

8/22/1975

**OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS**



**State of Oregon
Department of
Environmental
Quality**

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A G E N D A

PUBLIC MEETING

OREGON ENVIRONMENTAL QUALITY COMMISSION

August 22, 1975

Room 602, Multnomah County Courthouse, 1021 S.W. 4th Avenue, Portland, Oregon

9:00 a.m.

- A. Minutes of June 27, July 10, and July 15 Commission Meetings
- B. June and July 1975 Program Activity Report
- C. Tax Credit Applications

AIR QUALITY

- D. Petition to Amend or Repeal Rules: Petition relating to Noise Standard for 1976 Diesel Vehicles
- E. Rule Adoption:
 - 1) Prevention of Significant (Air Quality) Deterioration; Temporary Rule
 - 2) Standards for Performance of New Stationary (Air Contaminant) Sources
 - 3) Emissions Standards for Hazardous Air Contaminants
- F. Variance Request: Union Oil Company; Continuation to December 1, 1975 of Variance from Residual Fuel Oil Sulfur Limitation

11:00 a.m.

- G. Public Hearing: Proposed Rules Containing a Civil Penalty Schedule for Violation of Noise Emissions Standards

LAND QUALITY

- H. Rule Adoption: Revisions and Additions to Administrative Rules governing Conventional and Alternative Systems of Subsurface Sewage Disposal Including Non-Water Carried Waste Disposal Systems
- I. Status Report: Metropolitan Service District of Portland; State Loan Requirements for Regional Solid Waste Management Plan
- J. Authorization to Conduct Public Hearing: Re Proposed Rules Pertaining to Management of Environmentally Hazardous Wastes

WATER QUALITY

- K. Adoption of Policy on Log Handling in Oregon Waters
- L. Proposed Amendments to Regulations Pertaining to Deposit of Motor Vehicle Bodies and Accessories into Waters of the State to Permit Construction of Artificial Fishery Reefs Using Discarded Tires, Pursuant to SB 944

Note 1. Because of the uncertain time spans involved, the Commission reserves the right to deal with any item, except Item G, at any time in the meeting.

2. The Commission will breakfast (7:30 a.m.) at the Trees Restaurant in the Portland Hilton Hotel.

MINUTES OF THE SEVENTIETH MEETING

of the

OREGON ENVIRONMENTAL QUALITY COMMISSION

June 27, 1975

Pursuant to the required notice and publication, the seventieth meeting of the Oregon Environmental Quality Commission was called to order at 9:00 a.m. on Friday, June 27, 1975. The meeting was convened in the Second Floor Auditorium of the Public Service Building, 920 S.W. Sixth Avenue, Portland, Oregon.

Commissioners present included: Mr. B. A. McPhillips, Chairman; Dr. Morris Crothers; Dr. Grace S. Phinney, (Mrs.) Jacklyn L. Hallock, and Mr. Ronald M. Somers.

Department staff members present included Mr. Kessler R. Cannon, Director; Mr. Ronald M. Myles, Deputy Director; and Assistant Directors Mr. E. J. Weathersbee (Technical Programs); Mr. Harold L. Sawyer (Water Quality), Mr. Kenneth H. Spies (Land Quality); and Mr. Harold M. Patterson (Air Quality). Counsel, Mr. Robert Haskins, and several other staff members were also present.

SPECIAL BUSINESS

Chairman McPhillips, addressing himself to a letter of resignation tendered by the Department Director, Kessler R. Cannon, asked the Commission members to vote on its acceptance. MOVING that the resignation be accepted, Commissioner Crothers noted that the State owed Mr. Cannon a great debt of gratitude. He commented that Mr. Cannon assumed the Directorship at a time of difficult circumstances and that he had performed an excellent job. He opined that it was his belief that the Department had enjoyed an extraordinarily successful legislative session in a period when many were predicting the Legislature would "gut" the Department. He noted that nothing of the kind occurred, that in fact the DEQ came out with added responsibilities and duties. Commissioner Crothers attributed a great deal of this to the abilities of Mr. Cannon. He stated that he personally wished to express his gratitude for the job done by Mr. Cannon.

It was seconded by Commissioner Hallock and carried that the Commission accept the resignation of Mr. Cannon as the Director of the Department.

Chairman McPhillips expressed his personal appreciation for the job Mr. Cannon had done and the pleasure he had felt in working with him for the limited time Mr. Cannon was with the Department.

Mr. Cannon thanked the Commission for his rewarding tenure, noting that he had greatly enjoyed his association with the Commission, the Department, the Legislature, and the people of Oregon. Mr. Cannon opined that he left an

excellent staff with the Commission and that the Department was a better Department in structure and posture than it was when he assumed the Directorship. He indicated that he was very pleased with the record of the Department in the last 15 months.

Chairman McPhillips, noting that it would be appropriate to elect a new Director of the Department in line with the Governor's recommendation asked for the nomination of Mr. Loren (Bud) Kramer. It was MOVED by Dr. Crothers, seconded by Commissioner Hallock and carried that the Commission approve Mr. Loren Kramer as Director of the Department of Environmental Quality, effective July 1, 1975.

MINUTES OF THE MAY 23, 1975 COMMISSION MEETING

There being no comments or corrections to the minutes of the May 23, 1975 Commission meeting, Chairman McPhillips indicated they stood approved as received.

