with ORS 468.305 but that compliance "doesn't exhaust the Commission's responsibility." He said that responsibility comes under federal law as interpreted by three levels of the federal courts in *Sierra Club vs. Ruckelshaus*.

Mr. Guilbert said that Section 110 of the Federal Clean Air Act, which requires the states to formulate implementation plans, has been interpreted to include the purposes clause of the Clean Air Act as set forth in Sierra Club vs. Ruckelshaus. Although the EPA approved Oregon's Clean Air Act Implementation Plan in May of 1972, it disapproved it in November 1972; that disapproval is still law. Oregon along with all other states is in violation of the federal law. Mr. Guilbert said that if the Commission wished to be in compliance with federal law, it should adopt rules on significant deterioration.

Dr. Crothers then MOVED that the petition be denied and further, that the Department be instructed to initiate the rulemaking process with due haste. The motion was seconded by Dr. Phinney and carried.

Other testimony on this matter, received by mail and made a part of the permanent record, included statements from Mr. Bruce Holser, Oregon State University; Mr. and Mrs. James Sloss, Portland; Pacific Power and Light Company, Portland; Northwest Pulp and Paper Association, Seattle; Portland Chamber of Commerce; Mr. Dan Wilson, Albany; and Dr. Robert Gay, Portland.

CHEM-NUCLEAR LICENSE APPLICATION

Mr. Wicks presented the staff memorandum report with the following recommendation of the Director:

The Director recommends that the Commission make its decision at the November 22, 1974 meeting on the issuance of the proposed license for Chem-Nuclear, Inc. It is further recommended that the Commission authorize the Director to formally notify Chem-Nuclear of the Commission's decision and of the applicant's right for a hearing if the license is refused.

Mr. John Mosser, a Portland attorney representing Chem-Nuclear, Inc., requested to be heard. He spoke to the question of whether there should be nuclear wastes, noting that this decision was first approached by the Commission two years ago. At that time the Commission said it would prefer not to have nuclear wastes but would consider them if they were economically necessary to make a viable site. He said that on November 26, 1973, the Commission adopted the Director's recommendation that nuclear wastes be permitted since they were necessary to make an economically viable site. Mr. Mosser said that if these earlier decisions were reversed, considerable time would have been expended for no purpose, since the Commission would be no closer to finding a site for environmentally hazardous wastes that it was several years ago when the law was passed.

Mr. Mosser conceded that nuclear wastes are not necessary in the sense that there is another site close by. But he added that the State of Oregon requires a different method of handling chemicals than any other state, and that in order to carry some of the overhead of the excessive costs of handling chemicals, Chem-Nuclear has said that a minimum of nuclear wastes was necessary. He said no environmental reason for refusing the inclusion of nuclear wastes has been shown. The company has proposed storing low-level radioactive wastes which deteriorate over time. The chemical life of hazardous chemical wastes, on the other hand, is infinite. Over time, the chemical wastes are a greater problem than the nuclear wastes.

Mr. Mosser concluded by stating that Chem-Nuclear "has tried to work with this Commission and the DEQ staff to meet what we understood was Oregon's desire for the highest type of operation for both nuclear and chemical wastes," and that the only way to operate the site to Oregon's standards would be to have some nuclear wastes permitted.

Mr. Jonathan Newman, a Portland attorney representing Nuclear Engineering, Inc., said he was available for questions, that his client's position had been clearly stated, and that there was no need for the site proposed by Chem-Nuclear.

Mrs. Hallock noted that the November 26th meeting referred to by Mr. Mosser, no commitment was agreed to by the Commission to permit radioactive wastes at the Chem-Nuclear site. Mr. Mosser concurred, stating that the Commission had not adopted a policy on that matter.

Dr. Phinney MOVED that the permit be amended to exclude the storage of radioactive wastes; seconded by Mrs. Hallock and carried. Dr. Crothers voted against the motion, saying that he was essentially voting against the exclusion of radioactive wastes.

Mr. McPhillips had to leave the meeting and Vice Chairman Crothers presided for the remainder of the afternoon.

Mr. Cannon said the staff would work with the applicant and submit a proposal to the Commission as to the best means of handling "this very real problem." He said a site must be acquired and the Department would ask the Legislature for the necessary funds to acquire a site and finance its operation.

Mr. Mosser said his client could not operate a chemicals only site without subsidy.

Mr. Somers MOVED that the staff look into another site and seek assistance from the Legislature if it was needed.

Mr. Mosser said his company would be interested either in operating its site on a subsidized basis for chemicals, in selling it to another operator, or in selling it to the state if the state wanted to operate it. He said Chem-Nuclear would be glad to cooperate because "it's been our desire to get a site for the state and any other site is going to take two years of geologic and hydrologic studies before you can use it."

The Commission agreed to leave out the word "another" and Mr. Somers amended his motion to state that the staff be instructed to look into a site and seek assistance from the Legislature if it was needed. There was no objection, and it was so ordered by unanimous consent.

PROPOSED RULES FOR INDIRECT SOURCES

Mr. Somers MOVED to accept the recommendation of the Director that the Environmental Quality Commission repeal OAR, Chapter 340, sections 20-050 through 20-070 and adopt in lieu thereof Rules for Indirect Sources and Maintenance of Air Quality Standards, sections 20-100 through 20-135, dated November 12, 1974. The motion was seconded by Mrs. Hallock and discussion followed.

Dr. Crothers commented that the staff report indicated that 40 percent of the permit applications received by the Department were for small parking lots of less than 50 spaces but that those applications accounted for only 7 1/2 percent of all the parking spaces applied for in the Portland area. He objected to the 50-space minimum requirement for a permit and to the inclusion of residential and apartment house parking lots.

Mr. Vogt explained that permits are required for parking lots of 50 or more spaces. Although parking facilities of this size are not large enough for individual air quality evaluations for the purpose of determining their effect on the Implementation Plan and the effect on the ambient air quality,

they may, in the aggregate, have an effect on air quality. He added that the conditions required for parking facilities of this size encouraged utilization of mass transit and that departmental review tended to control the proliferation of parking in given areas.

The Vice Chairman called for public testimony on the matter.

Mr. Fred VanNatta, representing the Oregon State Home Builders Association, noted for the record that he had worked with the Mobile Home Parks Association as well. He opposed the proposed rules on the basis of their "substantial impact" on the cost of the residential housing they would affect. Copies of his testimony were distributed to the members and one has been made a part of the permanent record. His testimony contained several questions, the answers to which he had previously discussed with the staff, for the purpose of clarifying the intent of the rules.

Mr. VanNatta voiced several objections to the definition of "associated parking." He said the definition could be construed to include on-street parking and parking that is connected by a public way as well as exclusions presently provided for in the rules. He suggested the addition of the language "off-street area or space" which was language recently added to the definition of "parking space."

Mr. VanNatta also objected to the 50-space cut-off standard in or within five miles of metropolitan areas and with conditions proposed by the Department for inclusion in the permits. He said that the EPA did not intend that its proposed Indirect Source rules would apply to single family tracts, and that the EPA has proposed a 1,000 space cut-off, where the state has proposed 50.

In reply to Mr. Somers' question concerning the number of 1,000-space parking lots in Oregon, Mr. VanNatta replied that the staff report indicated that some 50 percent of the spaces staff has reviewed in the last two years are in parking lots of 1,000 or more. Mr. VanNatta also questioned whether parking areas in multi-family residential dwellings contributed significantly to the deterioration of the ambient air in the area.

Mr. Cannon stated that the entire Portland downtown plan was based upon the premise that cars do affect the ambient air quality.

Mr. VanNatta said that the limitation of parking in the downtown Portland area was one thing, but that he was opposed to such limitations within five miles of a metropolitan area, particularly at places of residence.

Mr. Cannon stated that the Department has been working to limit pollution in a known area and must be able to limit it in the proposed surrounding areas as well.

Mr. Bruce Anderson, an attorney from Eugene, representing the Oregon Members of International Council of Shopping Centers (I.C.S.C.), distributed copies of a letter he prepared and which he summarized (a copy of which has been made a part of the permanent record). He said there are three major issues of concern: (1) consistent opposition by a wide range of public and private organizations to a number of requirements in the regulations, especially the 50-space minimum, and the effect they would have on commercial facilities; (2) the expected delay in implementation of the federal Indirect Source regulations from January 1, 1975 to mid-1975, because of an awareness that the proposed regulations would have "a minimal effect on air quality even if they work optimunly [sic]"; (3) the analysis made by the National Academy of Sciences and the National Academy of Engineering, submitted to the Public Works Committee of the United States Senate "on the question of both the necessity and the effectiveness of other transportation controls, in particular indirect source controls, in place of, or in addition to, direct controls on the automobile."

Mr. Anderson objected to the minimum size of a facility for which a parking permit is required, noting that the DEQ proposed limits of 50 and 500, where applicable, and the EPA has proposed 1,000 and 2,000. He suggested 500 and 1,000. He asked the Commission not to apply the same figures to the rest of the state that have been applied to the Portland metropolitan area, noting that five miles outside Salem or Eugene is significantly different than five miles outside Portland.

Mr. Cannon said that if the federal government had some years ago done what it said it was going to do about the automobile, much of the present and proposed regulations would not be necessary. However, he said that the permit procedures are designed to see if there is some way to accommodate the automobile, which continues to be a major source of pollution, and still allow

developments to take place, at the same time meeting the standards in air quality "that we've committed ourselves to."

Mr. Anderson urged the Commission to carefully review the rules changes proposed by I.C.S.C. prior to adopting rules for the control of indirect sources, and asked that they not set regulations "that will drive small developers out and hurt the already hard hit construction industry."

Mr. Douglas Sowles, a member of the Environment Committee of Associated General Contractors, dealt with three specifics: (1) the requirement for estimating traffic in the tenth and twentieth years following completion of the facility--20-129(1)(a)--since it was not included in previous drafts nor mentioned in the public hearings; (2) clarification of the jurisdiction of the regional authorities; and (3) his objection to the 50-space minimum, preferring either 500 or 1,000.

Mr. Douglas Stevie, Senior Planner of the Oregon State Housing Division, distributed copies of a prepared statement which he read (a copy of which has been made a part of the permanent record). He spoke in opposition to the proposed rules, particularly sections 20-115(2)(a) and 20-130, pertaining to the inclusion of indirect sources in or within five miles of a municipality with a population of 50,000 or more, and to the issuance or denial of indirect source construction permits. He said these sections "will act to further shift the cost of general protection to lower income households by increasing overall housing costs."

Mr. Victor W. Shearer of Corvallis, President of the Mobile Home Parks Association and owner of Whispering Pines Mobile Lodge, objected to the inclusion in the permit requirements of mobile home parks in applicable areas. He said the regulations appear to be "unreasonable."

Mr. Ron Symons of Travelers Insurance Company (real estate loan division), Portland, objected to the 50-space minimum; the conditions for construction of an indirect source, as contained in the permit requirements; and the duration of the permit. He said that the Portland office of Travelers Insurance has provided mortgage loan money for over 30 shopping centers and other commercial properties, and one of their criteria is the economic viability of the facility in terms of good ingress and egress and adequate parking. He noted that

mortgage lenders usually require more spaces than the developer wants but which are often limited by the DEQ. He suggested that the minimum number of spaces for which a permit was required was too small but he did not offer a substitute figure.

Mr. Richard Hanson, Manager of Valley River Shopping Center in Eugene, expressed concern about the 50-space minimum, preferring that 50 be changed to 500 and 500 to 1,000. He said that shopping centers must work with transit authorities; but in response to a question from Dr. Crothers, stated that only about two percent of his shopping center's customers come by bus, although a bus arrives at the Center every 10 minutes. About 1,000 people visit the Center each week.

Mr. Glen Odell, consulting engineer from Portland, spoke in favor of the proposed rules. As a former staff employee of the DEQ, he said he was instrumental in drafting the parking and highway regulations two years ago. He said the staff initially wanted to get a handle on the automobile in a way the federal government was not and in a way in which land use control agencies refused to do. "DEQ's actions since that time have succeeded in a large measure if not in getting a handle on the automobile, at least in getting industries of all kinds and the general population at large to understand that the automobile is related to air pollution...."

He said that the staff has been reviewing 50-car parking facilities within five-mile limits of Salem, Eugene and Portland for the past 2 1/2 years and was "personally pleased" to see the staff undertake this revision of the regulations. He said the proposed rules form the options the DEQ has when it does approve parking facilities, and that these options have previously existed as staff guidelines. He said the regulations benefit the environment, applicants and industry, and that the requirement for master plan approval will help with regulating these indirect sources. Mr. Odell suggested that the minimum number of parking spaces in a facility for which a permit would be required could go to 100 "without hurting anything" although the staff seemed to think they could continue to handle the load with a 50-space minimum.

Mr. Odell said that good land use planning would eliminate the need for consideration of parking facilities in residential areas. In terms of

continued staff review of commercial facilities, Mr. Odell said he "couldn't be more supportive of it."

There were no other witnesses.

It was MOVED by Dr. Phinney and seconded by Mr. Somers to accept the Director's recommendation. Dr. Crothers called for a roll call vote. Voting in favor of the motion were Mrs. Hallock, Dr. Phinney and Mr. Somers; voting against the motion was Dr. Crothers who said the Department already has regulations to control indirect sources and further, that the minimum numbers for a permit were too small.

OPEN BURNING REGULATIONS--AUTHORIZATION FOR PUBLIC HEARING; and
WEYERHAEUSER COMPANY, SPRINGFIELD--REQUEST FOR PUBLIC HEARING

Action on these two agenda items was taken by a single motion made by Mr. Somers and seconded by Mrs. Hallock, to accept the Director's recommendations given below. There was no objection and it was so ordered by unanimous consent.

Open Burning Regulations, Authorization for Public Hearing:

It is the recommendation of the Director that a public hearing be authorized at the Environmental Quality Commission meeting to be held on January 24, 1974 [changed from December 20, 1974], for the purpose of taking public testimony prior to the adoption of proposed rule changes.

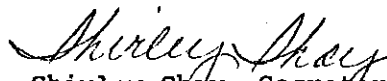
Weyerhaeuser Company Request for Public Hearing:

It is recommended that authorization to hold a public hearing on the proposed modifications to the Weyerhaeuser Company Air Contaminant Discharge Permit be granted.

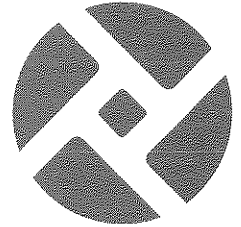
OTHER BUSINESS

Mr. Somers asked about the status of the Wah-Chang plant in Albany. Mr. Sawyer said a full report would be presented to the Commission at its meeting in Albany on December 20th.

There was no further business and the meeting was adjourned at 3:50 p.m.


Shirley Shay, Secretary
Environmental Quality Commission

November 21, 1974



B.A. McPhillips, Chairman
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Port of Portland

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COLUMBIA INDEPENDENT REFINERY INC. (CIRI)

The Environmental Quality Commission will be asked by the DEQ Staff at the November 22, 1974 EQC meeting to authorize the issuance of a draft air contaminant discharge permit for Columbia Independent Refinery, Inc. This authorization may require that a public hearing be held for the Columbia Independent Refinery, Inc. permit.

CIRI submitted its permit application on April 2, 1974. It is our understanding that all additional information requested by the DEQ staff has been provided and reviewed. The time delays in submitting additional information and processing this permit have been very costly to CIRI, both in terms of direct expenditures and increases in project costs due to inflation. The Port urges EQC's approval of the issuance of a draft permit and authorization for a public hearing so that a decision may be made on CIRI as expeditiously as possible.

The EQC has recently adopted an Interim Policy for approving Air Emission Sources. This policy addressed the criterion of air quality emission trade-offs. It is our belief that the concept of trade-offs as it applies to this refinery is valid. In order for trade-offs to be effective, your action is needed to adopt a clean fuels policy. The Port recommends that EQC also authorize a public hearing on the proposed clean fuels regulation.

I appreciate this opportunity to comment and will be contacting the EQC later to explain the reasons why Rivergate is the best overall site for this refinery.

Lloyd Anderson
Executive Director

P27L

MERTEN & SALTVEIT

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November 19, 1974

Environmental Quality Commission

RE: November 22, 1974 hearing:
Ambient Air Standard for Lead

Honorable Members of the Commission:

On behalf of the Petitioners in this matter, ENUF, CCA, OEC, STOP, Sierra Club (Columbia Chapter), Louis and Ruth Brent, Donald and Val Cobb, Clifford and Judi Allen, Jerry and Helen Virning, and Mike and Leslie Hoffman, I submit the following comments regarding the November 14, 1974 recommendations of the Department of Environmental Quality.

DEQ's position is that numerous lead studies, due to poor testing techniques, uncontrolled variables, and other factors, have failed to establish that an ambient air level of lead greater than two micrograms per cubic meter, or any particular level for that matter, is dangerous to health; that other states have adopted a standard of five; that state-wide testing in Oregon has established that a standard of five would not be exceeded; and, therefore, a standard of five should be adopted.

This reasoning, in our opinion, starts from a false premise and shows a callous disregard to public policy of this state and to the public good. It assumes that proponents of a standard ought to prove that a health hazard in fact exists, and, by reference to the fact that a standard of five would not be exceeded anywhere in the state, indicates that DEQ is not at all interested in having any lead standard to enforce.

No one argues that lead in the air we breathe has any beneficial effect. All concede that lead is a toxic substance. The only dispute is over how much is needed before human health is endangered. Under these circumstances, the burden of proof properly is on those opposing the Petitioner's proposed standard of two to establish that no significant portion of the population would face a risk to health by such levels. This has not been done for the simple reason that the sum total of all the studies conducted is inconclusive. Nevertheless, some of the studies indicate the need for a standard of two.