PROGRAM ACTIVITY REPORT

Mr. Ronald Myles, Deputy Director of the Department, presented the Program Activity Report. It was MOVED by Commissioner Somers, Seconded by Commissioner Hallock and carried that the Department's May, 1975 Program Activity Report receive confirming adoption by the Commission. ~~(C. Somers, 1975)~~

TAX CREDIT APPLICATIONS

It was MOVED by Commissioner Somers, Seconded by Commissioner Hallock, and carried that the Commission approve ten tax credit applications as recommended by the Director and set forth in distributions to the Commission. The applications were numbered as follows: T-644, T-645, T-646R, T-649, T-650, T-651R, T-660, T-661, T-662, and T-663.

With regard to T-646R, Commissioner Phinney asked if the BRM Company, Industrial Wastes, handles other industrial wastes in addition to straw. Mr. Ernie Schmidt of the Department's Solid Waste Program replied that the company does handle other industrial wastes but he added that the equipment claimed in the tax credit application handles only straw activities.

PUBLIC FORUM

Mr. Bill Van Dyke of the Oregon Student Public Interest Research Group (OSPIRG) addressed the Commission. He said preliminary research results indicate problems with the Department's procedures for dealing with the land use impacts of federal sewerage construction grants, noting that these grants have the potential for an enormous impact on land use patterns in this state.

Mr. Van Dyke explained that the current procedure, as now followed by the Department, to insure that projects comply with land use provisions, is to require county commissioners to submit a general statement that their sewerage

project meets provisions of the county Comprehensive Plan and State-wide Land Use Goals and Guidelines. He objected that such procedure does not require specific findings on individual goals and guidelines or on the comprehensive plan showing that the project does, in fact, comply with these requirements.

Mr. Van Dyke contended that specific findings are important for two reasons: (1) Oregon law requires the Department of Environmental Quality to carry out its programs which affect land use in accordance with Oregon's land use laws, goals and guidelines and (2) counties will be reviewing their comprehensive plans to bring them into compliance with state-wide goals and guidelines over at least the next year. Until the end of this review, Mr. Van Dyke noted, there would be insufficient assurance that counties have taken state-wide land use goals into account in their comprehensive plans. He went on to say that the blanket statement of compliance now required does not assure that the county commissioners have taken a new and detailed look at their comprehensive plan and statewide goals and guidelines in evaluating their sewerage projects. Thus, Mr. Van Dyke contended, the Department of Environmental Quality does not receive enough information to say with assurance that a given project complies with state laws, goals and guidelines. This responsibility he contended, it clearly has under ORS 197.180.

On behalf of OSPIRG, Mr. Van Dyke urged the Commission to adopt a rule, under Ors 468.020(1) which authorizes the commission to adopt rules and standards it considers necessary to perform functions vested in the commission by law, requiring counties to submit such specific findings. Requiring specific findings would assure that all counties follow this procedure, he contended. The requirement could provide added protection against problems later in the project process similar to those in the South Medford project, he suggested. Then, he reported, a petition to the LCDC for review of the land use implications of the project after EPA had awarded a construction grant to the Sanitary Authority was dismissed only after the City of Medford, Jackson County, and the Sanitary Authority made arrangements for meetings to work out their problems. Finally, Mr. Van Dyke opined, it would provide the Department of Environmental Quality with some information to use in evaluating its sewerage program for compliance with statewide goals and guidelines as the law requires.

Mr. Van Dyke stated that OSPIRG would support a request from the Director of the Land Conservation and Development Commission to the Department, asking for one month's deferral on the Projects List to allow for a meeting to evaluate the land use impacts of the projects.

Mr. Fred Delaney addressed the Commission on behalf of the Honeywood Park Homeowners Association. He described Honeywood Park as a "mini subdivision" in the South Portland area. He stated that the subdivision is bordered on the south and east sides by Beaverton Creek, with the Aloha sewage treatment plant just across Beaverton Creek at the east end of Honeywood Park.

Mr. Delaney detailed two areas of concern to the homeowners: (1) Beaverton Creek is polluted, runs gray-blue to bluish black, gives off offensive odor, and

floats solid forms of pollution; (2) the odor from the Aloha sewage treatment plant is continual and offensive.

According to Mr. Delaney, as far back as one year, inquiries were made as to these conditions to various agencies including the Department. He reported that assurances were given of plans (some being implemented) that would alleviate these problems. With the plans completed, Mr. Delaney contended, the problems exist to the same degree, if not greater.

Chairman McPhillips asked Director Cannon for a staff report to the Commission to see what steps could be taken to alleviate the situation described by Mr. Delaney. Mr. Cannon replied that it would be done.

SEWAGE WORKS CONSTRUCTION GRANT PRIORITY LIST FOR FISCAL YEAR 1976.
REPORT OF HEARING RESULTS AND DIRECTOR'S RECOMMENDATION

Commissioner Somers informed the Commission of a request from the Land Conservation and Development Commission that this matter be delayed in order to allow them time to comment. He MOVED that the matter be tabled until July 10, 1975. Commissioner Hallock seconded the motion.

Commissioners Somer and Hallock asked Mr. Sawyer what the effect of the delay would be. Mr. Sawyer replied that the primary concern in delay would be that many projects would be delayed even further from the initial steps necessary to develop information to determine where there is a conflict with the plan. He opined that some projects would be delayed and that others already under way would be stopped.

Referring to Beaverton Creek, Mr. Sawyer stated that one of the projects on the list was the Rock Creek Sewage Treatment Plant and the interceptor lines to serve that area. That project was at a very critical stage, Mr. Sawyer stated. Failure to adopt the list, he added, could potentially delay the project for a year or more in completion.

Commissioner Somers questioned how ten days could have such an effect. Mr. Sawyer contended that the project was running on a critical path construction schedule and that timing of construction in relation to the weather could cause such an effect.