To quote the Oregon Legislature, "the Oregon goal for pure air quality is the achievement of an atmosphere with no detectable adverse effect from motor vehicle air pollution on health, safety, welfare and the quality of life and property." ORS 468.365(4).

Further, "the emission of pollutants from motor vehicles is a significant cause of air pollution in many portions of this state." ORS 368.365(1).

This Commission, itself, has designated freeways and expressways in urban areas as air contramination sources (340 OAR 20-050, 20-055), and requires the "highest and best practicable treatment and control" of pollutants from such sources which are constructed subsequent to June 1, 1970 (340 OAR 20-001).

The Federal Clean Air Act requires Oregon to pursue a nondegradation policy in relation to areas not now defiled by air pollutants. The right of the people of this state to expect and require that their servants will protect and maintain the purity of their air is a natural right inherent in the social compact itself.

The DEQ has recommended that all these policies be disregarded. Where relatively little lead now exists, DEQ would have you allow a 150 percent increase so that lead blood levels known to be dangerous will be present. It is not known by what reasoning the protectors of the public welfare arrived at such a conclusion. If air is clean and dangerless even from inconclusive studies?

DEQ, by its May 15, 1974 submission to this Commission (which, incidentally, recommended a standard of two), established that no area outside of Portland had a ambient lead level greater than or equal to two, and that only three sites in the Portland area exceeded two. (Table 3, 5/15/74 DEQ Report). Why, then, adopt a standard allowing a level of five to be generated? It would be different if lead were a neutral element, but, in fact, lead is toxic and of no beneficial use in the air. This being the case, there is no reason to allow an increase in the ambient level of the poison.

It should also be noted that DEQ has not outlined any enforcement guidelines for the standard it proposes. Petitioners request that the proposed "Roadway Rules" and "Regulations For Air Purity Along Roadways" filed with the Commission by Petitioners on May 2, 1973, be adopted as is. A copy thereof is enclosed for your quick reference.

Very truly yours,


Charles J. Merten

CJM:pam
Enclosure

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

COMMITTEE TO END NEEDLESS URBAN
FREEWAYS; COALITION FOR CLEAN AIR;
OREGON ENVIRONMENTAL COUNCIL;
SENSIBLE TRANSPORTATION OPTIONS FOR
PEOPLE; COLUMBIA GROUP OF THE PACIFIC
NORTHWEST CHAPTER OF THE SIERRA CLUB;
LOUIS and RUPH BRENT; DONALD and VAL
COBB; CLIFFORD and JUDI ALLEN; JERRY
and HELEN VTRNIG; and MIKE and
LESLIE HOFFMAN,

Petitioners.

PETITION FOR PROMULGATION
OF RULES AND REGULATIONS

The petitioners, hereinafter described, hereby request that the following rules and regulations be forthwith adopted and promulgated by the Environmental Quality Commission:

1.

ROADWAY RULES

1. No person or persons, including state or local agencies, departments, commissions, boards, or governments shall construct, within any urban area of this state, any roadway, without first providing the EQC with reasonable assurances, supported by factual data, that the operation of said roadway, will not violate the regulations of the EQC regarding air purity standards along roadways.

2. Upon receipt of such assurances, the EQC will, based upon the supporting data, the expertise of the DEQ, and such further information, including public comment, as it might desire, make its own independent judgment as to whether the operation of such roadway will violate the regulations of the EQC regarding air purity along roadways. No such roadway

shall be constructed without an affirmative determination by the EQC that said regulations will not be violated by the operation of such roadway.

3. For the purposes of these rules:

(a) "roadway" means any road, highway, expressway, or freeway providing surface transit

(b) "operation of a roadway " means the functional use of a roadway by motor vehicles, other vehicles, or other means of surface transit

(c) "urban area" means (1) any city with a population in excess of 50,000; and (2) the metropolitan area of any city and the adjoining area within five miles of its boundaries, if the total combined area has a population in excess of 50,000.

II.

REGULATIONS FOR AIR PURITY ALONG ROADWAYS

In addition to any other applicable rule, regulation, or standard, any roadway or segment thereof constructed after January 1, 1974 in any urban area of this state shall be so designed and constructed that for the following fifteen years of operation:

1. The ambient air concentration of lead at points six feet immediately above the midline of said roadway shall not exceed levels which may pose a hazard to human health for the users thereof; and

2. The ambient air concentration of lead at any point within 1000 feet of the edge of said roadway shall not exceed two micrograms per cubic meter averaged on a monthly basis.

III.

FACTS SUPPORTING PETITION

Petitioners allege the following to be fact:

1. Lead is hazardous to human health when ingested or breathed;
2. Adult human beings have an average intake of lead from food and drink, which are relatively unavaoidable sources, of 320 micrograms per day; about 10% of this amount, or 32 micrograms per day, are retained in the body;
3. Approximately 184,316 tons of lead per year are emitted into the air above the continental United States. Of this amount, approximately 181,000 tons are produced by gasoline combustion. Most of said combustion occurs in the engines of motor vehicles.
4. Of the lead inhaled from the ambient air during the breathing process, approximately 37% is absorbed by the body.
5. The concentration of lead in soils within 100 feet of roadways has been found to be 250-280 times that occurring naturally.
6. Urban area residents have, today, high concentrations of lead in their bodies in relation to suburban and rural residents;
7. Ambient air concentrations of lead in excess of two micrograms per cubic meter pose a threat to human health.
8. Recent discoveries by local health authorities in Portland, Oregon indicate that children who live along freeways in Portland have abnormally high, and potentially hazardous, levels of lead in their bodies, and that no apparent cause for the same exists other than inhalation of lead from the ambient air along said freeways.

9. The federal government has not taken effective measures to reduce the lead level of gasoline so as to reduce the ambient air concentration of lead below two micrograms per cubic meter. Contrary to popular belief, neither the EPA nor any other federal agency has banned, or has proposed to ban, lead from gasoline. EPA has proposed regulations which, commencing January 1, 1975 and ending January 1, 1978, will reduce the lead content in gasoline from its present levels to 1.25 grams per gallon. Even with such reductions, however, mathematical calculations for planned roadways in Portland, Oregon result in lead concentrations in excess of two micrograms per cubic meter along said roadways.

10. The only practicable and effective way to protect residents living within 1000 feet of roadways from the hazard of lead poisoning is to design, construct, and operate roadways so as not to exceed an ambient air lead concentration of two micrograms per cubic meter averaged on a monthly basis.

11. No agency of the State of Oregon has to-date adopted ambient air standards of lead concentration.

IV.

PROPOSITIONS OF LAW

Petitioners will rely upon the following legal propositions:

1. They are interested persons and/or represent interested persons within the meaning of ORS 183.390 and 34 OAR 11-015.

2. It is the policy of the State of Oregon to abate the sources and levels of air pollution which existed on

August 9, 1971, and to prevent air pollution that is new in relation to that date. ORS 449.770.

3. The Oregon Legislature has found that emissions of pollutants from motor vehicles is a significant cause of air pollution in many portions of the state and that the control and elimination of such pollutants are of prime importance for the protection and preservation of the public health, safety, and well-being. ORS 449.951.

4. The EQC may regulate, limit, control, or prohibit motor vehicle operation and traffic as necessary for the control of air pollution which presents imminent and substantial danger to the health of persons. ORS 449.747.

5. The EQC may adopt air purity standards for any geographical area of the state. ORS 449.760 (7), 449.785, 449.800.

6. The EQC may classify air contamination sources according to levels and types of emissions and other characteristics which cause or tend to cause or contribute to air pollution; and may require its prior approval for the construction of air contamination sources. ORS 449.707(1), 449.712.

7. Pursuant to ORS 449.712 and 449.760, the EQC has designated freeways and expressways in urban areas as air contamination sources. 340 OAR 20-050, 20-055.

8. The highest and best practicable treatment and control of pollutants from air contamination sources constructed after June 1, 1970 is required. 340 OAR 20-001.

V.

PETITIONERS

The petitioners are:

1. COMMITTEE TO END NEEDLESS URBAN FREEWAYS (ENUF),

a nonprofit, unincorporated association whose members are residents of Multnomah County, Oregon and who live in the path of, and/or near thereto, the proposed I-205 freeway. The projected lead concentrations near said proposed freeway exceed two micrograms per cubic meter averaged on a quarterly basis.

2. COALITION FOR CLEAN AIR, is an association whose members live in urban areas of the States of Oregon and Washington. Said organization has as one of its primary purposes the control and abatement of air pollution within the State of Oregon.

3. THE OREGON ENVIRONMENTAL COUNCIL, an Oregon nonprofit corporation, and whose purpose is the protection and enhancement of Oregon's environment, including the quality of its air. The OEC has 2,000 individual members, many of whom live in urban areas of the state.

4. SENSIBLE TRANSPORTATION OPTIONS FOR PEOPLE (STOP), a nonprofit Oregon organization whose primary purpose is to advance a balanced transportation system for the people of Oregon and to provide alternative modes of transit to the automobile for the reason that, inter alia, the automobile is a major source of air pollution in this state. Many of STOP's members live in urban areas of the State and near proposed roadways therein.

5. THE COLUMBIA GROUP OF THE PACIFIC NORTHWEST CHAPTER OF THE SIERRA CLUB, an unincorporated association of persons who, inter alia, seek to preserve the quality of life

of the state and a livable urban environment. Many of the Chapter's members live in urban areas of the State.

6. LOUIS and RUTH BRENT, husband and wife, residents of Multnomah County, Oregon, who live at 9937 N. E. Alton, within 250 feet of the proposed I-205 freeway.

7. DONALD and VAL COBB, husband and wife, residents of Multnomah County, Oregon, who live at 3910 N. E. 99th, within 250 feet of the proposed I-205 freeway.

8. CLIFFORD and JUDI ALLEN, husband and wife, residents of Multnomah County, Oregon, who live at 4007 N. E. 99th, within 500 feet of the proposed I-205 freeway.

9. JERRY and HELEN VIRNIG, husband and wife, residents of Multnomah County, Oregon, who live at 9529 N. E. Campaign, within 500 feet of the proposed I-205 freeway.

10. MIKE and LESLIE HOFFMAN, husband and wife, residents of Multnomah County, Oregon, who live at 9444 N. E. Mason Street, within 1000 feet of the proposed I-205 freeway.

CHARLES J. MERTEN
Attorney for Petitioners

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Suite 213, 1008 S. W. Sixth Avenue
Portland, Oregon 97204
Tel: 227-3157

TESTIMONY OF FRED VAN NATTA BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

- November 22, 1974 -

On behalf of the OREGON STATE HOME BUILDERS ASSOCIATION on "Indirect Sources" or "Direct Increases in the Cost of Shelter"

~~We have a series of specific concerns about these proposed rules, some of which even your staff, in the hearing officer's report, recognized as valid. Unfortunately, not even these problems were cleaned up before the rules were brought before you.~~

But before we look at the specifics....let's consider the general issue of "indirect source" rules as they apply to residential shelter.

People are going to live somewhere. We have priced most Oregon families out of single family homes with the result that only apartments and mobilehome parks are financially within reach of the average family in Oregon. People who presently have homes don't realize how fortunate they are.

These rules will have a substantial impact on the cost of the shelter they will affect, but they WON'T STOP PEOPLE FROM LIVING SOMEWHERE. To the extent they drive builders beyond the five-mile ring, THEY MAY INCREASE AUTOMOBILE TRAFFIC IN THE AIR BASIN.

To the extent they don't drive the builder beyond the five-mile ring, the rules will do nothing to decrease the pollution BECAUSE PEOPLE WILL CONTINUE TO LIVE and have automobiles at their residences.

What I am saying is, the rules...as they apply to residential shelter...can only possibly have two effects. One is to move builders beyond the five-mile limit, and the other is to increase the cost of construction and thus the cost of shelter for Oregon families.

Other testimony on cost will be presented.

Your rules call for regulation at both ends, where the person lives and where the person works. We suggest regulation at the site of the

residence is not useful...only costly to the citizens of the state.

Before we look at the detail, let's explore the scope of these rules. Will you help me answer these questions to clarify the record on the coverage of these rules?

Assume each situation is within five miles of a municipality of 50,000 or more:

Is a 26 lot subdivision with double car garages required to apply for a permit?

Are 15 duplexes with 4 parking spaces each required to apply for a permit?

Are 30 condominium units in a single structure with 2 parking spaces each required to apply for a permit?

Are 30 condominium units with 15 separate structures and 2 parking spaces for each unit required to apply for a permit?

Are mobilehome parks required to apply for a permit?

Are mobilehome subdivisions required to apply for a permit?

Is a subdivision with a recreational facility with 50 spaces at the Recreation Hall required to apply for a permit?

Is a subdivision with a recreational facility with 20 spaces at the Recreation Hall and 150 spaces at associated residential dwellings required to apply for a permit?

Is a subdivision like Woodburn Senior Estates, which has a recreational vehicle parking area of 15 spaces with 50 associated spaces at related residential dwellings required to apply for a permit?

Is the subdivision required to apply for a permit if there are 50 spaces in the recreational vehicle parking area?

Conversation with staff indicates an effort has been made to clarify the application of the rules to subdivisions and mobilehome parks by adding the language, "off-street area or space" to the defi-

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tion of parking space. This helps, but the requirement of "associated parking" brings it all back under the rule again. You must add the "off-street area or space" to the definition of "associated parking" also. 20-125 requires a site plan, plus "associated parking", which would bring "on-street" parking back into the space count. If the intent is to exclude "on-street" parking, the definition of "associated parking" must be changed.

It should also be noted that most subdivisions developed under the PUD principle would be covered because their streets are in private ownership. Mobilehome parks apparently would not be covered if they dedicated their streets and had their recreational vehicle parking areas below 50 spaces and connected only by a public dedicated street.

We are most gravely concerned about the 50 space cut-off standard for the metropolitan areas and within 5 miles of them. Your staff argues you can adopt rules 20 times more restrictive than Federal standards and "no technical basis is found...to be required."

I have not spent a lot of time with this Commission, but it is inconceivable to me that you would take action which subjects thousands of Oregon families to additional costs for their housing without some technical basis. We simply have been unable to find any data that says 50 automobiles coming together at an apartment or mobilehome park causes such serious pollution that an expensive and time-consuming process as outlined here is necessary.

Your hearing officer argues you have the authority to set any standard you want under the general statute creating the agency, but there is not even an allegation that 50 parking spaces creates...to paraphrase the statute..."one or more air contaminants in sufficient quantities and of such character and duration they are likely to be injurious to

public welfare, health of human, plant or animal life, etc.

You have a staff study of parking lots in the Portland area which is presented as "proving the need for a 50 lot cut-off", but, contrary to that, it proves you should increase the cut-off figure far beyond 50.

For example, you could reduce the staff workload this rule will create by 75%, and you still look at more than 75% of the parking spaces by increasing the cut-off to 250 spaces.

You may be over-staffed, but citizens who deal with your agency consistently hear the excuse, "we are under-staffed".

Our recommendation is that you adopt the Federal standard of 1,000 spaces AND YOU WOULD STILL REVIEW about 50% of the parking spaces built according to your study.

We also object to the conditions which we understand the Department expects to place on the permits. We have not found the statutory authority which would permit the Department to require a builder to subsidize bus systems.

We are told the Department anticipates requiring a builder or apartment owner to provide mass transit tickets to renters in an apartment building or buyers of condominium units.

This is incredibly silly public policy. It's wrong. It's a waste of money. It's an abuse of governmental power. That rational men would suggest it, is beyond me.

If people want to ride the bus...let them buy the tickets. If you add it into the rent...which is what you suggest...the first thing we have is rent control because the cost of housing is so high.

In closing, I also want to point out these rules are contrary to Interim Goals established by ORS 215.515.

This rule will provide a positive incentive to move development beyond the 5 mile ring around Portland, Salem and Eugene.

This will violate Interim Goal d, "conserving prime farm land"; Interim Goal b, "conserving open space"; Interim Goal e, "providing for an orderly and efficient transition from rural to urban land uses"; and Interim Goal a, "preserving the quality of air, water and land resources".

The resulting sprawl and increased transportation necessary to bring people back to the cities for their jobs and shopping will have adverse effect, particularly on land use patterns.

For these reasons, we urge you to exempt residential and mobilehome spaces from these rules and/or adopt the Federal cut-off point of 1,000 spaces.

* * * * *

COONS, COLE & ANDERSON

ATTORNEYS AT LAW

FORUM BUILDING

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**ALLAN H. COONS
HUGH K. COLE, JR.
BRUCE H. ANDERSON**

**AREA CODE 503
TELEPHONE 488-0203**

November 22, 1974

Oregon Environmental Quality Commission
Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Re: Written Comments on Behalf of Oregon Members
of International Council of Shopping Centers
(I.C.S.C.) Supplementing Oral Presentation on
Behalf of I.C.S.C. at Environmental Quality
Commission Hearing on Proposed Rules for
Indirect Sources in Salem, Oregon, on
November 22, 1974.

Gentlemen:

From the very inception of the Department of Environmental Quality's proposal to have you adopt administrative rules for Indirect Sources and Maintenance of Air Quality Standards, representatives of the I.C.S.C. members in Oregon have been addressing themselves to a number of extremely important concerns in regard to the proposed rules. The proposed rules have already been through three revisions, and I hope it is clear to the members of the Environmental Quality Commission that the primary reason for this has been due to the great deal of continued public concern over the form of the proposed rules. Although we acknowledge that during this process the D.E.Q. staff did make some changes in critical areas (i.e. adding language to recognize the common practice of initially proposing construction in planned incremental phases and modifying the language of Section 20-129 to make it clear that it applied only to future proposed construction and not to existing facilities), there are still many areas of critical concern to the I.C.S.C. members, as well as representatives of many other public and private organizations, that have not been properly addressed in the proposed regulations. It is the intent of this letter to supplement a shorter oral presentation planned for your public hearing in an attempt to point out the remaining major areas of concern, as well as to suggest to you why it would be both improper and unreasonable to adopt the regulations in their present form. At the very least, the Commission should review its notes of the testimony submitted at the November 22 hearing, as well as written material submitted at or after such hearing before adopting any regulation.