Commissioner Crothers questioned the advisability of adopting a list which must be forwarded to EPA, but which is still subject to some revision after meeting with LCDC. Mr. Sawyer replied that the list could be revised by the Commission after a hearings process. Commissioner Crothers expressed concern about delaying any proper construction and asked Mr. Sawyer whether it would be possible to presently adopt the list and arrange a subsequent hearing on possible revisions. Mr. Sawyer replied that this was possible. He explained that procedurally any project can be stopped where there is a definite concern. The question, as Mr. Sawyer stated it, was whether to delay all projects due to concern over some.

Commissioners Hallock and Phinney questioned whether it was more disruptive to tentatively adopt and look forward to a lengthy and complicated hearing process or to postpone adoption for 14 days.

Commissioner Hallock questioned whether the Department had a list of those projects with a land use problem or could put one together in 14 days. In response, Mr. Sawyer explained that the Department had prioritized identified problems and needs. He stated that the way the projects relate to land use planning is a question each applicant must answer before receiving a grant.

Under new EPA rules which go into effect July 1, he added, no work can be done which is eligible for reimbursement. Each must have a grant on the project's preliminary planning phases. He recalled that, in the past, grants were only awarded with the commencement of the construction phase. Without this list's adoption, he noted, the initial steps could not be taken. Many of the Department's projects are in this first step planning project, he reported.

Commissioner Somers argued the value of the Commission's being certain of its direction before any action is taken.

Commissioner Somers MOVED to postpone consideration until the 10th of July. This motion was seconded by Commissioner Hallock and carried by the Commission. Commissioner Crothers voted against it.

Mr. J. Christopher Minors, attorney for the Southwest Lincoln County Sanitary District, reported that the District was ready to break ground on the project and endorsed the reduction in the contingency fund which would allow the project's inclusion on the list. He cautioned that each day of delay costs an estimated \$600 increment in construction expense and urged the Commission not to delay beyond July 10.

Ms. Carolyn Wright of the Oregon Clean Water Project supported the decision to postpone adoption of the Prioritization List.

Commissioner Hallock was concerned that the suggestion of OSPIRG might prove too cumbersome for the counties and asked that a less complex approach be considered.

The Commission members assured Mr. Cannon that their wish was to have the Department Staff meet with representatives of the Land Conservation and Development Department during the postponement.

WATER QUALITY PROGRAM STRATEGY FY 1976

Mr. Harold Sawyer presented the staff report, pointing out that an annual State Water Strategy for review by the Environmental Protection Agency was requisite to continued federal funding of the Water Quality Program. He listed

the three most visible priorities as lying in the areas of Construction of Sewage Treatment facilities, efficient permit processing and source monitoring, and progress in Area Wide (208) and River Basin planning.

Priorities in the use of staff time were said to be an important aspect of the strategy. The Prioritization List, whose consideration had been postponed, he explained, would, when adopted, be part of the Strategy.

In response to inquiry by Commissioner Somers, Mr. Sawyer expressed the view that the Commission might well give conceptual approval to the proposed Strategy, such approval to include the Prioritization List as it is finally adopted on July 10.

In response to inquiry from Commissioner Phinney, Mr. Sawyer explained that the Area Wide Waste Treatment Management Planning under Section 208 of the Act included planning directed at point source problems as well as non-point sources. He lamented the abatement emphasis in the federal program which precluded needed preventive measures in many instances.

It was MOVED by Commissioner Somers, seconded by Commissioner Phinney, and carried that the Director's recommendation be adopted as set forth in the staff report.

EXECUTIVE SESSION

The Commission went into Executive Session to discuss matters of pending litigation.

PUBLIC HEARING:

PRIORITY CRITERIA FOR AIR CONTAMINANT PERMITS IN LIMITED AIRSHEDS

Presenting the Staff Report, Mr. John Kowalczyk of the Department's Air Quality Program drew attention to minor changes the proposed rule had undergone since its initial publication. He reported that discussion with the Governor's Office, Multnomah County, and the City of Portland had led to the question of "Community Benefits" as a desirable criterion. It was suggested that any Air Contaminant Discharge Permit in a limited airshed might await the previous granting of a Conditional Use Permit by the appropriate agency to insure that the project's community benefits had been reviewed in the latter forum. Also, he said, early notice to other agencies that an application is subject to the proposed rule would allow them to address the Commission prior to permit issuance.

Due to the issues discussed above, Mr. Kowalczyk reported, the Director's recommendation was to postpone adoption of the proposal until appropriate amendments could be drafted and placed before the Commission.

Mr. Martin Crampton of the Multnomah County Planning and Development

Commission spoke in behalf of County Commissioner Don Clark. He stressed the importance of land use and economic vitality as considerations which should precede issuance of a permit under the proposals. This Community Benefits aspect, he suggested, could be implemented by the requirement of adherence to land use standards as recommended by the appropriate local planning and development authority. He suggested that the Columbia Region Association of Governments (CRAG) could act as such a local authority in the Multnomah County area, giving recommendations for the Department to consider prior to the issuance of a permit. CRAG was considered appropriate, he said, because pollution follows the confines of the airshed and is not confined to any of the lesser local boundaries within CRAG jurisdiction. He urged the Commission to call upon CRAG for steps to implement his suggestion.

In response to inquiry by Commissioner Crothers, Mr. Kowalczyk, noting that no pending permits would be affected by the rule at the present time, suggested that delay in the adoption of the rule would pose no serious problems to the Department.