Furthermore, if the United States Congress adopts a proposal before it to postpone the effective date of the Federal Regulations dealing with indirect sources from January 1, 1975 to June 30, 1975, then the Environmental Quality Commission should do no less than also postpone its adoption of any indirect source regulations until it has thoroughly considered the proposed impact of such regulations.

We suggest to you that you be extremely cautious in the form and content of any indirect source regulations that you adopt for several reasons. First, the large scale opposition to the form of the proposed regulations by diverse public and private groups over the last five or six months, and in particular the continued objections to several key portions of the regulation that have remained unchanged through several D.E.Q. staff revisions, should indicate that there are many critical areas of public concern about the form of the proposed regulations. Secondly, the National Academy of Sciences and the National Academy of Engineering have submitted to the United States Senate a detailed report on the question of both the necessity and the effectiveness of other transportation controls, in particular indirect source controls, in place of, or in addition to, direct controls on the automobile. The Commission should certainly review this important, expert analysis of the problem presented by indirect source regulations before it simply adopts the dangerously restrictive and economically costly regulations in their present form. (Time limitations prevented the securing of actual copies of or from this important study in time for presentation to the Commission on behalf of I.C.S.C.). Such a review will undoubtedly raise serious questions as to the wisdom of any indirect source regulation. Next, in light of the reasonable possibility that Congress, in response to this report and other substantial indication that the Federal Guidelines for indirect source regulations may be unrealistic, may well postpone implementation of the Federal Indirect Source Regulations until the middle of 1975 (from their presently scheduled January 1, 1975 date), the Environmental Quality Commission should do no less than thoroughly study the regulations proposed for Oregon. Finally, the obvious increase in construction costs to the shopping center industry that will be brought about by the proposed regulations are particularly critical in our time of continually weakening national economy. This problem is the hardest to overcome for the small developer of smaller shopping centers who is already faced with overwhelming inflationary costs. The problem is, of course, also particularly acute in the construction industry, one of the areas of our economy hardest hit by our present economic crises; and this problem is passed directly on to the developer.

With the above background in mind, we ask that the Commission at this time postpone any approval of the proposed regulations in order to bring about the following necessary additions thereto or changes therein, only the most important of which will be commented on orally before you at your November 22 hearing:

- (1) Section 20-100 Policy. Reiterating the position the Oregon I.C.S.C. members have maintained continually throughout this process, it is respectfully submitted that shopping centers, their retail and commercial

facilities and associated parking and pedestrian areas cannot be properly considered an "air contamination source" within the definition of ORS 468.275. Furthermore, I am not aware of any proof that regulation of shopping center construction is necessary to control the concentration of air contaminants at one or more reasonable receptor sites on the shopping center premises. It is therefore respectfully requested that the Commission demonstrate the basis for the conclusions stated in Section 20-100 that the regulation of indirect sources (especially if the Commission intends to consider a shopping center an indirect source) is "necessary to control the concentration of air contaminants . . ."

- (2) Section 20-110 Definitions. Combination of Indirect Sources Problem. Section 20-110(10) should be amended to either remove the language "or combination thereof" from the definition of indirect source or by adding after the words "or combination thereof" the additional language "constituting a part of the indirect source in question". The developer of an indirect source should only be responsible for the impact his project will have on air quality. No combination of separate indirect sources not constituting an actual portion of the indirect source seeking a permit should be defined as an indirect source or considered the responsibility of the indirect source in question.

Attempt to Control Daily Operation and Construction Schedules. Section 20-110(11) should be amended to remove the language that authorizes an indirect source construction permit to contain operational conditions. It should not be a function of the D.E.Q. to attempt to regulate day to day operating conditions, although obviously operation can be curtailed if at any time it is shown that the conditions for construction stated in the permit in question are not being followed. This would occur because of the wording of Section 20-135(2), although that Section should also not refer to operational conditions. On a similar vein, 20-110(11) should not make reference to construction schedules as being a portion of the original permit. Obviously, the wording of Section 20-135(3) could be a basis for revocation of a permit if construction is not commenced within the period stated therein. However, the D.E.Q. should not attempt to dictate any other forms or types of construction schedules other than those inherent in observing the time limits of the original permit. Both of these objections can be cured by simply changing the wording of the final portion of Section 20-110(11) to read as follows:

" . . .which authorizes the permittee to commence construction of an indirect source and thereafter complete construction and carry out operations under construction conditions as specified in the permit."

The related necessary change in Section 20-135(2) would make the last portion of that Section read as follows:

" . . . operating in violation of the construction conditions set forth in its indirect source permit."

The definition of "Reasonable Receptor or Exposure Sites" contained in Section 20-110(21) should be amended to make clear that the sampling sites in question should only relate to air contaminants directly associated with the indirect source seeking a permit. For example, it would be obviously improper to deny an indirect source permit to a proposed sports stadium based on the fact that automobiles using its parking facility, when taken in conjunction with automobiles using a nearby four-lane road, created an air contamination problem; and then turn around and deny the four-lane highway in question a permit to add an additional lane based on motor vehicle emissions partially stemming from the adjoining sports stadium. This would mean that neither project could go forward! This obviously should not be the intent of the regulations. They should be concerned with air quality generated by, and on the site of, the indirect source in question. This result can be assured by rewording the final portion of the first sentence of Section 20-110(21) to read as follows:

" . . . generated by associated mobile source activity directly related to the indirect source in question."

- (3) What Size Parking Facilities Should be Required to Obtain a Permit?
The regulations propose continuation of a requirement that indirect sources in or within five miles of the boundaries of certain cities proposing to add fifty or more parking spaces, and indirect sources outside of such boundary but within any of five stated counties proposing to add five hundred or more parking spaces, must apply for a permit before beginning construction. Section 20-115(2)(a)(i) and (b)(i). This particular regulation has continually been objected to by I.C.S.C. members as well as such other groups as diverse as the League of Oregon Cities, the Oregon State Homebuilders Association, and the City of Eugene. Appendix C to the D.E.Q. staff report that has been presented to you, an analysis conducted by the D.E.Q. of parking spaces in the Portland metropolitan area, certainly should not be used as justification for a standard that is already unreasonable and far beyond that customarily applied in similar regulations throughout the country. Furthermore, even the Department's own figures suggest that the obviously added cost for permits for small parking lot construction or expansion are not justified in terms of the percentage of spaces actually involved in such lots. See Table 2 to Appendix C to the staff report that indicates that 33.1% of all parking spaces in the Portland metropolitan area are located in parking facilities of less than five hundred spaces in size. Finally, even if there was any way to justify the unreasonably restrictive standards of this Section of the regulations, statistics from the Portland metropolitan area should certainly not be used to

impose permit requirements on facilities located in other metropolitan areas with three, four or five times less population than the Portland metropolitan area! A much more realistic figure would be to substitute 500 in place of 50 and 1,000 in place of 500 for the applicable portions of 20-115(2)(a) and (b). These figures would be much more realistic and still more restrictive than the 1,000 figure for SMSA's and the 2,000 figure for areas outside SMSA's suggested in the Federal Indirect Source Regulations. A possible alternative for application to Portland only would be to require a permit for construction of facilities for 250 or more cars within the central business district and for 500 or more cars outside of the central business district but within five miles of the municipal boundaries of the city.

(4) Section 20-130. Issuance or Denial of Indirect Source Construction Permits. The following changes should be made in this Section:

(a) A new Subsection (c) should be added under 20-130(2) that reads as follows: "(c) As a portion of all public notices, the Department or Regional Authority having jurisdiction shall identify the close of the public comment period as a stated time in advance of the end of the sixty-day period within which action on a permit application must be taken. After the close of such public comment period, and no later than ten days before it proposes to take final action in regard to the application for a permit, the Department or Regional Authority having jurisdiction shall advise the applicant of any comment received from the public, so that the applicant may, if it chooses, reply to those comments. The Department or Regional Authority having jurisdiction shall consider the applicant's response to the public comments in making its final decision."

(b) Section 20-130(4)(i) and (j) are confusing, beyond the control of the developer of a shopping center facility, and therefore should be deleted. Subsections (f), (c) and (l) of 20-130(4) are unconstitutional under the due process and equal protection provisions of the Oregon and United States Constitutions, and therefore should be deleted. One alternative means of dealing with the problem presented by all these stated Sections would be to delete them and reword 20-130(4)(a) to read, "Posting transit route and scheduling information, and developing other mass transit incentive programs reasonably applicable to the indirect source in question." (underlined material added).

(5) Permit Duration. In order to give more clarity and certainty to the regulations, and in particular to satisfy the concerns of lending institutions, the provisions of Section 20-135(1) should be reworded as follows:

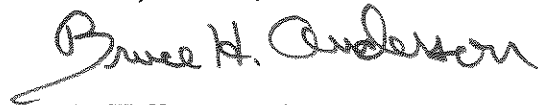
"Notwithstanding anything else in this Section or any other Section of this regulation that might be construed to the contrary, a person, once having been issued a permit by the Department or a Regional Authority having jurisdiction, may continue to operate his or its complex source indefinitely without having to apply for or obtain a new permit for such complex source unless or until (a) the person proposes to add to, enlarge, replace, alter or modify the existing complex source in a manner that would have required a permit had such action been taken in the form of initial construction, or (b) the permit is revoked in accordance with an applicable revocation provision of this regulation."

- (6) Requirements of Measurements for Lead Concentrations Contained in Section 20-129(1)(a)(iii). Federal ambient air quality standards for lead have been withdrawn, as have previously proposed D.E.Q. standards. Furthermore, there is no agreement on the relationship between ambient air lead and direct automobile emissions. Finally, the Federal program for reducing lead in gasoline should more than adequately deal with any ambient air lead problems over the coming years. For all these reasons, requirements for lead level monitoring should be removed from the regulations.

It is the hope of the Oregon members of I.C.S.C. that the above material will aid in convincing the Commission that much more further detailed study and amendments are necessary before any regulations as all inclusive and costly as the Oregon Indirect Source Regulations are adopted. These members ask you to remember that the primary problem we all should be dealing with is the automobile, not commercial facilities. Rather than approve the adoption of an unreasonably restrictive and economically burdensome regulation that at best would make miniscule changes in air quality, the I.C.S.C. members ask that the state and federal government pursue methods and techniques aimed at returning the primary burden of achieving cleaner air to the automobile engine itself, as was originally clearly intended by the drafters of the Federal Clean Air Act.

Very truly yours,

COONS, COLE & ANDERSON



BRUCE H. ANDERSON

BHA:mv

cc: I.C.S.C.

TESTIMONY OF DOUGLAS E. STEVIE,

OREGON STATE HOUSING DIVISION,

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

November 22, 1974

MR. CHAIRMAN, MEMBERS OF THE COMMISSION:

I AM DOUGLAS STEVIE, SENIOR PLANNER OF THE OREGON STATE HOUSING DIVISION; AND I'M HERE TO SPEAK IN OPPOSITION OF THE PROPOSED RULES FOR INDIRECT SOURCES AND MAINTENANCE OF AIR QUALITY STANDARDS TO BE MADE A PART OF OREGON ADMINISTRATIVE RULES, SECTIONS 20-100 THROUGH 20-135, REPLACING SECTIONS 20-050 THROUGH 20-070, PARKING FACILITIES AND HIGHWAYS IN URBAN AREAS. SPECIFICALLY, WE OPPOSE RULE 20-115(2)(A) WHICH STATES THAT SOURCES IN OR WITHIN 5 MILES OF THE MUNICIPAL BOUNDARIES OF A MUNICIPALITY WITH A POPULATION OF 50,000 OR MORE SHALL HAVE INDIRECT SOURCE CONSTRUCTION PERMITS FOR THE CONSTRUCTION OR MODIFICATION OF ANY PARKING FACILITY OR OTHER INDIRECT SOURCE WITH ASSOCIATED PARKING WITH A CAPACITY OF 50 OR MORE SPACES, AND RULE 20-130 WHICH ALLOWS FOR UP TO A 60 DAY PERMIT DECISION DELAY AND SPECIFIES A LAUNDRY LIST OF POSSIBLE CONDITIONS FOR PERMIT APPROVAL.

AS AN AGENCY CHARGED WITH STIMULATING AND INCREASING THE SUPPLY OF HOUSING, PARTICULARLY FOR FAMILIES OF LOWER INCOMES, THE HOUSING DIVISION IS DEEPLY CONCERNED OVER THE FACT THAT THE COST OF BASIC SHELTER IS INCREASING AT AN ACCELERATING RATE. WHILE PART OF THIS INCREASE IS THE PRODUCT OF PRIVATE FORCES, MUCH OF IT IS THE RESULT OF REQUIREMENTS IMPOSED BY GOVERNMENTAL AGENCIES IN THE NAME OF GENERAL PUBLIC INTEREST. IN AN EFFORT TO ENHANCE THE APPEARANCE OF OUR CITIES, TO PRESERVE OPEN SPACES, TO REDUCE LEVELS OF AIR AND WATER POLLUTION AND TO PROTECT THE CONSUMER, WE HAVE INITIATED

POLICIES WHICH ARE PRICING HIM OUT OF THE MARKET. SECTIONS 20-115(2)(A), 20-130(3) AND 20-130(4) OF THE PROPOSED RULES WILL ACT TO FURTHER SHIFT THE COST OF GENERAL PROTECTION TO LOWER INCOME HOUSEHOLDS BY INCREASING OVERALL HOUSING COSTS.

AS PROPOSED, THE RULES WILL INCREASE THE BASIC COST OF SHELTER BY:

1. INCREASING BUREAUCRATIC RED TAPE AND ADDING YET ANOTHER DELAY TO THE ALREADY LENGTHY PROJECT APPROVAL PROCESS.
2. REQUIRING COSTLY TECHNICAL DOCUMENTS TO BE PREPARED IN SUPPORT OF PERMIT APPLICATIONS.
3. REQUIRING PROJECT DEVELOPERS TO MEET ADDITIONAL CONDITIONS RANGING FROM THE CONSTRUCTION OF BUS STOP SHELTERS TO PROVIDING FREE MASS TRANSIT TICKETS. THE LATTER, IF APPLIED TO RESIDENTIAL DEVELOPMENTS, WOULD, IN EFFECT, FORCE LOWER INCOME HOUSING TO SUBSIDIZE MASS TRANSIT.
4. PROVIDING AN INCENTIVE FOR DEVELOPERS TO BUILD MULTIFAMILY UNITS JUST BEYOND THE 5-MILE LIMIT WHERE COST FACTORS WOULD BE MOST FAVORABLE. THIS WOULD, IN EFFECT, FORCE LOWER INCOME PERSONS TO LIVE IN AREAS FAR REMOVED FROM CONCENTRATIONS OF NEEDED PUBLIC SERVICES AND, IN ADDITION, WOULD SERVE AS A DISINCENTIVE TO EFFICIENT USE OF URBAN LAND.

IN SUMMATION, THE INDIRECT SOURCE POLICY FORCES VIRTUALLY ALL APARTMENT PROJECTS TO FILE A REPORT AND TO OBTAIN THE NECESSARY PERMIT. EXCEPT WHERE THE OWNER IS AN OCCUPANT AND PART-TIME MANAGER OF A SMALL STRUCTURE, THE MINIMUM ECONOMIC SIZE TO SUPPORT AN ON-SITE MANAGER IS BETWEEN 30 AND 40 UNITS. AT ONE AND ONE-HALF PARKING SPACES PER UNIT, MOST OF THESE WILL BE REQUIRED TO HAVE MORE THAN 50 PARKING SPACES.

INASMUCH AS THE MAJORITY OF OUR POPULATION WILL HAVE TO BE HOUSED IN MULTIFAMILY UNITS IN THE FUTURE AND INASMUCH AS NEARLY ALL MULTIFAMILY STRUCTURES WILL HAVE MORE THAN 50 PARKING SPACES, WE PROPOSE, AT LEAST WITH REGARD TO RESIDENTIAL STRUCTURES, THAT NATIONAL STANDARDS BE EMBRACED SO THAT INDIRECT SOURCE CONSTRUCTION PERMITS WILL BE REQUIRED ONLY ON PARKING FACILITIES THAT HAVE 1,000 OR MORE SPACES. IF THE PROVISION OF MASS TRANSIT IS INDEED A PUBLIC BENEFIT, IT WOULD MAKE SENSE TO GENERATE NEEDED REVENUES THROUGH A BROAD-BASED TAX RATHER THAN SHIFTING THE BURDEN, THROUGH INCREASED HOUSING COSTS, TO LOW-INCOME HOUSEHOLDS.

STATEMENT OF JOHN S. ULLMAN, PH.D.
OREGON STUDENT PUBLIC INTEREST RESEARCH GROUP
BEFORE THE
ENVIRONMENTAL QUALITY COMMISSION, SALEM, OREGON
NOVEMBER 22, 1974
CONCERNING
RULES PROPOSED TO PREVENT SIGNIFICANT DETERIORATION OF AIR QUALITY

My name is John Ullman. I wish to thank the Commission for allowing OSPIRG to present its views today concerning its petition to adopt rules for the prevention of significant deterioration of air quality in regions of the state in which air pollution does not exceed the secondary standard of the Clean Air Act of 1970 (PL 91-604).

The basic issue today is whether Oregon should tackle the job of protecting its clean air resources. OSPIRG asserts that Oregon can and should move immediately to prevent further deterioration of the state's clean air. OSPIRG would like to call the Commission's attention to the following points which support this view.

1. Clean air is worth protecting. If Oregon's scenic areas are allowed to be polluted to levels approaching the Federal Secondary Standard, severe visibility problems will result. This would have the effect of eliminating one of the important reasons for living in or visiting Oregon.

Beyond aesthetic considerations, low levels of air pollutants are implicated in a number of untoward effects on wild and cultivated plants. It is important to remember that the Federal Secondary Standards protect humans from pollutant concentrations which would cause acute health problems. One is forced to suspect that lower pollutant levels are not entirely harmless to humans.

From an economic point of view, it makes sense to maintain good air quality. It will be much more expensive to clean up air once it has become polluted than to keep it clean in the first place.

2. We cannot afford to wait for federal regulations. Ideally, the Environmental Protection Agency (EPA) should adopt strong regulations which will be fairly enforced throughout the nation. In reality, the EPA will soon adopt extremely weak regulations. Among other things, these rules will make it possible for a state to pollute up to the Federal Secondary Standard in any region. This will leave things exactly as they are right now, both in terms of clean air protection and interstate competition for bordering airsheds.

OSPIRG has been informed that the Sierra Club is fully committed to a court challenge of the EPA's proposed rules when they are finally adopted. This means that we will not have federal regulations for several years, regardless of their merits. Oregon simply cannot afford to wait that long before it implements a coherent plan to protect its clean air.

3. Present state regulations are not sufficient to protect clean air. Currently sources of air pollution are controlled by permits issued by the Department of Environmental Quality (DEQ). Each source is considered individually and preconstruction monitoring is not required. Moreover, the only standards which a source has to meet are the Federal Secondary Standards. OSPIRG feels that its plan goes a long ways toward correcting these deficiencies.

4. Protecting clean air should not hinder economic growth. OSPIRG does not intend that well planned growth should be curtailed. It should be possible to protect clean air and still allow some large sources of pollution to locate in Oregon. Maintaining our clean air resource should help attract clean industry. It should also spur the development of clean energy sources, such as solar and geothermal. Both of these things will benefit Oregon in

the long run.

The specter of Oregon being asphyxiated by pollutants in adjacent states cannot be taken seriously in the near future, and it is certainly no reason to allow air to deteriorate over the vast majority of the state. At the moment, the Lower Columbia is the one region where Oregon is seriously competing with a neighboring state for use of an air shed. In this case, the air is already so bad that non-deterioration rules would be of little consequence. Ultimately, interstate problems will have to be settled by interstate negotiations.

5. Some important features of the OSPIRG proposal are listed below.

A. Two sets of concentration increment limitations are established. The Zone I increments are intended to keep pristine areas unspoiled, and the Zone II increments are intended to allow necessary growth in rural areas. These limitations should keep most of Oregon's clean air below the Federal Secondary Standards.

B. The emission ceilings are provided to close a loophole in the increment limitation system. For example, without emission ceilings, a source might be able to meet the increment limitations, even though it emitted excessive amounts of pollutants, if it had a high enough stack.

C. The provision for preconstruction monitoring will provide a reasonable baseline for judging the performance of the source. At least as important, it will provide much needed data for improving air quality regulations even further.

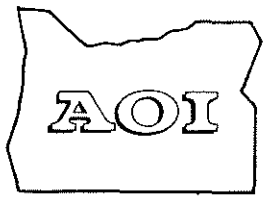
After considering various options, OSPIRG feels that its proposed regulations offer a workable, realistic solution to the significant deterioration problem. The OSPIRG rules are closely patterned after a

Testimony of John S. Ullman, Ph.D.
November 22, 1974
Page Four

plan which the DEQ presented to the EPA last year.² It is OSPIRG's hope that the DEQ will be able to forge these proposed regulations into a powerful tool for maintaining the quality of Oregon's clean air. Therefore, OSPIRG respectfully requests that the Environmental Quality Commission initiate rule-making proceedings in accordance with sections 11-005 through 11-040 of the DEQ rules.

FOOTNOTES

1. Moss, L. I., How To Prevent Significant Deterioration of Air Quality In Any Portion of Any State, Sierra Club Statement before the Environmental Protection Agency, Hearings on Significant Deterioration, Washington, D.C., August 27, 1973.
2. O'Scannlain, D. F., Rules Proposed to Prevent Significant Deterioration of Air Quality, State of Oregon Testimony before the Environmental Protection Agency, San Francisco, California, September 6, 1973.



ASSOCIATED OREGON INDUSTRIES

2187 S.W. MAIN STREET • PORTLAND, OREGON 97205 • 227-5639

Ivan Congleton, executive vice president

November 21, 1974

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

Re: Oregon State Public Interest Research Petition
for Adoption of Rules Relating to Prevention
of Significant Deterioration of Air Quality

Dear Mr. Cannon:

The Association appreciates the opportunity to comment on the petition and its applicability. Unfortunately, due to the short period of time in which we were given to respond our Air Quality Committee has been unable to meet so the comments contained herein are based upon general guideline policies of the Air Quality Committee and the Association.

It is our belief that the Department of Environmental Quality has fully met its statutory responsibility under ORS468.305. We believe this is demonstrated in the following manner:

1. ORS468.305 appears to be misstated in Point 4 of the petition because the statute reads: "a general comprehensive plan for the control or abatement of existing air pollution and for the control or prevention of new air pollution in any area of the state in which air pollution is already found existing or in danger of existing". Our definition of air pollution found in ORS468.275 reads: "Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of the duration as are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby.

Paragraph 4 of the petition paraphrases the statutory language by stating "to develop a means for preventing the pollution of air in areas where pollution does not now exist, but may exist in the future." We believe that the agency has in all respects acted at all times to control and prevent existing and new air pollution as defined in our statutes.

Continued - - - - -

2. In 1971 the Oregon State Legislature provided enabling legislation to require air quality permits of all sources in the State of Oregon. (This followed the enactment of ORS468.305 by two years.) Those permits carry within them the specific requirements for control of the source in question. That the air quality permit program is working is clearly demonstrated by the information submitted to you by your staff relating to projected 1975 and 1985 particulate and sulfur dioxide emissions or in the Portland standard metropolitan statistical area. For the period 1970-1975 that information indicates that the controlled sources have significantly reduced both their emissions of sulfur dioxide and particulates for the period 1970 to 1975. It further indicates that area sources, not under permit are the increasing sources of air contaminants. There is no reason to believe that a similar compilation of data would not show the same reductions in all areas of the state.
3. In 1972 the Oregon Department of Environmental Quality, after extensive public hearings, approved and presented to the Environmental Protection Agency, an air quality implementation program. In addition, the Attorney General as required under the federal law, certified that Oregon law was compatible with the Clean Air Act and that the State of Oregon had the staff, budget and means and methods of enforcement to carry out all responsibilities as an approved state under the Clean Air Act. Review of the implementation program will indicate that the State of Oregon has adopted a comprehensive program for the control and abatement of pollution in this state. Nothing less than this would have received the approval of the EPA.
4. Supplementary to the implementation program, the Environmental Quality Commission has within the last three months proposed for adoption air quality maintenance areas for those areas of the state that have exceeded at any time, or are reasonably likely to exceed, any federal secondary standard. These maintenance programs cover most of the Willamette Valley and that area of Jackson County around the City of Medford. This indicates that the DEQ and Commission are still moving toward further protection of ambient air standards in the State of Oregon where there is a recognized need therefor.
5. As to the question of protecting the air pursuant to the Clean Air Amendments of 1970 (Public Law 91-604) it should be evident that the Environmental Protection Agency will, in the very near future, promulgate a regulation on nondegradation as they are required to do under court order. If Oregon's current rules are inadequate to meet new EPA standards, then it would be appropriate for the Commission to undertake rule-making at that time but only when it is determined that additional regulation is needed. To enter into rule-making prior to the determination of EPA could put us out of step with other states in the nation, conflict with land use planning as it is currently being carried under the Land Conservation and Development Commission and local planning agencies and further complicate the integrated control of our environment unduly.

6. The Department of Environmental Quality does not generally adopt regulations. That is a matter for the Environmental Quality Commission. Therefore, there has been no reason for DEQ to specifically recite ORS468.305 in their various actions to implement a general comprehensive plan of control or abatement of pollution. In fact, a total review of the actions of the agency will clearly demonstrate that there has been a general comprehensive plan developed. The fact that the particular statute (468.305) was not mentioned at any time during the development of the total program does not mean that it has not been accomplished any more than the Environmental Quality Commission's failure to recite the specific statutory authority on which they found authority for a rule would nullify an adopted rule.
7. If further proof of compliance with the statute (ORS468.305) is necessary, we would simply note that we know of no occasion on which this commission has given any policy direction to the DEQ pursuant to the statute. We have assumed this meant that the Commission has had reason to believe that the DEQ had met its statutory responsibilities.

In conclusion we would simply state that we believe that the Environmental Quality Commission has met its statutory responsibility. If further rule-making by the Environmental Quality Commission is required by adoption of rules and regulations of the Environmental Protection Agency the matter raised in this petition should be delayed until that time.

The petitioners have not in any way, other than by their general comments shown either that the state was out of conformity with either the ORS468.305 or Public Law 91-604, nor have they given any consideration to the impact on the DEQ and its ability to carry out such a program as proposed in their petition.

Industry has already noted an increasing amount of DEQ staff time devoted to activities not directly related to air quality control, primarily relating to reports and other paper work required by EPA. We believe these activities have diluted the efforts of the agency in accomplishing its major goal--improvement of air quality, by both controlled and area sources. We believe that the petitioners are cognizant of these issues and should have addressed themselves to the impact such a proposal would have on the agencies other air quality control programs.

Sincerely,



Thomas C. Donaca
on behalf of the Associated Oregon
Industries Air Quality Committee

TCD:ek

No. H

THE LEAGUE OF WOMEN VOTERS OF OREGON

SUITE 212 . 495 STATE STREET

SALEM, OREGON 97301

Phone 581-5722



AFFILIATED WITH THE
LEAGUE OF WOMEN VOTERS OF THE UNITED STATES

Testimony to:
The Environmental Quality Commission
November 22, 1974

Norma Jean Germond

Concerning:
Rules proposed to prevent significant deterioration of air quality

The position of the League of Women Voters of Oregon on air quality states that all segments of society (government, industry, agriculture and individual citizens) must share responsibility for improved air pollution abatement practices.

The four main points which all state League members support are as applicable today as when they were adopted in 1968.

1. Adequate standards for control of established rules and regulations.
2. A comprehensive, coordinated program for management of air as a natural resource.
3. Adequate financing for air pollution abatement programs.
4. More research to determine causes and effects of air pollution and methods of control, and better coordination of research programs and increased sharing of information.

Although the problems and complications regarding the State's role in establishing zones of air quality and particularly in defining the meaning of the term "significant deterioration" seem insurmountable and fraught with conflict, we believe the definition must be made by this State and soon.

The League believes that all industries and developers should be asked to consider the impact on air quality of any project's scale and location. Therefore, very specific air quality information must be gathered and made available to not only the EQC, but the LCDC, NTEC and other agencies concerned with land use planning and siting power plants. The setting up of models is expensive, but the money needs to be found to do an adequate job or else the results will have no value to anyone. We must know what air pollution limits will be allowable in certain areas.

First we must have exact figures as to what were the contaminants in the air in 1972, what they are now, and what they will likely be in the future if a certain number or type of industry or development came into that area. Only then can significant deterioration begin

November 22, 1974

Norma Jean Germond

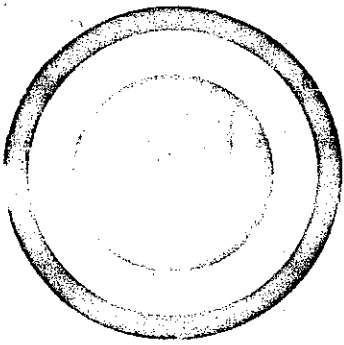
begin to be defined numerically: by numbers which describe allowable increments of deterioration and which we decree shall not be exceeded.

The existence of industry is always in a state of flux. Older plants that cannot economically meet the new air quality restrictions will be phased out and new, cleaner plants will come on line. It will be much easier for these new industries if they know the areas in which they can locate, what is expected of them as to air pollution control equipment. Balancing industrial growth and environmental protection is like a new game everyone is trying to learn. If there aren't any rules, nobody knows how to play.

In conclusion, the League does not believe that land use should be dictated solely by air quality, but we do believe that close cooperation between all agencies is important so that air quality is one of the important considerations in land use planning.

No action in zone definition may very well result in bad deterioration of clean air in the outer suburbs and rural communities, or even on the very borders of our state parks and national forests; whereas factual statistics taken from actual modeling will tell us where and how to plan new growth and how clean it must be. We know our State better than the Environmental Protection Agency people in Washington, and it is we who should determine the quality of our own air shed.

No. H



OREGON ENVIRONMENTAL COUNCIL

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

November 13, 1974

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED

NOV 14 1974

OFFICE OF THE DIRECTOR

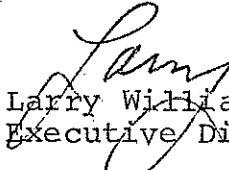
Mr. Kessler Cannon
Director, Department of
Environmental Quality
1234 S. W. Morrison
Portland, Oregon 97205

Dear Kess:

Enclosed please find one copy of the testimony we plan to present at the public hearing on November 22, 1974 regarding the 11-040 Petition.

Mary Ann Donnell, the OEC President will be presenting the testimony at the hearing.

Sincerely,


Larry Williams
Executive Director

LW:jan

cc: Mary Ann Donnell
Enclosure

- A. F. T. E. R., Tigard
- AMERICAN ASSOCIATION OF UNIVERSITY WOMEN, Portland
- AMERICAN INSTITUTE OF ARCHITECTS The Portland Chapter
- Southwestern Oregon Chapter
- AMERICAN INSTITUTE OF PLANNERS Oregon Section
- AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS Oregon Chapter
- ANGLERS CLUB OF PORTLAND
- AUDUBON SOCIETY, Portland, Central Oregon, Corvallis
- BAY AREA ENVIRONMENTAL COMMITTEE Coos Bay, Oregon
- CHEMEKETANS, Salem, Oregon
- CITIZENS FOR A CLEAN ENVIRONMENT Corvallis, Oregon
- CLATSOP ENVIRONMENTAL COUNCIL ECO-ALLIANCE, Corvallis
- EUGENE FUTURE POWER COMMITTEE
- EUGENE NATURAL HISTORY SOCIETY
- FACULTY WIVES OF CENTRAL COMMUNITY COLLEGE, Bend
- 4-H CLUB CARROT-TOPPERS, Scappoose, Oregon
- FRIENDS OF THE EARTH
- FRIENDS OF SPRINGBROOK PARK, Lake Oswego
- GARDEN CLUBS of Cedar Mill, Corvallis, Eastmoreland, Gervais, Nehalem Bay, McKenzie River, Scappoose, Portland, Villa, Fir Grove
- GREENLEAF CLUB OF FIRST UNITARIAN CHURCH Portland
- JUNIOR LEAGUE, Eugene, Portland
- MCKENZIE FLYFISHERS, Eugene, Oregon
- MCKENZIE GUARDIANS, Blue River, Oregon
- MT. HOOD COMMUNITY COLLEGE OUTDOOR CLUB
- NEWPORT FRIENDS OF THE EARTH
- NORTHWEST ENVIRONMENTAL DEFENSE CENTER
- NORTHWEST STEELHEADERS COUNCIL OF TROUT UNLIMITED, Milwaukie, Tigard, Willamette Falls
- OBSIDIANS, INC., Eugene, Oregon
- OREGON CITIZENS FOR CLEAN AIR
- OREGON COUNCIL OF ROCK AND MINERAL CLUBS
- OREGON GUIDES AND PACKERS, Vida, Oregon
- OREGON LUNG ASSOCIATION
- OREGON PARK & RECREATION SOCIETY Corvallis, Oregon
- OREGON ROADSIDE COUNCIL
- OREGON SHORES CONSERVATION COALITION O.S.P.I.R.G.
- O.S.U. FIN AND ANTLER CLUB Corvallis, Oregon
- PLANNED PARENTHOOD ASSOCIATION, INC. Portland
- PORTLAND RECYCLING TEAM, INC.
- P.U.R.E., Bend, Oregon
- REED COLLEGE OUTING CLUB Portland, Oregon
- ROGUE ECOLOGY COUNCIL Ashland, Oregon
- SANTIAM ALPINE CLUB Salem, Oregon
- SELLWOOD-MORELAND IMPROVEMENT LEAGUE, Portland
- SIERRA CLUB Pacific Northwest Chapter Mary's Peak, Corvallis Rogue Valley, Ashland Columbia Group, Portland Mt. Jefferson, Salem
- SOCIETY FOR OREGON AVIAN RESEARCH
- SPENCER BUTTE IMPROVEMENT ASSOCIATION Eugene, Oregon
- STEAMBOATERS
- SURVIVAL CENTER, U. of O., Eugene
- TEAMSTERS FOOD PROCESSORS
- UMPQUA WILDERNESS DEFENDERS
- WESTERN RIVER GUIDES ASSOCIATION, INC.
- WILLAMETTE LUNG ASSOCIATION
- WILLAMETTE RIVER GREENWAY ASSOCIATION

COMMENTS OF THE OREGON ENVIRONMENTAL COUNCIL ON OSPIRG'S
PROPOSED RULE MAKING IMPLEMENTING A POLICY OF NON-
DETERIORATION OF AIR QUALITY - NOVEMBER 22, 1974

Mr. Chairman and Members of the Commission, I am Mary Ann Donnel, President of the Oregon Environmental Council. The Council is a coalition of 80 conservation, sportsman, planning, health, and labor organizations and approximately 2500 individual Oregonians. We maintain our offices at 2637 S. W. Water Avenue, Portland, Oregon 97201.