Mr. Rich Owings of the Port of Portland objected to the proposed rule as insufficiently protective of the economic stability of industry in the Port area. He contended that the rule, as proposed, would require the Department to process permits in the order of their completed applications, giving incentive for a rush of applications. He urged that Community Benefits be given more solicitude and preferential treatment be given existing sources. He questioned the Staff Report as indicating the Commission might not have jurisdiction to consider these aspects of the sources applying for permits.

Mr. Owings said the Port recognizes the need to integrate regional considerations of both air quality and land use. He agreed that CRAG would be a beneficial forum for all concerned agencies to effectuate this integration. He contended that, once criteria for development were agreed upon, these could include the Department's prioritization of permit applications in limited airsheds.

He urged adoption of a priority rule which incorporates concern for the aforesaid Community Benefits of the applying source.

Commissioner McPhillips asked what duration of postponement would be necessary to draft a proposal based on the Community Benefits concerns expressed. While Mr. Cannon thought that CRAG might well be given thirty days in which to respond and give indication of the necessary time, Mr. Owings suggested that a rule could be adopted with reference to the desired criteria first. This, he said, would put the onus on the affected agencies to promptly develop criteria. Commissioner McPhillips was of the view that thirty days postponement, of itself, should provide sufficient stimulus for the concerned agencies to provide suggestions for the rule.

Mr. Cannon noted that there were several alternatives for the implementation of the Community Benefits assurances desired but added that opinion of Counsel was in order to determine the extent of the Commission's authority along such a dimension of regulation.

Commissioner Crothers, noting the Commission's desire to see local planning agencies play a role in allocating the limited future development of the affected airsheds, MOVED that the matter be deferred for consideration at the Commission's regular July meeting and that, in the interim, a response from CRAG be requested with regard to the testimony given. Commissioners Somers and Phinney seconded the motion which was subsequently carried.

RULE ADOPTION: RULES PERTAINING TO REGULATION OF SUBSURFACE SEWAGE SYSTEMS

Mr. Jack Osborne of the Department's Subsurface Sewage program presented the staff report, recalling that the proposed rules recommended by the Citizen's Task Force on Subsurface Sewage had been previously before the Commission and, with the exception of the "prior approvals" rule, deferred until the present meeting.

It was presently the Department's intention, he reported, to further defer action on most proposals until, after statewide hearings, the rules, along with amendments mandated by the legislature (SB 34 and SB 297) could be proposed for permanent adoption.

In the interim, Mr. Osborne explained, there was a need for certain temporary rules to take effect immediately. These, he reported, dealt with regional differences, fee schedules, and variances.

Commissioner McPhillips questioned the advisability of adopting rules on a piecemeal action and continual amending has an unsettling effect on industry and the public.

Commissioner Phinney stressed the need to adopt the amended fee schedules in order to avoid the recurrence of financial difficulty due to insufficient fee-generated revenue.

Commissioner Crothers expressed concern that variance rules would be needed immediately. Mr. Osborne concurred, reporting that the variance law was currently in effect. He reported that the Department, upon passage of the rules, would immediately appoint acting variance officers to act on applications expected to be forthcoming very soon.

Mr. Cannon pointed out that requests for temporary rules were necessarily piecemeal where needed to implement new emergency legislative measures to serve the public as quickly as possible.

Mr. William H. Doak, Soils Scientist and Land Use Consultant, suggested that the Commission amend the proposed rules to afford reduced fees to parties who retain a registered sanitarian or engineer to present detailed plans for governmental review. This, he contended would alleviate the inequity wherein those seeking prompt action were required to hire private services and pay, as well,

for review by governmental sanitarians. He suggested that this would cut down on administrative time spent by the agencies. Twenty-five dollars for review and \$25 for inspection were suggested as reasonable fees for those submitting detailed plans hired in the private sector. Mr. Doak added that the agencies, by this method, would not relinquish any of their control or ability to protect the public interest.

Commissioner Somers questioned whether there was adequate regulatory assurance of the competency of the licensed sanitarians and engineers to make such a suggestion advisable.

Mr. James Allison, of the CTF urged the Commission to adopt the temporary rules on variances so as to take maximum advantage of the building season. He reasoned that any imperfection in the temporary rules could be remedied at the time they are superseded by permanent rules, which, in turn, could be the subject of continuing refinement.

Mr. Steven F. Boedigheimer, of the Jefferson County Health Department endorsed the proposal with regard to regional differences as an adequate rule which had been needed by those in certain eastern Oregon areas.

Mr. Tam Moore, Chairman of the Jackson County Board of Commissioners, addressed the Commission with support for the proposals, pointing out that any infirmities could be remedied when permanent rules are considered. He mentioned, as one minor area of concern, the possibility that the rules, going beyond statutory authority, could be interpreted to extend variances to pit privies.

Referring to the Staff Report, Commission Somers MOVED that Clatsop County be added to the list of counties in Proposed OAR 72-015(4) to charge fees other than as set forth in 72-915(1) and that, with this addition, the Proposed 72-010 and 72-020 of OAR, Chapter 340 be adopted as temporary rules in accord with the Director's recommendation and that the remaining proposals be tabled until July 10, 1975. The motion was seconded by Commissioner Hallock and carried, with Commissioner Crothers voting against the same. He expressed disagreement with further delaying action on the variance rules.

CONSIDERATION OF ADOPTION OF MORATORIUMS ON NEW INSTALLATION OF SUBSURFACE SEWAGE DISPOSAL SYSTEMS IN CERTAIN AREAS

Mr. Peter W. McSwain, Hearing Officer, presented the staff report resulting from several public hearings in the areas of moratoriums being considered in Josephine, Douglas, Benton, Linn, and Columbia Counties. It was the Director's recommendation, he reported, that all areas subject to a temporary moratorium by Commission action on May 23, 1975 be subject to a permanent moratorium with the exceptions of the Fruitdale-Harbeck area of Josephine County, the Deerhaven Heights subdivision of Benton County, and the Foster Midway area of Linn County. With regard to the former two exceptions, it was recommended that the Commission immediately lift the moratoria. With regard to the latter area, no action was recommended as another hearing in the area was felt desirable prior to action.