The Oregon Environmental Council supports OSPIRG's petition for the adoption of rules to implement the national policy of non-deterioration of air quality for the State of Oregon. We recognize at the same time we make this statement, however, that our support is superfluous, inasmuch as the Environmental Quality Commission's duty to implement non-deterioration is written into both State and Federal law. That stubborn and unyielding fact is the point above all others we want you to remember from our testimony, so we should like to re-phrase it: we are not testifying that a non-deterioration policy should be the law, nor that it will be the law, nor even that it might be the law. Non-deterioration of air quality is the law, and has been the law since at least the date the Clean Air Act was signed in 1970. (The Oregon statutory authority is now numbered ORS 468.280 and ORS 468.285.)

Nor is it merely a group of Oregon conservationists who make this assertion. The interpretation we have just given of the Clean Air Act is that of three levels of federal courts, culminating in a decision of the United States Supreme Court. We respectfully suggest, therefore, that the Commission declare that any testimony as to whether Oregon needs a non-deterioration policy or (conceding the need) should have a non-deterioration policy is irrelevant to the question before you today. The only question the EQC needs to decide is as to the form that the implementation of the policy mandated by statutes and court decisions should take.

The second suggestion we urge upon the Commission is that you forego adoption of the protective coloring you could assume through ratification of the proposed EPA rules on non-deterioration. The color of those rules is that of a yellow-brown smog, and the rules violate both the spirit of the Clean Air Act and the letter of the court decisions on non-deterioration. We have attached as an appendix to our testimony, an in-depth analysis of the deficiencies of the EPA rules which was written by Thomas Guilbert, formerly of the DEQ staff, and which appeared last month in the Environmental Law Reporter.

The proposed OSPIRG rules would remedy the worst deficiencies of the EPA rules as identified in Mr. Guilbert's article, because they eliminate EPA's illegal Class III and they require the application of best available control technology for all of the air pollutants for which EPA has promulgated secondary standards. In addition, the emission ceilings approach which OSPIRG sets out in section 20-048.03 is a clever and creative new means of defining the maximum limits to which deterioration may progress before it becomes significant.

The Oregon Environmental Council cannot recommend that the EQC adopt the OSPIRG rules in their present form, however. The OSPIRG proposal itself contains deficiencies which we will briefly reference here, but upon which we will elaborate more fully if the Commission resolves to conduct rule-making proceedings on the OSPIRG proposal without first amending it. These deficiencies include:

1. The disparity between the increment levels for Zone I and Zone II is so great that large "buffer zones" would be required around Zone I areas. EPA has estimated (Office of Air Quality Planning and Standards Memo, dated August 12, 1974) that large particulate and SO₂ sources which could operate within EPA's Class II increments (identical, except for 3-hour SO₂ increments, to OSPIRG's Zone II) would have to be placed at least 80 miles away or the upward side from Class I areas (identical to OSPIRG's Zone I) to avoid violating Class I increments. Buffer zones this large around small state parks, for instance, would be impractical, but excluding such state parks would subject those areas to the unacceptably large Zone II increments. The EPA Class (or Zone) approach is unworkable for designation of areas smaller than an entire airshed, unless the sizes of the Class II (or Zone II) increments are decreased.
2. The State Air Quality Control Regions are not strictly enough defined to prevent gerrymandering by inclusion of clean areas within a designated SAQCR in order to dilute the local effect of a very dirty source.
3. The relationship of "best available control technology" to federal new source performance standards and to the existing Oregon requirement of highest and best practicable treatment and control is not delineated. The OEC believes the best available control technology standard should be stricter than either.
4. Mapping required by designation of geographical areas required by Zone I, Zone II, and SAQCR's might raise potential jurisdictional conflicts with the Land Conservation and Development Commission. This difficulty and the difficulty numbered "1" above, could be avoided by the mechanism suggested in Mr. Guilbert's article of having the increments vary automatically according to the baseline emissions.
5. Use of 1972 rather than 1970 as the baseline is not explained.
6. As noted in Dr. Ullman's cover letter, adequate standards for nitrogen oxides, hydrocarbons, and carbon monoxide are not included in the proposed rules.

While the OEC does note these deficiencies in the OSPIRG proposal, we wish to emphasize once again our strong and unequivocal support of

immediate rulemaking to implement non-deterioration. EPA Administrator Ruckelshaus disapproved Oregon's Clean Air Implementation Plan to the extent that it failed to implement non-deterioration back in 1972, and Oregon has been in technical violation of the Clean Air Act ever since. We therefore propose that the Commission adopt the following temporary rule at today's meeting:

"The Director shall grant no air contaminant discharge permit in an area in which air pollution levels are below the secondary standards of the Clean Air Act of 1970 until such time as the Environmental Quality Commission has adopted final rules implementing a policy of non-deterioration of air quality,"

and that the Commission direct the Director to present specific rules to implement the non-deterioration policy to the Commission at its December 20, 1974 meeting in Albany, Oregon.

Thank you.

OREGON ENVIRONMENTAL COUNCIL
2637 S. W. Water Avenue
Portland, Oregon 97201

Up in Smoke: EPA's Significant Deterioration Regulations Deteriorate Significantly

By Thomas G. P. Guilbert*

On August 16, 1974, the Environmental Protection Agency announced its latest proposed regulations¹ for implementation of the Clean Air Act's stated purpose, "... to protect and enhance the quality of the Nation's air resources..."² Usually referred to as "significant deterioration" regulations, the proposed regulations are the EPA's latest move in a chess game against the Sierra Club, whose opening move, *Sierra Club v. Ruckelshaus*³ in 1972, was the legal equivalent of taking the EPA queen. EPA has skillfully used the bureaucratic riptoste of delay and attrition, once resorting to the famed Nixon Defense (king's pawn to knight's fore: "In EPA's view, there has been no definitive judicial resolution of the issue whether the Clean Air Act requires prevention of significant deterioration of air quality. When the issue was presented to the Supreme Court, the Court was equally divided...").⁴ The latest proposed regulations are very weak, and the Sierra Club must now decide if it will settle for a stalemate.

The term "significant deterioration" refers to the degradation of existing air quality in areas of the nation where it is now better than is required by EPA's secondary standards for pollutant concentrations in ambient air. According to the *Sierra Club* ruling, such degradation is forbidden by the "protect and enhance" language of the Clean Air Act, and the EPA Administrator has a non-discretionary duty under the statute to disapprove all state implementation plans which do not contain provisions to prevent it. The proposed regulations represent the Administrator's latest attempt to establish rules governing the preparation and approval of these significant deterioration portions of state plans.

The author supposes there would not be such a furor about significant deterioration regulations if the national

secondary ambient air quality standards really protected all of the values the Clean Air Act says they are supposed to protect. While the primary standards established under the Act are designed to protect human health, the secondary standards are supposed to protect "human welfare," which is defined by the Act to include (but not be limited to):

effects on soils, water, crops, vegetation, man-made materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being.⁵

The Environmental Protection Agency has, of course, established secondary standards under the Act, which are exceedingly difficult to meet in most urban areas. As a practical and political matter, the EPA would have had a difficult time establishing levels any more stringent than the current secondary standards, and there is organized political pressure to have the standards relaxed.

Looking at the value of visibility, for example, what may appear to New Yorkers or Los Angelenos as a sparkling, clear day might look like a cloud on the horizon of Taos, New Mexico, or Bend, Oregon. In vast areas of this nation, especially in the high deserts of the West, visibility is routinely on the order of hundreds of miles. By contrast, estimates of visibility through air loaded up to the secondary standard limitations are in the ten to fifteen-mile range. Resort towns whose attraction is based in part on vistas of distant mountains could find, if the air in the intervening area were allowed to degrade to secondary standard levels, that they were located ten times too far away from the mountains to see them. A visitor to Crater Lake might find he couldn't see all the way across.

In addition to visibility reduction and by no means of lesser importance, however, are a variety of other effects which EPA has noted may result from increasing amounts of air pollutants.⁶ These effects include reduction in solar radiation reaching the ground, acidification of rain, lakes and streams, and conversion of sulfurous and nitrogenous emissions into sulfates and nitrates.

Conceding that the above scenario is possible, is it realistic? The answer, apparently, is yes: a source of air pollution currently located in an urban area may well

*Mr. Guilbert was the senior editor of the Environmental Law Institute's treatise, *Federal Environmental Law*, published in September 1974 by West Publishing Company. He is presently the Hearings Officer for the State of Oregon, Department of Environmental Quality.

1. 39 Fed. Reg. 30799 *et seq.* (Aug. 27, 1974).

2. 42 U.S.C. §1857 (b) (1), ELR 41201.

3. 2 ELR 20262 (D.C. 1972), *aff'd*, 2 ELR 20656 (D.C. Cir. 1972), *aff'd* by equally divided court, *sub nom.* *Fri v. Sierra Club*, 3 ELR 20684 (U.S. 1973).

4. 38 Fed. Reg. 18986 (July 16, 1973).

5. 42 U.S.C. §1857b (h), ELR 41224.

6. 38 Fed. Reg. 18991 (July 16, 1973).

wish to expand production and concomitantly expand emissions at the same time the air pollution control agency in the area is requiring other sources to cut back on emissions in order to meet secondary standards. The application for a permit for increased emissions will likely be denied, leaving the source with the choice between finding emissions control technology which will allow expanded production without expanded emissions, abandoning plans to expand production, or relocating the expanded source elsewhere. All other things being equal, good management would then suggest that a move occasioned by the lack of capacity of an airshed to assimilate the source's pollutants should be to an area with maximum assimilative capacity, i.e. an "empty" airshed. In fact it was the location of a massive fossil-fuel electric generating complex in the peculiarly pristine Four Corners area of the desert Southwest that provided a major impetus for the litigation affirming the Clean Air Act's no significant deterioration policy.

The EPA Response

In July, 1973,⁷ the EPA brought forth four alternative plans for achievement of minimal degradation of existing high air quality. Each of the four plans applied specific limitations to only two pollutants: sulfur dioxide and particulate matter; each required that all new or modified sources in clean air areas employ best available control technology; each applied to sixteen specified categories or sources, plus any other source which would emit more than 4000 tons per year of sulfur dioxide, particulate matter, nitrogen oxides, hydrocarbons, or carbon monoxide.

One of the four 1973 plans, the Emission Limitation Plan, would not have regulated ambient air quality directly at all, but rather would have limited total emissions over a relatively large area, which indirectly would have resulted in maintenance of air quality in many or most cases. This plan had the inherent simplicity of not relying upon complex diffusion modeling techniques to determine baseline air quality and the probable contribution of a proposed source to deterioration.

The EPA's 1973 Local Definition Plan, carrying to the logical limit an erroneous EPA concept that "significant" as used in Judge Pratt's opinion in *Sierra Club v. Ruckelshaus*⁸ could somehow be separated from "deterioration of air quality" and evaluated independently, allowed states and local air pollution agencies to make a case-by-case determination of whether the predicted deterioration of air quality caused by a new source would be "significant" in terms of that agency's or state's policy.

The EPA's 1973 Air Quality Increment Plan would have established a single nationwide allowable incremental increase in SO₂ and particulate concentrations. The in-

cremental size EPA settled on was one which, in EPA's opinion, would balance reasonable amounts of economic growth and deterioration of air quality.

Finally, EPA's announced favorite plan of 1973 combined elements of both the Local Definition and Air Quality Increment Plans. Called the Area Classification Plan, states could zone some areas so that incremental increases of the same size as in the Air Quality Increment Plan would be allowed (Zone II); other areas could be zoned so that much smaller incremental increases would be allowed (Zone I). While the increment for Zone II would allow moderate industrial development, the Zone I increment would prohibit the introduction of even one small fossil fuel fired power plant, municipal incinerator or medium apartment complex, using normal emission control techniques. There was also an "exception," or variance, procedure allowing states to zone some areas so that deterioration up to the secondary standard would be allowable.

With only very minor changes, the Area Classification Plan was re-proposed to the states in a document mailed to the fifty governors with a cover letter signed by Russell Train and dated July 11, 1974. The preamble accompanying that letter informed the states that they had thirty days to comment on the proposed regulations. However, when the employees of the air pollution agency of at least one state telephoned the EPA offices in Research Triangle Park, North Carolina, during the first week in August concerning the regulations, they were told not to bother to comment, since major revisions were to be included in a new proposal that was released August 16, 1974.

Major Weaknesses of the EPA Plan

The latest plan carries over the weaknesses of its lineal ancestors, the Area Classification Plan and the stillborn July 11, 1974, plan. However, what baby teeth those predecessors had have been pulled in the August 16 proposal.

By all odds, the greatest weakness in the original Area Classification Plan was the "exception" procedure. By granting exceptions, states could allow any area of the state to be exempt from the Clean Air Act's "protect and enhance" requirement and deteriorate to the secondary standard. This procedure is now formalized as Class III (1973's "zones" having become 1974's "classes") of the August, 1974, plan. Although the proposed regulations establish some procedures the states must go through to redesignate areas Class III, including holding public hearings and consulting with Federal Land Managers, where applicable, they state that the redesignation "shall be approved unless the Administrator determines . . . that the State has arbitrarily and capriciously disregarded relevant environmental, social, or economic considerations . . ."⁹ (emphasis added). The requirement that the considerations must be arbitrarily and capriciously disregarded

7. 38 Fed. Reg. 18985 *et seq.* (July 16, 1973).

8. 2 F.L.R. 20263.

9. 39 Fed. Reg. 31008 (Aug. 27, 1974).

assures that the Administrator will not disapprove a redesignation to Class III so long as the state gives lip service to air quality considerations and cites the economic advantage to the air pollution source. Predictably, this loophole will swallow up the rule.

But is the loophole legal? Judge Pratt's order in *Sierra Club v. Ruckelshaus* required the EPA Administrator to disapprove state implementation plans which allow significant deterioration of air quality "in any portion of any state."¹⁰ Under the EPA proposed regulations, a state could redesignate an area where there existed zero pollution or nonmeasurable amounts of pollution as a Class III area and then allow the air quality to degrade all the way to the secondary standards. On exclusively air quality grounds, if there is to be any meaning to Judge Pratt's order, it must mean at least that such deterioration is prohibited by the Clean Air Act's "protect and enhance" language; otherwise, we are left with no standard beyond the secondary standards.

In 40 CFR part 52, section 52.21, to which the new significant deterioration regulations will be added, the EPA Administrator, in compliance with the order, disapproved all state plans "... to the extent that such plans lack procedures or regulations for preventing significant deterioration of air quality in portions of States where air quality is now better than secondary standards."¹¹ Yet, at the press conference on August 16, John Quarles, Deputy Administrator of EPA, conceded under questioning that it would be correct to characterize the proposed regulations as not preventing the states from allowing existing clean air in some areas to degrade all the way down to the national standards, and thus the regulations do not solve the problem.

How can EPA propagate this Newspeak a full ten years before 1984? In his prepared remarks for the August 16 press conference, Quarles advanced "... a recognition that deterioration of air quality can be regarded as 'significant' only within the broader perspective of public expectations and desires concerning the manner in which a particular region should be developed."¹² Unfortunately, Quarles, a lawyer and a very good one, did not tell us where EPA derived the statutory authority to enact regulations formalizing such recognition. The Clean Air Act does very specifically grant states the authority to impose "land use and transportation controls" as part of their implementation plans, but only "... as may be necessary to insure attainment and maintenance of [a] primary or secondary standard."¹³ The authority to apply (or not apply) ambient air quality standards more restrictive than

the secondary standard for the purpose of land use control is not an extension of that authority, but the converse of it, and legally highly dubious. The purpose of enforcing ambient air standards more restrictive than the secondary standards is, as stated in the Clean Air Act, simply "to protect and enhance the quality of the Nation's air resources." The author fails to find authority in that law for using air quality standards for any other purpose.

In one of the sentences added to the preamble to the proposed regulations between the July and August, 1974, drafts, the EPA has italicized two words in the second part of the "protect and enhance" subsection: "... so as to promote the public health and welfare and the *productive capacity* of its population."¹⁴ Could this be the phantom authority for using the Clean Air Act as a means to accomplish the "broader perspective of public expectations and desires concerning the manner in which a particular region should be developed"? It takes a distortion of language to read it so. What EPA seems to want the subsection to say is that the quality of the Nation's air resources should be protected and enhanced *so long as it does not interfere with* pollutant-producing production by the population in clean air regions: that is, EPA views productive capacity as in conflict with, and restricting, the purpose of protection and enhancement of air quality. The subsection's language, however, shows that Congress expected that protection and enhancement would *result* in the promotion of productive capacity, in that people will be healthier, happier, and more productive when the air is clean than when it is dirty.

In their inherent police power, the states do, of course, have the power to regulate land use in accord with the expectations and desires of the populace on how land should be developed. The EPA, however, has no statutory authority to *require* the states to exercise that power, as would be suggested by the Administrator's reserving the right to disapprove a redesignation if the state has disregarded a relevant social or economic consideration.

The whole thrust of *Sierra Club v. Ruckelshaus*, appealed all the way to the Supreme Court and affirmed there, is that the Clean Air Act, by its "protect and enhance" language, forbids any "significant deterioration of existing air quality in any portion of any state where existing air quality is better than one or more of the secondary standards promulgated by the Administrator."¹⁵ Under the doctrine of pre-emption, a state cannot validly adopt less restrictive air quality controls than the federal standard. Nor may EPA delegate to the states the power to adopt less stringent standards than are allowed by federal law, and it is thus highly doubtful that the Agency has the power to *approve* the exercise of state police power in the field of air pollution control if that exercise would work against the goals of the Clean Air Act.

10. 2 ELR 20263.

11. 37 Fed. Reg. 23836 (Nov. 9, 1972).

12. Remarks by John R. Quarles, Jr., EPA Deputy Administrator, at the Significant Deterioration Press Conference (August 16, 1974) at 3.

13. 42 U.S.C. §1857c-5(a)(2)(B), ELR 41206

14. 39 Fed. Reg. 31000 (Aug. 27, 1974).

15. 2 ELR 20263.

The stillborn July, 1974 proposal had an interesting feature, deleted from the August proposal, requiring states to specifically redesignate any areas they desired to be Class II (moderate degradation) or Class III (degradation to the secondary standards) within 24 months of promulgation of the regulations. As with the earlier 1973 Area Classification Plan and the later August 16, 1974, proposal, the Class II designation was to become the nationwide standard as of the date of promulgation, but under the July, 1974, proposal, areas not specifically redesignated Class II or Class III within two years would then automatically revert to Class I (almost no degradation). (States could, however, later redesignate the now-Class I areas to Class II or Class III.) Thus under the July, 1974 proposal the weight of bureaucratic inertia was on the side of cleaner air, since a state's failure to take classification action would result in areas reverting to the high standards of Class I, whereas state inaction under the more recent proposal would leave areas subject to the lower standards of Class II. In its preamble to the July, 1974, proposal, where this feature was explained, EPA stated:

The nationwide Class I designation after 24 months for State hearings and redesignations . . . is not simply a tactical maneuver to force States into action. It does have this conceptual basis: if "significant deterioration" were to be considered from a purely air quality standpoint, without any consideration and balancing of economic, social, and other factors, it is at least arguable that the Class I type of designation would be the most appropriate in many areas. Therefore, on a conceptual basis, the Administrator is simply providing a tentative determination of what significant deterioration means . . ." (emphasis added)¹⁶

These words are gone from the preamble to the August 16, 1974, proposal, but the obvious question that quotation raises lives on in the proposed regulations: if deterioration greater than the increments allowed in Class I areas is significant in some places, why isn't it significant in all places? If the answer to that question can be framed only in terms of consideration of factors other than air quality, where is the statutory authority of the EPA to require consideration of those factors? More importantly, in the face of the Clean Air Act's "protect and enhance" language and the judicial interpretation thereof, where is the statutory authority of the EPA to allow deterioration greater than Class I in any area? In short, the very existence of a Class I in the latest EPA proposal stands as the strongest criticism of the existence of Classes II and III.

EPA argues, not frivolously, that a significant deterioration regulation of the stringency of the Class I allowable increments, applied universally and uniformly, could be severely restrictive of many social and economic activities; and that if Congress had intended to make air quality considerations as dominant a determi-

nant of land use as a nationwide Class I designation would dictate, it would have used more explicit language than that of the "protect and enhance" subsection. This is an important argument which, though apparently rejected by the courts, deserves serious consideration. The author would like to make three observations with regard to it.

First, the land use implications of the significant deterioration requirement of the Clean Air Act have probably been overexaggerated. No air regulation, standing alone, can affect uses of land which do not cause air pollutant emissions, and as a practical matter, will have little effect on any but large sources of pollutants. Residential, agricultural, small commercial, and light industrial land uses don't generate enough pollutants (except, perhaps, from the automobile exhausts in parking lots and from building heating units) to raise serious concerns about significant deterioration. If improvements in automobile emissions control which EPA anticipates materialize, and sensible transportation planning accompanies future development, significant deterioration rules will most likely not have a restrictive effect on these land uses unless dirty fuels are burned in a large number of home and small business furnaces. Even controlling the emissions from furnaces yet to be built does not, however, appear to raise insurmountable land use problems.

Second, with regard to heavy industry and utilities, the prohibition against significant deterioration means only that in the short run, increases in the volume of uncontrolled emissions will not be allowed to seriously outstrip improvements in emissions treatment and control technology; and in the long run the improvements in control technology must very nearly equal the increases in pollutants generated. But this long-run requirement is the same no matter what ceiling exists on ambient air deterioration. Even if all areas were allowed to deteriorate to the secondary standards and even if the secondary standards were relaxed, sooner or later, if the increase in pollutants generated continues to exceed improvements in treatment and control technology, all air sheds will be loaded to the point where they can assimilate no more pollutants. Thus, the question is not whether there will be a "no-growth" policy on pollutants actually being emitted into the air, but rather how fast a time schedule is imposed to achieve that policy, and how far air quality will deteriorate before the eventual "no-growth" policy is achieved.

Third, it is not necessarily true that, from a purely air quality standpoint, deterioration greater than Class I increments would in every case be significant. While, as argued above, the EPA lacks statutory authority to impose allowable deterioration increments on grounds other than air quality, an increment which varies according to purely air quality considerations would fall within the statutory mandate. Thus, using as an example the annual arithmetic mean secondary standard for sulfur dioxide (80 micrograms per cubic meter), while it may be that a deterioration of more than 2 micrograms per cubic meter

16. Draft Preamble to regulations sent to governors July 11, 1974, at p. 17.

(the Class I increment) would be considered significant where existing air quality either has zero concentration of sulfur dioxide or stands at 78 micrograms per cubic meter, a deterioration of 15 micrograms per cubic meter (the Class II increment) might well be considered insignificant where existing air quality stands at 50 micrograms per cubic meter.

Other Weaknesses of the EPA Plan

While the above deficiencies in the EPA proposal are the most serious, they are not the only areas in which the proposed regulations fail to satisfy the Clean Air Act.

Under the proposed regulations, the head of any department or agency or the United States Government which administers federally-owned land, including public domain lands, or his designated representative, may stymie any state's attempt to redesignate the land Class I (or Class II or III).¹⁷ In the event of disagreement between the federal land manager and the state, the Executive Office of the President will designate a classification for the area. This provision seems to fly in the face of the Clean Air Act's clear statement:

that the prevention and control of air pollution at its source is the primary responsibility of States and local governments.¹⁸

In light of the fact that it is precisely in the sparsely settled states of the West and Alaska, where the United States Government owns a large percentage of the land, that many large, scenic pristine air areas exist, this provision in the proposed rules is a significant one. Further, it is conceivable that, for example, a soft-coal fired thermal generating plant located on federal lands redesignated by the Executive Office of the President as Class III could prevent the maintenance of Class I deterioration increment levels on adjoining non-federally-owned land.

This latter situation would provide a direct parallel with the facts in *Huron Portland Cement Co. v. Detroit*.¹⁹ In that case, a ship operating in interstate commerce on the Great Lakes was in full compliance with federal regulations governing its boiler equipment and operations, and would require structural alterations in order to comply with Detroit's smoke emission standards. Nonetheless, finding that maintenance of air quality is a matter of peculiarly local concern, the Court held that the ship must comply with the smoke standards.

The federal regulations in the *Huron Portland Cement* case had been enacted for safety, not air quality, purposes. An even more apposite case might thus be *Florida Lime and Avocado Growers v. Paul*.²⁰ In that case, the relevant federal regulations were the United States Department of

Agriculture's standards of wholesomeness. California excluded importation of some avocados for failing to meet stricter state standards covering the same subject matter and was upheld in its action by the Supreme Court.

Finally, to allow a federal land manager to deadlock the imposition by a state of significant deterioration limitations over an area, with the power to resolve the deadlock vested in a federal authority, amounts to exclusive federal jurisdiction over the land. Article I, section 8, clause 17 of the United States Constitution provides the only express authority for the exercise of exclusive jurisdiction over lands within states. That clause states, in part:

The Congress shall have power . . . To exercise exclusive Legislation in all Cases whatsoever . . . over all Places purchased by the Consent of the Legislature of the State in which the Same shall be, for the Erection of Forts, Magazines, Arsenals, dock-Yards, and other needful Buildings. . .

Under the Tenth Amendment to the United States Constitution, reserving all powers not enumerated to the federal government to the states and the people, there can be no other instances when there is exclusive federal jurisdiction over lands within states, and so this portion of the rule presents constitutional problems.

The other side of this federal regulation coin is that the Administrator of the EPA clearly could use the statutory directive that he

shall encourage cooperative activities by the States and local governments for the prevention and control of air pollution; encourage the enactment of improved and, so far as practicable in the light of varying conditions and needs, uniform State and local laws relating to the prevention and control of air pollution; and encourage the making of agreements and compacts between States for the prevention and control of air pollution.²¹

in resolving jurisdictional disputes over allocation of the deterioration increment along state boundaries. Many such disagreements could actually be created by the proposed regulations in that the deterioration allowed in a Class III area designated by one state and that allowed in a Class I area which the neighboring state may wish to designate in the same airshed may be mutually inconsistent. However, while noting that the "transport of pollutants across State lines was a major issue raised by the states which filed amicus curiae briefs in [*Sierra Club v. Ruckelshaus*]," the EPA states in its preamble to the regulations, "it is not appropriate to place the Administrator in the role of arbitrator in interstate disputes because

21. 42 U.S.C. §1857a (a), ELR 41201. *cf.* 42 U.S.C. §1857c-5 (a) (2) (E), ELR 41206, requiring all state implementation plans to contain "adequate provisions for intergovernmental cooperation, including measures necessary to insure that emissions of air pollutants from sources located in any air quality control region will not interfere with the attainment or maintenance of such primary or secondary standard in any portion of such region outside of such state or in any other air quality control region."

17. 39 Fed. Reg. 31007 (Aug. 27, 1974).

18. 42 U.S.C. §1857(a)(3), ELR 41201.

19. 362 U.S. 440 (1959).

20. 373 U.S. 132 (1963).

he would have no criteria on which to base his decisions." The EPA can and will provide technical assistance and make findings of fact; but if the differences cannot be resolved, relief should be sought through the courts."²²

The author suggests, however, that the only criteria the EPA Administrator lacks to perform the role of arbitrator are the social and economic factors which he lacks statutory authority to consider in any event. At the same time, the statutory directive cited above that he "shall encourage . . ." gives him ample criteria on which to base his decisions.

The date of the baseline above which no significant deterioration will be allowed presents another anomaly of the proposed regulations. The "protect and enhance" language has been in federal law since the Air Quality Act of 1967, although there existed only meager federal enforcement powers prior to the enactment of the Clean Air Act of 1970. It was in the 1970 Senate Report accompanying the bill that became the Clean Air Act that Judge Pratt found convincing evidence that in the re-passage of the "protect and enhance" clause the policy of no significant deterioration became the legislative intent.²³ In Judge Pratt's order in *Sierra Club v. Ruckelshaus* in 1972, he directed the EPA Administrator to "disapprove any portion of any state plan which fails to effectively prevent the significant deterioration of existing air quality in any portion of any state,"²⁴ (emphasis added) meaning, presumably, 1972, so that that date must be the latest candidate from which significant deterioration may be computed.

The proposed EPA regulations, however, use as the baseline 1973 data to which has been added the modeled contribution from sources on which construction began before the effective date of the regulations. EPA justifies this choice on three bases: that 1973 is the latest year for which complete data is available, and since data gets better every year, it is also the most reliable data available; that extrapolation back to a recent baseline by modeling techniques is more easily done for a recent date since which fewer pollution sources have located than for a distant, historical date; and that using an earlier date would work an unfairness upon sources which have located in clean air areas since the baseline date.

The first two arguments for a 1973 baseline are based upon technical and administrative convenience, and have no legal color at all. However, if 1973 (or later) air quality can reasonably be equated with an earlier baseline, i.e., if no new sources have located to cause deterioration since the earlier baseline date, then these arguments also have no technical or administrative merit. In other words, the convenience applied only in precisely those cases where a

new source has changed the air quality from that existing when Judge Pratt's order was given.

The third fairness argument is unconvincing because it cuts both ways. If it is unfair to impose a retroactive baseline which may force a source which has located in a clean air area since that baseline date to clean up, is it not equally unfair to reward those "sooners" who rushed to clean air areas after Judge Pratt's order but before the regulations came out, gaining a competitive advantage over those who may wish to locate in those areas later but cannot fit within the allowable deterioration increment? In fact, is there not a colorable equal protection argument here which outweighs any due process considerations?

Beyond these questions, the proposed regulations establish an incremental deterioration that may be added to the baseline, so that in a Class II area, for instance, a moderate amount of pollutants may be added to the air shed beyond the 1973-74 baseline, even if, due to new sources, that 1973-74 baseline has been raised by several times that moderate amount above air quality levels existing in 1972. What logic is there in allowing further deterioration from levels existing in 1972 only because a new large source managed to get into the area before 1973-74 data were taken?

Related to the question of the baseline date is the fact that the proposed regulations, which are effectuated through the new source review process, do not affect new sources which commence construction within six months of the effective date of the regulations. Thus it is possible that, even with the baseline effectively the level as of the date of promulgation of the regulations, EPA's own allowable incremental deterioration may have been exceeded many times over before the first new source in the area is reviewed under the significant deterioration criteria.

The 1973 Area Classification Plan and the stillborn July, 1974 proposal to the governors both contained provisions requiring major new sources to conduct air quality monitoring in their vicinity. The data from such monitoring was to be used both to assure that the air quality was not deteriorating beyond the increment allowed for that area and to provide data for the prediction of whether a proposed later new source could be constructed without exceeding the allowable deterioration increment. The monitoring requirement has been excised from the August, 1974 proposal. EPA has now committed itself fully to preconstruction modeling techniques. This weakness in the present regulation is a technical, rather than a legal one, but it is a serious weakness. Diffusion modeling is a young science, and results derived from it are subject to error of a high magnitude. EPA asserts that "[d]ata obtained from current diffusion modeling techniques, while not corresponding to actual conditions in the ambient air, do provide a consistent and reproducible guide which can be used in comparing the relative impact of a source."²⁵

22. 39 Fed. Reg. 31005 (Aug. 27, 1974).

23. 2 ELR 20264.

24. 2 ELR 20263.

25. 39 Fed. Reg. 31003 (Aug. 27, 1974).

Errors in the results can be reduced somewhat by calibration of the model against measured data; however, with no monitoring requirement, such calibration is unlikely to occur or even be possible. Furthermore, like any modeling technique, diffusion modeling becomes much more complex, difficult, and expensive the more variables are introduced. The cumulative effects of non-major sources on the air quality of an area are likely to be simplified out of a pre-construction model for a major source.

From the manpower standpoint of the state regulating agency, monitoring data provides some reference numbers against which to compare what will probably be a bewildering document submitted when an applicant for a permit presents his diffusion model "proving" that his proposed source will not cause air pollution levels to exceed the allowable deterioration increment. After the source is constructed, monitoring data will afford the regulating agency a method of knowing if the pre-construction prediction was correct, if the applicant is in compliance, and if there is any "unused" increment left. The data collected from such monitoring stations, moreover, can be useful to the agency for other air programs.

In two respects the new proposed regulations are extremely solicitous of the interests of fossil fuel-fired steam electric power plants. In the first instance, as explained in the preamble to the rules, EPA has eschewed the use of "modified source" in favor of "expanded source," defined as a "source which intends to increase production through a major capital expenditure." EPA states that this was to accommodate fuel-switching allowed under the Energy Supply and Environmental Coordination Act of 1974,²⁶ which EPA concedes was not intended to resolve the significant deterioration issue, but which does reflect a recent expression of congressional intent regarding priorities. EPA is probably correct that, subject to the limitations provided in the 1974 Act, Congress has determined that conservation of clean fuels achieved by fuel-switching takes precedence over significant deterioration.

The second accommodation to fossil fuel-fired steam electric power plants is less defensible. In the July, 1973, preamble,²⁷ EPA explained (highly simplified here) that the new source performance standards for this type of source had been set to correspond to the performance of the best control technology (stack scrubbers or electrostatic precipitators) on the emissions from the worst fuel conditions (high sulfur coal). However, due to the availability of low sulfur fuels in many of the same areas where the air is presently cleaner than the national secondary standards, these new source performance standards could be met without application of the best control technology. Nonetheless, the 1973 proposal contained a provision requiring the best available control technology which, when used in conjunction with the better fuels,

would result in performance standards appreciably higher than the new source performance standards.

The requirement for best available control technology on such power plants in clean areas has been deleted from the most recent proposal. In EPA's words, "power plants would not be subjected to the special [best available control technology] review because requiring such a review might arguably be inconsistent with the Congressional intent of requiring national standards of performance for new sources."²⁸ Congressional intent? Whatever happened to "The purposes of this subchapter are — (1) To protect and enhance the quality of the Nation's air resources ..."²⁹

The Clean Air Act requires, by reference,³⁰ that national primary and secondary ambient air quality standards be established for a minimum of six pollutants: sulfur dioxide, particulate matter, carbon monoxide, hydrocarbons, nitrogen oxides, and photochemical oxidants. (Photochemical oxidants are caused by the action of sunlight on other pollutants, and should be adequately controlled by emissions standards controlling the ambient air concentrations of the first five pollutants.) Judge Pratt's order required that the EPA Administrator approve only those state implementation plans which do "... not permit significant deterioration of existing air quality in any portion of any state where the existing air quality is better than *one or more of the secondary standards promulgated by the Administrator.*"³¹ (emphasis added) The presently proposed regulations control only sulfur dioxide and particulate matter, and are thus in putative violation of the court order.

In the 1973 Area Classification Plan, best available control technology was required for all pollutants for which secondary standards exist, although the Zone I and Zone II increments applied only to sulfur dioxide and particulates. EPA in its latest regulation finds this best available control technology requirement "inconsistent" with the Class I and Class II restriction to the two pollutants. EPA does not explain why it considers the requirement that new sources apply best available control technology to all pollutants is inconsistent with its regulations proposed for the express purpose of preventing significant deterioration of air quality. Interestingly, EPA continues to use the argument that the regulations require application of best available control technology, even though the regulations in fact no longer so require, as an argument against including carbon monoxide, hydrocarbons, and nitrogen oxide in the increments in its area classifications.³²

The preamble makes two other arguments against in-

26. P.L. 93-319, ELR 41231.

27. 38 Fed. Reg. 18989 (July 16, 1973).