Commissioner Somers expressed concern that, in light of Supreme Court holdings regarding zoning variance notice requirements, it might be improper to impose a permanent moratorium in any area before first giving notice and opportunity to be heard by personal service upon each and every affected property owner.

Mr. McSwain acquiesced in this concern, adding that, should the Commission decline to invoke permanent moratoria where recommended, it might be desirable to give immediate relief to those areas where hearings had indicated the local government and residents felt no moratoria were needed. He specified Deerhaven Heights and the Fruitdale-Harbeck areas.

Mr. James Pomajevich, an attorney representing several property owners in Deerhaven Heights, assured the Commission that he had indication that virtually all of the residents of the Deerhaven Heights area were adequately informed of the hearing by word of mouth and through the media. He urged the Commission to immediately lift the subject moratorium.

Commissioner Somers having withdrawn a motion to defer action on the moratoria until hearings preceded by personal notice were held; Commissioner Crothers MOVED that the Director's recommendation be adopted after amendment to read as follows:

- 1) Remove Deerhaven Heights from those areas subject to temporary moratoria by Commission action of May 23.
- 2) Authorize and instruct the Department to conduct another public hearing in the Foster-Midway area of Linn County to determine the advisability of a permanent moratorium.
- 3) Repeal, by permanent rule and by order of ORS 468.685, the moratorium in Deerhaven Heights and in the Fruitdale-Harbeck areas.
- 4) Continue intact the remaining moratoria.

The motion was seconded by Commissioner Phinney and carried.

WILLAMETTE INDUSTRIES, SWEET HOME: AUTHORITY TO CONDUCT ONE-TIME, THREE DAY BURNING OF DEMOLITION MATERIALS

Mr. Frederick Skirvin of the Department's Air Quality Program presented the staff report and accompanying Director's recommendation that the proposed burning be authorized by the Commission.

It was MOVED by Commissioner Somers, seconded by Commissioner Hallock, and carried that the Director's recommendation be approved.

STATUS REPORT: FIELD BURNING

Mr. Cannon noted that the Governor had stated to the press his intention to sign SB 311 (field burning legislation).

Mr. Richard Vogt of the Department's Air Quality program reported that, in anticipation of the legislation, the staff had prepared registration forms which the Seed Council was now distributing to the fire marshalls so that acreage could immediately be registered. It was noted that July 10, the soonest date when a temporary rule could be adopted, was also the latest day on which the Commission could act to consider acreage allocations. Commissioner Somers felt it appropriate for the Commission to ratify staff's action in setting a public hearing for July 10 in the matter of findings regarding acreage allocation.

The Commissioners were given a staff report outlining the list of persons contacted by staff with regard to the new legislation, the proposed rule revisions, and the direction in which the staff was moving to implement the legislation.

Commissioner Somers inquired as to the degree to which the Department, in management of field burning, was availing itself of the most sophisticated services of the U. S. Weather Bureau.

Mr. Harold Patterson of the Air Quality Program noted that some of the weather stations were expanding and additional services, such as reports from Coast Guard flights, were being worked into the Smoke Management Plan.

Emphasizing the value of employing fully all of the services available, Commissioner Somers asked Mr. Doug Brannock, the Department's meteorologist, whether hourly reporting on barometric gradients at surface level, winds aloft, and other charting such as that available to pilots were being used by the Department. Mr. Brannock replied in the affirmative, adding that the hourly teletyped reports were received in the Department's offices and that the Department avails itself of every piece of information the Weather Bureau has to offer, including mapping activities conducted by computer from Suitland, Maryland. On burning days, he reported, he personally visits a weather station in either Eugene or Salem before burning is permitted.

Commissioner Somers noted that record keeping was desirable to explain the Department's actions where inaccurate forecasts cause smoke to be carried into populated areas, such as happened in Eugene last season. He asked if it would be advisable to have figures on the past accuracy of the wind forecasts as part of the information to be used in determining the acreage allocation appropriate for the year. It was important, he stated, to insure the people affected by the smoke management program that every available scientific technique was being employed and to let them know that, despite this, a percentage of failure would occur.

Mr. Cannon held out the possibility that the Department's track record might exceed that of the Weather Bureau where smoke management was concerned. Mr. Brannock added that, on the worst day of field burning pollution in Eugene, last year, he had not been satisfied with the weather bureau's forecast but had acquiesced in it anyway. Commission Somers expressed some puzzlement as to how the Department could improve upon the Weather Bureau in predicting winds.

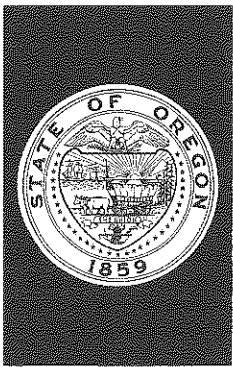
It was Chairman McPhillips' notion that the Commission and staff had exhausted the weather as a topic of conversation.

Commissioner Hallock was assured by Mr. Vogt that the O.S.U. "Report on Alternate Year Burning" would be available at the July 10 meeting.

It was MOVED by Commissioner Somers, seconded by Commissioner Hallock, and carried that the Director's recommendation be adopted and that the Commission convene a special July 10 meeting to implement its duties under SB 311.