28. 39 Fed. Reg. 31005 (Aug. 27, 1974).

29. 42 U.S.C. §1857(b) (1), ELR 41202.

30. 42 U.S.C. §1857c-4(a)(1)(A), ELR 41205.

31. 2 ELR 20263.

32. 39 Fed. Reg. 31006 (Aug. 27, 1974).

clusion of carbon monoxide, hydrocarbons, and nitrogen oxide in the deterioration increment, neither of which is nearly as convincing as the former and now invalid argument based on the deleted best available control technology requirement. The first is that, since the prime source of this type of pollution is the automobile, and new automobile emission controls are drastically reducing automobile emissions, there will be no significant deterioration for these pollutants, and conditions may actually improve. If significant deterioration for these pollutants is unlikely to occur, however, what harm can be caused by issuing regulations setting a deterioration increment which may not be exceeded? Furthermore, reductions of emissions at the source will result in reductions of pollutants in the ambient air only if the number of new sources does not exceed the amount of per-source reduction. The EPA has published separate regulations concerning indirect sources:³³ parking lots, highways, airports, etc., in recognition of this fact. While moderate residential and small commercial development is not likely to cause significant air pollution, a massive shopping center with its accompanying parking lot where once there was only rangeland might well cause significant deterioration of the ambient air for the "automotive pollutants" in that area.

The other argument EPA makes against inclusion of these pollutants is that there are no identifiable or noticeable effects at concentrations below secondary standard levels. In making this point, EPA concedes that sulfur dioxide and particulates have aesthetic impact at levels below the secondary standards. If this latter is true, then in light of the Clean Air Act's definition of "welfare"³⁴ the secondary standard may have been promulgated at an improper level for those two pollutants. Regardless of aesthetic or other effects, however, the decision in *Sierra Club v. Ruckelshaus* appears to interpret the Clean Air Act to require that concentrations of any pollutants shall not be allowed to rise significantly where the existing levels are below the secondary standards; and to state that deterioration all the way to the secondary standards is not significant appears to be a transparent violation of the court order, and, by extension, the Clean Air Act.

Not all changes in the proposed regulations that have taken place since the original 1973 proposal have weakened them, however. The list of sources for which pre-construction review is required to determine the effect on ambient air has been expanded from 16 types to 19, adding fuel conversion plants, primary lead smelters, and sintering plants. At the same time, however, another requirement that any source not included in the original 16 types which has a total annual potential emission rate for any of the five major secondary standard pollutants greater than 4,000 tons was deleted. The deletion relating to carbon monoxide, hydrocarbons, and nitrogen oxides

is in line with the general decision, discussed above, to ignore these pollutants. The deletion of the requirement with regard to non-listed sources emitting greater than 4,000 tons per year of sulfur dioxide or particulates was "because the requirement generally is superfluous."³⁵ The only time the provision would have come into effect, however, would have been when it was specifically non-superfluous, so it is a matter of open conjecture why EPA did not leave the provision in the latest proposal.

Finally, as a purely political and practical matter, the proposed regulations suck state air pollution control agencies into a maelstrom. If a state should desire to redesignate any area Class I or refuse to redesignate an area Class III when requested to do so, the air pollution control agency is going to be cast as the villain which unreasonably insists on absurdly pure air at the cost of goods, services, and the American Way.

It is hard to imagine any regulation which does not have some ripple effects, of course, and pollution control regulations perhaps have more than most. On this issue, however, EPA has told the states it won't stand behind them. As any county planning official can testify, nothing inflames the passions more than drawing lines on a map, and yet the proposed regulations require drawing lines on a map if the state does not wish to settle for a uniform Class II designation. (Further, the EPA Administrator has specifically solicited "comments on the desirability of increasing the level of the Class II increments proposed."³⁶ Will he reject comments on the desirability of decreasing the level of the Class II increments, one wonders?)

Once the lines are drawn, the agency must defend them at at least one public hearing in the area affected. That won't be easy, since in the majority of cases, the decision to draw the line right here instead of a little over there, or maybe in the other direction, will have been an arbitrary one. Once the area is redesignated, another political question has been created: how far within a Class III area must a source locate so as not to violate the air at the border of a Class II or Class I area? This once arbitrary line suddenly takes on great importance as people take sides on the question of buffer zones to protect the border areas. Once the owner or operator of a proposed new source applies for a permit, the battle lines will form again on at least four different fronts. Will the new source cause the deterioration increment to be exceeded in its own area? Will it cause the increment to be exceeded in a neighboring area of a numerically lower class? Should the immedi-

33. 39 Fed. Reg. 7270 *et seq.* (Feb. 25, 1974).

34. See text accompanying note 5, *supra*.

35. 39 Fed. Reg. 31003 (Aug. 27, 1974). In the proposed regulations of 1973, the Administrator noted that the sixteen categories of sources account for approximately 30 percent of the particulate matter and 75 percent of the sulfur dioxide emitted into the atmosphere each year nationwide, and account for essentially all of these pollutants emitted in clean areas. 38 Fed. Reg. 18989 (July 16, 1973).

36. 39 Fed. Reg. 31002 (Aug. 27, 1974).

ate area to be affected by the proposed new source be redesignated to a numerically higher class? Should the entire area in which the new source will be located be redesignated? Later, as each Class I or Class II area reaches its deterioration ceiling, there is certain to be pressure to redesignate upward, or to start nibbling away at the edges by redrawing the boundary lines. Almost all of these political problems are caused by having differential deterioration increments assigned to geographical areas, combined with the unlimited power to redesignate the areas. Do we need regulations which create problems for us like this?

A Suggested Alternative

EPA has complained that commentators on their proposed significant deterioration regulations constantly criticize their conceptual base, but don't get down to the nitty gritty of proposing specific regulations which will work. The author has sent a copy of this article to EPA within the called-for comment period (which ended September 26, 1974), accompanied by a specific regulation which he drafted. The regulation is not printed here, but rests upon the following conceptual bases:

First, like the EPA proposal, the mechanism establishes increments to be added to baseline air quality rather than setting absolute ceilings for areas irrespective of baseline air quality. This concept may appear at first blush to be a given, deriving from the term "significant deterioration." The statutory language, however, is not "significant deterioration" but rather "protect and enhance" (emphasis added). There is therefore no reason why so-called significant deterioration regulations could not establish absolute pollutant ceiling levels (tertiary standards?) and require air quality cleaner than baseline.

While the EPA proposed regulations are framed in terms of baseline-plus-increment, the environmental, social, and economic ends EPA proclaims are achievable thereby would be much better accomplished by the tertiary standard approach. Compare EPA's remarks in the preface to the proposed regulations:

It is important to recognize that the area classifications do not necessarily imply current air quality levels or current land use patterns . . . Class III could be applied to a currently pristine area, and Class I could be applied to a less clean area . . . Areas should be considered for re-designation as Class I in cases where the location of any polluting industry within the area is inconsistent with current or planned uses for the area . . . because it is one of exceptional scenic or recreational value or is ecologically fragile. . .³⁷

The author recalls the smog alerts in Yosemite National Park of a few years back and wonders if any baseline-plus-increment regulations would accomplish the ends which EPA envisions their regulations will allow. Cleanup of exceptionally scenic or ecologically fra-

gile areas can be achieved by specific emissions regulations, however,³⁸ and significant deterioration rules are more defensible if limited to baseline-plus-increment than if a tertiary standard approach is used.

Second, the deterioration increment is variable. As noted in the discussion of major weaknesses of the EPA proposal, Class I-sized increments may be an accurate reflection of what significant deterioration means in many clean air areas, but in the short run would be extremely restrictive of commercial development. To apply it to every area where the concentrations of one or more pollutants are below the secondary standards would create a far more drastic result than any Congress could have contemplated in passing the Clean Air Act.

Third, the deterioration increment is infinitely variable, rather than having two or three discrete steps, and the size is automatically determined, rather than being subject to political decisions. The infinite variability feature avoids the problems with the differential between allowable increments existing at borders, which are discussed above. The automatic application feature avoids the kind of political difficulties for air pollution control agencies ascribed to the EPA redesignation process.

Fourth, the size of the allowable deterioration increment is automatically determined by baseline air quality. The increment could just as easily be a function of any other independent factor, but the statutory authority probably exists only if the factor is intimately related to air quality. In its preamble to the regulations, EPA alludes to the NRDC Plan, developed by Richard Ayres, where the independent variable of which the increment is a function is population density.

Fifth, the author's proposal assumes that the purpose of the "protect and enhance" subsection is to protect two values above others: one is to guard against the possibility of as-yet-unknown low level effects the pollutants may have as concentrations approach the secondary standard levels; the other is to preserve forever the truly pristine areas where on a clear day you can see forever, and every day when the sun shines is clear. Accordingly, the author's proposal is for an allowable deterioration increment at zero when baseline air pollution concentrations are zero, increasing gradually as a function of higher baseline air pollution, peaking at a moderate level of baseline pollution, then dropping sharply as the baseline air quality approaches the secondary standard. The suggested formulation of such a function defines the significant deterioration increment as the lesser of one third of the baseline pollutant concentration or one half of the difference between the baseline level and the secondary standard.

Sixth, no single permit is allowed to allocate more than one half of the remaining deterioration increment

37. 39 Fed. Reg. 31004 (Aug. 27, 1974).

38. See, e.g. Oregon's Wilderness, Recreational, Scenic Area Rules, Oregon Administrative Rules, Chapter 340, Division 1, Subdivision 3, ELR 49001, at sections 13-015 and 13-020.

measured at any point greater than one mile from the source to which the permit is granted. Five years or more after a source locates in an area, it may apply for a permit to be allocated one half of the then-remaining deterioration increment.

Seventh, computation of the baseline levels and predicted emissions impact are to be accomplished using data measured over a year's time prior to the application for a permit and by diffusion modeling.

Eighth, the burden of proof is placed upon every applicant who must obtain any air pollution permit to show that he can comply with the regulations.

Ninth, permittees are required to continuously monitor

the effects of their emissions on ambient air quality.

Tenth, best available control technology is required in all cases.

In three months, the Clean Air Act will celebrate its fourth birthday. For more than half of those four years, EPA has been under a court order to promulgate regulations to effectuate the Act's "protect and enhance" subsection. That EPA is apparently on the verge of finally acting is welcome news. The American people, however, deserve regulations which comply with the Clean Air Act and the court order, and those we have yet to see from EPA.

No. 11

PACIFIC POWER & LIGHT COMPANY
PUBLIC SERVICE BUILDING
PORTLAND, OREGON 97204

G. ELDON DRENNAN
SENIOR VICE PRESIDENT

November 18, 1974

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

Subject: OSPIRG Petition for Adoption of Rules Relating
to Significant Deterioration of Air Quality

Dear Mr. Cannon:

Pacific Power & Light Company herewith offers its comments and suggestions with respect to the proposed rules submitted to you by the Oregon Student Public Interest Research Group (OSPIRG) and the Northwest Environmental Defense Center (NEDC) on October 30, 1974.

Pacific Power & Light Company is an investor owned electric utility serving approximately 341,000 customers in the State of Oregon. Although we do not at present have any facilities in the planning stage which would fall within the purview of these proposed regulations, we anticipate that we may be required to construct such facilities at some time in the future to meet the energy needs of our customers and others in the State of Oregon and in the Pacific Northwest. Accordingly, we are concerned with the possible adoption of these proposed rules and welcome this opportunity for comment.

At the outset, we take exception to OSPIRG's contention in paragraph 4 of its petition to the effect that ORS 468.305 mandates adoption of the proposed rules. We respectfully suggest that OSPIRG has misread or misconstrued the statute, and further suggest that the State's Clean Air Act Implementation Plan fully satisfies ORS 468.305. Of course, the Attorney General will wish to address himself to this alleged violation of state law; however, we do wish to point out that ORS 468.305 provides for a plan for "prevention of new air pollution in any area of the state in which air pollution is found existing or in danger of existing," rather than "areas where pollution does not now exist, but may exist in the future" as suggested by OSPIRG. We believe this difference in verbiage to be significant in this context.

Secondly, we suggest that consideration of the proposed regulation at this time is premature. We are sure that OSPIRG is aware of the pending rule making proceeding of the Federal Environmental Protection Agency (EPA) with respect to this very subject. On August 27, 1974, EPA published in the Federal Register a notice of proposed rules for the prevention of significant air quality deterioration as part of its regulations on approval and promulgation of State Implementation Plans. EPA provided a thirty day period for public comment, and we anticipate that

its final rules on this subject will be promulgated in the near future. Accordingly, we urge you to delay action on the OSPIRG petition until such time as the EPA regulations are adopted, and that you adopt, at that time, regulations which will be fully compatible with the EPA rules.

In addition, we would like to point out the following provisions of OSPIRG's proposed regulations which deviate from or conflict with the proposed EPA rule, or which are otherwise unreasonable or unwarranted.

1. Proposed Sections 20-048.02(1) and (3) would place all areas of the state which now have air quality better than the national secondary ambient air quality standards within Zones I and II*. This would not permit the state to designate any area which, for cogent social and economic reasons, may be expected to experience major industrial or commercial expansion. We believe that it would be a grave mistake to foreclose this type of flexibility in land use planning for the state's future needs.

2. The baseline date of 1972 as specified in Sections 20-048.02(1) and 20-048.03(3) is essentially unreasonable and may be unworkable. It gives no consideration to facilities which may have been authorized or under construction in 1972, nor is any consideration given to the question of availability of baseline data for that year. We agree with EPA that an accurately measured baseline is not significant in measuring incremental additions, and urge that you utilize the same baseline as proposed by EPA.

3. The OSPIRG regulation would establish an ambient air standard of 300 ug/m³ three hour maximum for SO₂ in Zone II areas, as opposed to the 700 ug/m³ standard proposed by EPA. We commend your attention to the fact that EPA has rescinded its original three hour national ambient air quality standard for SO₂ because it determined that short term concentrations have little adverse effect on health or welfare. The state standard of 1300 ug/m³ is still almost twice as great as the EPA 700 ug/m³ standard, and we believe that the EPA figure is sufficient (for short term concentration) to preclude significant deterioration.

4. We believe that it is unnecessarily restrictive and arbitrary to include all lands administered by the Bureau of Land Management within Zone I. There may be BLM administered lands which would more reasonably be classified as Zone (Class) II or III, and we suggest an ad hoc determination on such lands. In addition, we refer you to proposed Section 52.21(c) of the EPA regulations which provides for redesignation of federal lands by the Federal Land Manager with approval of EPA.

5. The inclusion of emission limitations, as suggested by Section 20-048.03, is unnecessary to prevent significant deterioration if ambient limits are adopted. This Section, of course, is akin to the "emission limitation plan" rejected by EPA, and should be rejected for the same reasons. Land use planning

*We suggest the use of the term "Class" rather than "Zone" for the same reasons set forth by EPA in the preamble to its proposed rules in the 27th issue of the Federal Register.

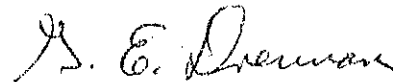
is too important a subject to be based entirely upon one aspect of environmental protection, and so long as the ambient standards are met, there is no need for restriction on emissions in excess of those required under the new stationary source performance standards and under state emission standards. In addition, the 120% of baseline emission limit as proposed by OSPIRG would effectively prevent any development of areas which now have little or no industrial activity.

6. Again, the proposed 100-ton per year limitation suggested by Section 20-048.04 is unwarranted and unnecessary.

7. We suggest that the provisions of proposed Sections 20-048.04, 20-048.05, 20-048.06, 20-048.09, 20-048.10 and 20-048.11 are unnecessary and redundant to other existing regulations of the department. Specifically, OAR Sections 20-020 and -030 now require notice of a proposed new source and information with respect to the source's emissions; Section 20-033 requires permits for such sources; and Section 20-001 requires use of best available treatment and control of air contaminants. We see no need to adopt the OSPIRG suggestions which would unnecessarily duplicate or (in some instances) conflict with existing regulations.

Again, we thank you for the opportunity to offer these comments and trust that you will give them serious consideration.

Very truly yours,



Mo H

Nov 18, 1974

Dear Sus -

Upon rearing the city of
Portland this weekend, my eyes
smarted terribly until I again left the
city. This soddens me greatly. We
can hardly ever see Mount Hood well
anymore. Don't let this kind of air
pollution contaminate the rest of
Oregon. Please.

Help us clean our air!

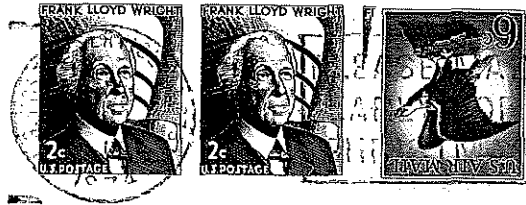
Sincerely,

Bruce Helser

School of Forestry

Oregon State University

4425 SW Philomath Kd.
Corvallis, Or. 97330



NOT AIRMAIL

Portland Environmental
Quality Commission

1234 SW Morrison St.

Portland, Or. 97205

James H Sloss
Carol S Sloss
1735 NE Weidman
Portland, 97232

Post

wed 11-18-74

OREGON ENVIRONMENTAL
Quality Commission
1234 SW Morrison St.
Portland, 97205

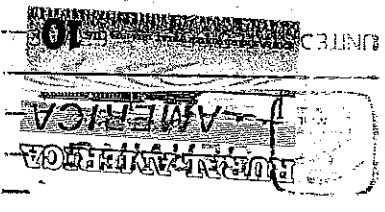
Dear Sirs

In view of the
inadequate Federal EPA
standards on Clean Air,

I wish to express my
concern that the quality
of air in Oregon does not
deteriorate. I urge you
to adopt regulations similar
to those presented to the
Federal EPA last year
by the DEQ Director on
behalf of Gov. McCall

Thank you
James H Sloss
Carol S Sloss

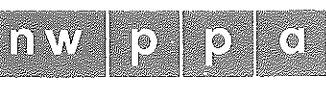
OREGON EQC
1234 SW Morrison St
Portland, OR 97205



Sloss
1234 Weidman
Portland, OR

No. 11

Executive Secretary: LAWRENCE E. BIRKE, JR.