It was MOVED by Commissioner Somers, seconded by Commissioner Phinney, and carried that the Commission retain Mr. Cannon for two months as a consultant at full salary.

There being nothing further, the meeting was adjourned.



ENVIRONMENTAL QUALITY COMMISSION

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Robert W. Straub
GOVERNOR

Joe B. Richards
Chairman, Eugene MEMORANDUM

GRACE S. PHINNEY
Corvallis

JACKLYN L. HALLOCK
Portland

MORRIS K. CROTHERS
Salem

RONALD M. SOMERS
The Dalles

To: Environmental Quality Commission
From: Director
Subject: Agenda Item B, August 22, 1975, EQC Meeting
June and July 1975 Program Activity Reports

Discussion

Attached are the June and July 1975 Program Activity Reports.

Recommendation

It is the Director's recommendation that the Commission give confirming approval to the Department's plan/permit action for June and July 1975.

LOREN KRAMER
Director

PWM:vt
8/18/75
Attached



Contains
Recycled
Materials

DEPARTMENT OF ENVIRONMENTAL QUALITY

Technical Programs

Plan and Permit Actions

June, 1975

<u>Water Quality Program:</u>	<u>Page</u>
76 - - - - Plan Actions Completed	1
39 - - - - Plan Actions Pending	7
159 - - - - Permit Actions Completed	12
104 - - - - Permit Actions Pending	21
 <u>Air Quality Program</u>	
8 - - - - Plan Actions Completed	24
28 - - - - Plan Actions Pending	25
96 - - - - Permit Actions Completed	29
346 - - - - Permit Actions Pending	36
 <u>Land Quality Program</u>	
14 - - - - Plan Actions Completed	39
7 - - - - Plan Actions Pending	41
22 - - - - Permit Actions Completed	42
147 - - - - Permit Actions Pending	44

Plan Actions Completed (76)

Water Quality Program

June, 1975

Municipal Sewerage Projects (60)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Multnomah	Sandy - Sludge Concentration Equip.	6/3/75	Provisional Approval
Multnomah	Portland - Gertz-Schmeer Proj. Addendum No. 3 to each of 3-schedules	6/6/75	Approved
Marion	Salem (Willow Lake) - 12th & Lewis St. S.E. Sewer	6/10/75	Provisional Approval
Marion	Silverton - Grant St., Eureka St., & Fiske St. Sewers	6/10/75	Provisional Approval
Jackson	BCVSA - C.O. #1, Sch. B Int. Project	6/12/75	Approved
Jackson	Ashland - C.O. #4 STP Project	6/12/75	Approved
Lane	Springfield - 1st Addn. Thurston Park Sewers	6/12/75	Provisional Approval
Lane	Springfield - 5th Addn. Beau Mont Sewers	6/12/75	Provisional Approval
Lane	Springfield - Oregon St. Sewer	6/12/75	Provisional Approval
Josephine	Cave Junction - Illinois Valley School Sewer	6/12/75	Provisional Approval
Douglas	Canyonville - Harrison St. Sewer Extension	6/12/75	Provisional Approval
Washington	USA (Rock Cr.) - Equip. Purchase Documents	6/13/75	Provisional Approval
Washington	USA (Fanno) - Drake Dev. Sewers	6/13/75	Provisional Approval

Municipal Sewerage Projects (Continued)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Benton	Corvallis - 13th St. & Walnut St. Sewers	6/13/75	Provisional Approval
Marion	Salem (Willow) - Keizer S.D.; Chemawa Estates Sewers	6/16/75	Provisional Approval
Douglas	North Umpqua S.D. - Saddle Butte Mobile Manor #3 Sewer	6/17/75	Provisional Approval
Clatsop	Warrenton - East Warrenton Sewer Extensions	6/17/75	Provisional Approval
Jackson	BCVSA - Mason Way Sewer	6/17/75	Provisional Approval
Multnomah	Portland - Johns Landing Sewer Extension	6/17/75	Provisional Approval
Washington	USA (Aloha) - Fiddstone - Phase I Subdn. Sewers	6/17/75	Provisional Approval
Douglas	Sutherlin - Cascade Estates Subdn. Sewers	6/19/75	Provisional Approval
Coos	Eastside - Vanderhoof Addition Sewers	6/19/75	Provisional Approval
Marion	Salem (Wallace) - Murlack Ave. Sewer	6/20/75	Provisional Approval
Washington	Hillsboro - 24th & Grant Sewer	6/20/75	Provisional Approval
Jackson	BCVSA - Pittview Ave. Sewer	6/20/75	Provisional Approval
Josephine	Harbeck-Fruitdale S.D. - Wineteer Subdn. No. 2 Sewers	6/20/75	Provisional Approval
Josephine	Harbeck-Fruitdale S.D. - Heritage Homes Subdn. Sewers	6/20/75	Provisional Approval
Curry	Knoxtown S.D. - Rogue Shores Subdn. Sewers	6/23/75	Provisional Approval
Clatsop	Warrenton - N.W. Cedar Crt. & Date St. Sewer	6/23/75	Provisional Approval
Washington	USA (Tigard) - Scott Subdn. Sewers	6/23/75	Provisional Approval

Municipal Sewerage Projects (Continued)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Washington	USA (Rock Cr.) - Addendum No. 1 Contr. 2	6/24/75	Approved
Washington	USA (Rock Cr.) - Addendum No. 1 Contr. 3	6/24/75	Approved
Washington	USA (Rock Cr.) - Addendum Nos. 1 & 2 Contr. 4	6/24/75	Approved
Washington	USA (Rock Cr.) - Addendum Nos. 1 & 2 Contr. 5	6/24/75	Approved
Washington	USA (Rock Cr.) - Addendum No. 1 Contr. 6	6/24/75	Approved
Polk	Salem (Wallace Rd.) - Harritt Drive, N.W.	6/24/75	Provisional Approval
Washington	USA (Forest Grove) - C.O. #4 STP Project	6/24/75	Approved
Yamhill	Lafayette - C.O. #2 STP Project	6/24/75	Approved
Lincoln	Newport - Harbor Way & Bay Street Sewer	6/24/75	Provisional Approval
Marion	East Salem S & D #1 - Lancaster Estates No. 3 Sewers	6/25/75	Provisional Approval
Clackamas	Canby - 5th & Berg St. (Canby Square) Sewer Project	6/25/75	Provisional Approval
Marion	Salem (Willow) - C.O. #2 STP Project	6/27/75	Provisional Approval
Marion	Woodburn - Lincoln St. Sewers	6/27/75	Provisional Approval
Multnomah	Gresham - N.E. Barr Rd. Sewer Extension	6/27/75	Provisional Approval
Multnomah	Inverness - N.E. 158th Ave. Sewer	6/27/75	Provisional Approval
Marion	Labish Village - Addendum No. 3 Sewer Contract	6/30/75	Approved
Marion	Salem (Willow) - Salem Indust. Park Phase II	6/27/75	Provisional Approval

Municipal Sewerage Projects (Continued)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Linn	Lebanon - Olive St., Academy St., Caroline St. & Isabella St. Sewers	6/27/75	Provisional Approval
Clackamas	Wilsonville - Montebello Subdn. Sewers	6/30/75	Provisional Approval
Yamhill	Dundee - Alder St. Sewer	6/30/75	Provisional Approval

Industrial Waste Sources (16)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Multnomah	Portland - Oregon Steel Mills - Rivergate Preliminary Engr. Waste Water & Treatment	6/2/75	Approved
Wasco	The Dalles - The Dalles Cherry Growers - Preliminary Proposal Waste Treatment System	6/9/75	Approved
Wasco	The Dalles - Stadelman Fruit - Preliminary Proposal Waste Treatment System	6/9/75	Approved
Tillamook	Tillamook - Robert Taplin Dairy Farm - Animal Waste Facilities	6/9/75	Approved
Marion	Salem - Boise Cascade - Yeast Plant Expansion	6/11/75	Approved
Tillamook	East Fork of Trask R. - Fish Comm. of Oregon - Solids Cleaning System	6/12/75	Approved
Tillamook	Cloverdale - Sam Snook Dairy Farm - Animal Waste Facilities	6/16/75	Approved
Clatsop	Wauna - Crown Zellerbach - Secondary Treatment	6/18/75	Approved
Washington	Beaverton - Mears Controls, Inc.	6/18/75	Approved
Douglas	Reston - Heard Swine Ranch - Manure Waste Disposal System	6/18/75	Approved
Clatsop	Wauna - Crown Zellerbach - Final Plans Secondary Treatment System	6/19/75	Approved
Clatsop	Warrenton - Warrenton Deep Sea Inc. - Screening Facilities	6/20/75	Approved
Jackson	Butte Falls - Oregon Wildlife Comm. - Butte Falls Hatchery - Pond Cleaning Wastes Control System	6/25/75	Approved

Industrial Waste Sources (Continued)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Washington	Aloha - INTEL IV - Neutralization - Pre- treatment System	6/26/75	Approved
Benton	Corvallis - Std. Oil Co., Bulk Plant - Oil Separator	6/27/75	Approved
Marion	Salem - Leslie & Olinger Pools	6/30/75	Approved

Plan Actions Pending (39)

Water Quality Program

June, 1975

Municipal Sewerage Projects (20)

<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Curry	Harbor S. D. - Holly Lane Sewer	2/4/75	Held pending construction of Harbor S. D. System. Response (dated 2/19/75).
Douglas	Spendthrift Mobile Park STP	2/14/75	Plans approvable waiting for Bond required by ORS 454.425. Letter (dated 6/27/75).
Lincoln	Starfish Cove Motel STP	4/25/75	Review to be completed upon resolution of administrative problems between State agencies.
Douglas	Riddle - STP	(orig.) 4/1/75 (revised) 5/21/75	Under review. Error in time projections for month of June. (Review completion projected 7/15/75)
Lane	Veneta - Sewage Lagoon	(orig.) 3/24/75 (revised) 5/22/75	Under review. Error in time projections for month of June. (Review completion projected 7/9/75.)
Coos	Charleston S. D. Sewerage System	5/19/75	Revision requested by letter (dated 6/30/75).
Benton	Corvallis - STP Improvements	5/23/75	Revision requested by letter (dated 6/25/75).

Municipal Sewerage Projects (Continued)

<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Lincoln	Toledo - Ollalla Slough Interceptor	6/9/75	Under review. (Review completion projected 7/15/75.)
Washington	USA - Fanno Creek Interceptor	5/21/75	Review completed. Letter not written by 6/30/75. (Action to be completed by 7/10/75 due to needs of revised review processing for EPA.)
Grant	Long Creek - STP & Sewerage System	6/23/75	Under review. (Review completion projected 7/24/75.)
Washington	USA (Tigard) - McDonald Sewer	6/26/75	Under review. (Review completion projected 7/11/75.)
Douglas	Roseburg - Vernerest Heights Sewers	6/27/75	Under review. (Review completion projected 7/10/75.)
Lane	Cottage Grove - 3rd Addition to Wrights Grove Sewers	6/27/75	Under review. (Review completion projected 7/3/75.)
Washington	USA (Beaverton) - Jesta Hill Sewers	6/25/75	Under review. (Review completion projected 7/7/75.)
Douglas	Roseburg - S. W. Military Rd. Sewer	5/29/75	Project withdrawn by engineer. No further action needed.
Clatsop	Astoria - Columbia Ave. Sewer	6/17/75	Under review. (Review completion projected 7/9/75.)