NORTHWEST PULP AND PAPER ASSOCIATION

2633 Eastlake Avenue East, Suite 206
Seattle, WA 98102 • 325-3277

November 21, 1974

Mr. B. A. McPhillips
Chairman, Environmental Quality Commission
Oregon State Capitol Building
Salem, Oregon 97308

Dear Mr. McPhillips:

This letter-statement is prepared in response to your proposed agenda for the Commission's November 22, 1974 monthly meeting in Salem, Oregon. On behalf of the NWPPA, which represents 31 pulp and paper mills in Oregon, Washington, and Alaska, we respectfully request that the Commission delay consideration of the OSP/IRG/NEDC petition relative to significant air deterioration, until such time as the petition's effects on existing and proposed industrial operations can be determined. In addition, we believe further collection, analysis, and evaluation of environmental data is desirable before meaningful discussions can be conducted or relevant decisions made.

Thank you for this opportunity to comment.

Sincerely,

Lawrence E. Birke, Jr.
Lawrence E. Birke, Jr.

LEB/pd

No. 11



824 S. W. FIFTH AVENUE • PORTLAND, OREGON 97204
AREA CODE 503 228-9411

November 21, 1974

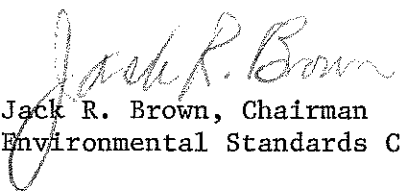
Mr. B. A. McPhillips, Chairman
Environmental Quality Commission
1234 S. W. Morrison Street
Portland, Oregon 97205

Dear Mr. McPhillips:

On behalf of the Portland Chamber of Commerce, I respectfully request that the Commission delay action on the petition relating to significant air deterioration submitted by the Oregon Student Public Interest Research Group and the Northwest Environmental Defense Center.

This petition has serious ramifications, including potential adverse effects on economic growth in the State of Oregon. We believe in your consideration the consequences of the regulations called for in the petition should be determined, as well as the extent to which the regulations can be achieved.

Sincerely,


Jack R. Brown, Chairman
Environmental Standards Committee

JRB/cch

cc: Leland Johnson
Oliver Larson

November 22, 1974

Hearing on Petition to Adopt OAR 340 20-048 Air Pollution Control

My name is Dan Wilson. I'm from Albany, Oregon and I'm here to testify in favor of the DEQ reviewing the proposal submitted by OSPIRG and the Northwest Environmental Defense Council.

I am concerned with the quality of this state's air. We in Oregon are fortunate to have clean air over much of this state's beautiful and scenic lands. The proposal would give us a chance to protect this clean air, and keep it from becoming like Portland, Salem, Eugene, Medford, or the rest of the Willamette Valley where on many days, you can't even see the Coast Range or the Cascade Mountains because of the pollution. Also, I am concerned about the health hazard presented by air pollution. I'm concerned that the rest of the state not be faced with this prospect also, and so fortunately or unfortunately, regulations are needed to protect this.

I think that Oregon, being the leader as it has been in the past in conservation and environmental protection, should be willing to adopt something they propose to be federal regulations, and that the DEQ needs to at least review this proposal. Oregon should be a leader again and protect the clean air that we do have while we still have the opportunity, so that in the future we can breath healthy air and see and enjoy this beautiful state that is ours.

Shirley
November 22, 1974

I would like to submit this testimony as part of the official record pursuant to agenda item H of the Nov. 22nd EPC meeting.

Bob Gay

My name is Robert L. Gay and I work for the Department of Environmental Quality, but my remarks today are delivered entirely on my own initiative, and should be regarded as personal opinions not necessarily reflecting the views of any other member of the Department. I decided last night to address the Commission on this issue because I think it is important, because I have had considerable association with it and because I may be able to provide a perspective that you may not hear today from others.

I drafted the Department's two major public statements on significant deterioration, after consultations with other agency staff. Both of these were in the form of testimony to EPA on their proposed regulations to prevent significant deterioration of air quality. The first of these two statements was delivered to EPA 14 months ago on behalf not only of DEQ but also of Governor McCall. The most recent DEQ testimony was sent to EPA less than two months ago. The two statements are quite similar in that they requested changes to remove weaknesses in the EPA proposals.

Today I would like to briefly discuss why I believe a need exists for strong regulations to prevent significant deterioration and what the major weaknesses are that I see in EPA's proposed regulations. I would also like to comment on several of the main points which I believe will be raised today, and finally to suggest a possible course of action relative to the petition before you.

The history of this issue is long but I wish to repeat some of it briefly in order to put today's discussion in perspective. The Clean Air Act of 1970 required a number of specific measures to "protect and enhance" the nation's air quality, including the establishment of national ambient air quality standards (NAAQS)—primary NAAQS to protect human health and secondary NAAQS to protect human welfare. According to the courts it also required the prevention of significant deterioration of air quality where that air quality is better than the secondary NAAQS. In effect this calls for tertiary standards to protect clean air areas—a concept which I submit is rational, feasible and needed. It is rational because one of the better ways to prevent clean air areas from being too rapidly polluted up to the level of the secondary standards is simply to establish and enforce a lower ceiling on ambient air quality deterioration. It is feasible because it can, in my opinion, be implemented without undue restraints on economic growth, provided that the best available treatment and control of emissions is vigorously required. It is needed because air shed capacity to assimilate pollutants is limited and it just makes good sense to be as stingy as possible in giving over clean air to the purposes of waste disposal.

Experience with all forms of pollution should teach us that an ounce of prevention is worth a pound of cure—and prevention of significant air quality deterioration is literally the name of this game. In my opinion then we need tertiary ambient air quality or emission standards to protect Oregon's clean air areas from too rapidly approaching the level of air pollution found in the Portland metropolitan area. This self imposed

ceiling need not prevent the siting of well controlled sources in well planned locations. In fact, I believe that the flexibility to allow pollution to rise all the way to the secondary standards in special cases should be retained, provided the number of these special cases is kept to an absolute minimum.

In discussing why EPA's proposed regulations are not adequate I will focus on the three main weaknesses that I believe are most critical in order to limit my remarks.

First, and most fundamental, is the failure of EPA to effectively limit the number and size of Class III areas -- where air quality would be allowed to deteriorate up to the applicable standard, which in Oregon, is the secondary ambient air quality standard. Designation of Class III areas amounts to granting an exemption from the whole idea of protecting clean air areas with a tertiary standard. Consequently, unless exemptions from these regulations are strictly limited, the regulations themselves will become meaningless. For example, Class III designations ought to be considered only after air quality modeling has been done, which demonstrates that specific sources which definitely plan to locate in a clean air area and which will employ the very best available control technology, will still cause greater deterioration of ambient air quality than is allowed by Class II area increments.

The second major shortcoming of EPA's latest draft regulations is the deletion of a key requirement contained in their original draft regulations -- namely, that new sources employ the best available control technology. EPA substituted the requirement that only its so-called New Source Performance Standards should be applied as emissions limitations. It is inevitable that New Source Performance Standards will become obsolete in the face of improving emissions control technology -- and some have fallen well short of best available control technology on the day they were promulgated. A case in point is EPA's recently proposed New Source Performance Standard for aluminum plants which sets a fluoride emission limit of 2.0 lbs of total fluoride per ton of aluminum produced -- twice the amount allowed by Oregon's

aluminum standards, which the proposed AMAX plant now says it can meet with room to spare.

Third, EPA's latest regulations deleted another key requirement contained in its earlier proposals -- namely, that sources who wish to locate in clean air areas where no air quality or meteorological data is available, must establish at least two monitoring stations for each pollutant of major concern and at least one meteorological station to measure local wind speed and direction. Thus, while EPA has acknowledged that mathematical pollution dispersion models are necessary, both to establish what the baseline air quality is in a given area, and to estimate the deterioration to be caused by a given facility, it has deleted the requirement that would ensure that real data about local winds and pollutant levels would be available for use in the models. In my opinion, any large source wishing to locate in a clean air area where insufficient data exists should be required to measure both local pollutant levels where appropriate, and local winds for at least one full year (one turn of seasons), prior to applying for an air discharge permit. This data could be used in dispersion models to estimate baseline air quality in the area as well as its own impact on that air quality. This monitoring should then be continued as a condition of any permit that is issued. The costs of this monitoring are properly placed on the source applying to use a major portion of the limited available airshed capacity. As an added benefit, the state would obtain air quality information from an expanding network of monitoring stations.

Let me now quickly comment upon a few of the reasons given by EPA and others against implementing strong regulations to prevent significant

deterioration of air quality.

First, it is said that this will dictate land use patterns and thereby, economic growth potential based on air quality criteria alone. I believe it may encourage comprehensive land use planning, which is good, but it need not dictate whether or how individual areas can develop. If, as proposed in earlier DEQ testimony to EPA, the number and size of Class III areas are severely limited, and Class I designations are applied only to areas where scenic and recreation uses will obviously prevail (such as national forests, parks, etc.) then the great bulk of the state where development will take place will be uniformly under Class II deterioration limitations. Strict enforcement of the best available emission controls requirement should allow considerable growth, especially where clustering of large sources can be avoided. In special cases where best available controls cannot reduce deterioration enough, and where the source is clearly needed in the proposed location, the Class III exemption exists. By maintaining the option to go to Class III designations where it is absolutely necessary, the full range of air shed capacity and land use possibilities that now exist in Oregon is preserved. But, by imposing the Class II tertiary standard for clean air areas, enforced by strict interpretation of the requirement of best available control technology and use of the Class III exemption only as a last resort, the existing air quality should be protected to the maximum extent. Finally, on this point, every environmental regulation ever adopted contained express or implied restrictions on land use. Unless the alleged adverse effects on land use and economic development of implementing significant deterioration regulations can be more concretely and plausibly described, such vague fears should not be allowed to side track a strong plan for protection of clean air areas, as mandated in the Clean Air Act.

A second point often raised is that if Oregon alone adopts significant deterioration regulations it risks losing industry to other states with less stringent controls - plus the potential added insult, where such states border Oregon, of receiving some of this pollution back, carried across the border on prevailing winds. This concern is understandable, but the answer cannot lie in abandoning efforts to promote the kind of strick pollution controls that Oregon favors as a nation wide standard. Oregon joined over twenty other states in supporting the Sierra Club lawsuit that forced EPA to propose significant deterioration regulations, because Oregon favored strong standards applicable nationwide. EPA has reacted to its court ordered rulemaking task with a notable lack of enthusiasm and its proposed regulations have deteriorated with each succeeding draft, such that their present proposals contain little that will protect air quality and constitute passing the buck back to the states.

I propose that Oregon recover EPA's fumble and once more become the environmental laboratory for the nation. EPA is almost certain to promulgate its latest draft regulations as proposed, whereupon, these will undoubtedly be challenged in court again by the Sierra Club as inadequate, and the court will probably agree. If Oregon can devise a workable plan for preventing significant deterioration during the next 3 to 6 months, it would serve as an example to the court, which could then direct EPA to promulgate regulations modeled after Oregon's, but applicable nationwide.

I believe that this scenario is not at all implausible and that the challenge to accept environmental leadership is not too great for the agency that cleaned up the Willamette River and imposed the toughest controls in the world on pulp mills and aluminum plants.

I hope that the Commission will not let the many legitimate but vague fears that may be voiced today deter Oregon from giving thorough study to the matter of preventing deterioration of air quality in clean air areas.

The real issue before you is not whether such regulations would prevent growth, but rather how clean will be the growth that inevitably takes place in Oregon. I believe that the intent of the Clean Air Act can be simply and adequately met by providing the tertiary standard necessary to ensure protection of especially clean air areas. By forcing it with a strict requirement that best available emission controls be required of every applicable source Oregon would simultaneously ensure maximum pollution control and the maximum amount of economic development for any given air shed capacity, precisely because each increment of growth would be accompanied by minimal pollution. The scope of such a regulation is properly limited to large sources and clean air areas (where the baseline air quality meets designated criteria), and could become just one more facet of DEQ's existing permit procedures.

Waiting to see what EPA will promulgate will produce few if any surprises. And the petition before you today, with a few exceptions, asks that Oregon adopt regulations which this department has asked EPA to adopt in its own testimony.

Therefore, I propose the following approach to this issue:

- (1) That DEQ undertake a thorough study of this issue, including possible economic and land use impacts, and present to the Commission within 2-4 months (a) a conceptual plan as to how an Oregon regulation to prevent significant deterioration might be implemented, or (b) detailed conclusions as to why such a regulation is

unwarranted or infeasible in Oregon at this time.

- (2) Because of the fear that such regulations may restrict economic growth or to dictate land use, a working advisory committee should contain a wide representation of interested parties. Petitioners, OSPIRG, and NEDC could work side by side with representative of the economic interests who speak here today, such as Associated Oregon Industries (AOI), electric utilities and others. Other state agencies should be included whose programs may be directly affected -- like LCDC and the Economic Development Department

The purpose of the advisory group would be to help DEQ staff conduct research that sheds as much light as possible in the areas of concern raised here today about the possible impacts of a state of Oregon regulation to prevent significant deterioration of air quality. The petitionin environmental groups would have the opportunity to consider the practical administrative requirements of implementing wuch a regulations statewide. Groups like AOI who sorry primarily about economic impacts and utilities like PP&L who worry primarily about the effect of such a regulation on coal-fired power plant emission control requirements would have the opportunity to document their concerns and educate both the petitioners and the DEQ staff. The DEQ staff would be solely responsible for drafting any regulations and recommendations to the Commission, but would seek the review and comment of the advisory group and try to obtain a consensus on as many points as possible.

Miraculous agreement is not expected from such an exercise -- compromise is expected -- but only after extensive research and discussion of the findings

by broad cross section of opinion. My own opinion at this point is that the promulgation of regulations to prevent significant deterioration of air quality along the lines outlined above and in the two previous DEQ statements to EPA will benefit Oregon air quality without harming Oregon's economy or preventing industrial development. If in-depth study of possible effects show that adverse consequences will clearly outweigh benefits, I believe that this verdict will be accepted by all reasonable parties, because it will be documentable using the findings of the staff and its advisory group.

Thank you for the opportunity to comment. I'd be glad to answer any questions you may have.

STATE AND TERRITORIAL AIR POLLUTION PROGRAM ADMINISTRATORS

STAPPA EXECUTIVE COMMITTEE

Chairman

BROOKS BECKER, Ph. D.
Bureau of Air Pollution Control
and Solid Waste Disposal
3536 University Avenue
P. O. Box 450
Madison, Wisconsin 53705
Tel.: 608-266-0924

November 15, 1974

Mr. Russell Train, Administrator
United States Environmental Protection Agency
401 M Street, S. W.
Washington, D. C. 20460

Vice-Chairman

CHARLES R. BARDEN
Air Pollution Control Services
Texas State Department of Health
8520 Shoal Creek Boulevard
Austin, Texas 78756
Tel.: 512-451-5711

Dear Mr. Train:

Secretary-Treasurer

ROBERT H. COLLOM, JR.
Air Quality Control Section
Department of Natural Resources
47 Trinity Avenue, S. W.
Atlanta, Georgia 30334
Tel.: 404-656-4867

On behalf of STAPPA, I would like to express the support in principle by a majority of the states of the approach taken in the August 27 Federal Register proposal, 40 CFR 52, with respect to prevention of significant deterioration of air quality. Given the fact that EPA must establish regulations to prevent significant deterioration of air quality, we believe that this proposal provides the best method for achieving the goal with maximum local input.

Dir

ROBERT V. BLANCHE
Air Quality Service
Oklahoma State Department of Health
N. E. 10th & Stonewall
Oklahoma City, Oklahoma 73105
Tel.: 405-271-5220

Although we support the approach in principle, two major weaknesses need to be resolved before promulgation. First, the determination of regional class must be the decision of the state for the entire state including Federal and Indian lands. Classification should be carried out by the state and adopted by EPA unchanged. Likewise, all Federal sources falling under these regulations should require approval by the state before construction.

Director

GEORGE P. FERRERI
Bureau of Air Quality Control
Maryland State Department of
Health and Mental Hygiene
610 N. Howard Street
Baltimore, Maryland 21201
Tel.: 303-383-2779

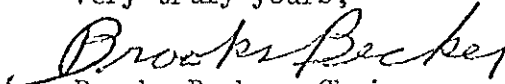
Second, a Federal role should be established to handle interstate disagreements in border areas where significant effects may occur. Potentially severe problems exist where Class III regions are defined near the border and upwind of a neighboring state. Interstate areas represent the only exception to first point.

Past Chairman

LEE E. JAGER
Air Pollution Control Division
Michigan Department of Natural Resources
905 D, S. W.
Lansing, Michigan 48914
Tel.: 517-373-7573

Before final adoption, other specific points raised in response to the proposal should be considered also because of their practical implications, but these criticisms do not affect our support of the approach in principle.

Very truly yours,


Brooks Becker, Chairman
STAPPA Executive Committee

EBB:bf

cc: STAPPA Membership

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
NOV 21 1974
AIR QUALITY CONTROL