Municipal Sewerage Projects (Continued)

<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Linn	Albany - North Albany Interceptor	6/11/75	Under review. (Review comple- tion projected 7/11/75.)
Benton	Corvallis - Hewlett-Packard Sewer	6/27/75	Under review (Review comple- tion projected 7/8/75.)
Lane	Eugene - Seven Sewer Projects	6/26/75	Under review. (Review comple- tion projected 7/15/75.)
Klamath	Chiloquin - Sewerage System Rehabilitation	6/27/75	Under review. (Review comple- tion projected 7/9/75.)

Industrial Waste Sources (19)

<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Marion	Woodburn - Skylane Farms - 3 Chicken Houses & Manure Handling System	4/18/75	Referred to RHF. Review completion by 7/31/75.
Klamath	Klamath Falls - Weyerhaeuser - Bark & Debris Control	4/24/75	Held pending review of log handling policy.
Washington	North Plains - Permapost - Waste Water Collection and Evaporation System	4/24/75	Final plans not recd. as yet. (7/8/75) NW Region has writ- ten asking for final plans.
Lincoln	Toledo - Georgia Pacific - Final Plans Secondary Biological System	5/1/75	Visited plant 5/12/75. Ltr. drafted for add'l. info. 5/20/75.
Clackamas	Wilsonville - Joe Bernert Towing Co. - Wash Water Recirculation System	5/22/75	Under review. Review comple- tion by 7/31/75.
Multnomah	Portland - Phillips Pet- roleum - Oil/Water Separator	5/28/75	Under review. Review comple- tion by 7/31/75.
Lane	Springfield - Weyerhaeuser Co. - Evaporator Condensate System and Expansion	6/1/75	Initial review 6/6/75. Letter sent requesting additional info. 6/20/75. Hold pending commission meeting 7/25/75.
Douglas	Gardiner - International Paper Co. - Gardiner Paper Mill - Preliminary Report for Upgrading System	6/11/75	Initial review 6/26/75. Review completion by 7/31/75.
Linn	Near Larwood - Oregon Wildlife Comm. - Roaring River Hatchery - Settling Pond	6/15/75	Requested more information.

Industrial Waste Sources (Continued)

<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Coos	North Bend - Menasha Corp. - Hydropulper Area Effluent Recycling System	6/19/75	Under review. Completion by 7/31/75.
Coos	North Bend - Menasha Corp. - Press Washing Flow Control	6/19/75	Review com- pletion by 7/15/75.
Coos	North Bend - Menasha Corp.- Screens at Settling Basin	6/19/75	Under review. Completion by 7/31/75.
Coos	North Bend - Menasha Corp. - Steam Plant Ash Removal System	6/19/75	Review com- pletion by 7/15/75. Drafted 7/1/75.
Benton	Corvallis - Evans Products - Upgrade of Waste Water Treatment Facilities	6/20/75	Initial review 6/26/75. Request- ing meeting for 7/14/75.
Clackamas	Lake Oswego - Oregon Ptd. Cement - Waste Water Treatment	4/3/75 6/26/75	Requested final plan submittal.
Tillamook	Garibaldi - Edmunds Fish & Crab - Screening Facilities	6/26/75 Add'l. Info. Recd.	Review comple- tion by 7/15/75.
Tillamook	Tillamook - George Porter Dairy Farm - Animal Waste Facilities	6/30/75	Review comple- tion by 7/15/75.
Tillamook	Tillamook - Earl W. Wyatt Dairy Farm - Animal Waste Facilities	6/30/75	Review comple- tion by 7/15/75.
Tillamook	Tillamook - Clarence Borquist Dairy Farm - Animal Waste Facilities	6/30/75	Review comple- tion by 7/15/75.

Permit Actions Completed (159)

Water Quality Program

June, 1975

Municipal Sources (1 State, 44 NPDES)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Deschutes	Bend - Juniper Utility Company	6/20/75	State Issued
Baker	City of Baker	6/12/75	NPDES Issued
Linn	City of Scio	6/12/75	NPDES Issued
Clackamas	Clackamas - Oak Acres Mobile Home Park	6/12/75	NPDES Issued
Yamhill	Sheridan - The Delphian Foundation	6/12/75	NPDES Issued
Lane	Coburg Exit - Country Squire Motel, Restaurant Complex (Vira Corp.)	6/13/75	NPDES Issued
Coos	Bandon - Oregon State Hwy. Div. (Bullards Beach State Park)	6/19/75	NPDES Issued
Coos	So. Charleston - Oregon State Hwy. Div. (Sunset Bay State Park)	6/19/75	NPDES Issued
Josephine	Grants Pass - River Haven Mobile Estates	6/23/75	NPDES Issued
Jackson	City of Jacksonville	6/23/75	NPDES Issued
Coos	City of Eastside	6/23/75	NPDES Issued
Douglas	Yoncalla - Daniel M. Webb	6/23/75	NPDES Issued
Wallowa	City of Wallowa	6/23/75	NPDES Issued
Washington	Durham - Unified Sewerage of Wash. County (Durham Sewage Treatment Plant)	6/23/75	NPDES Issued

Municipal Sources (Continued)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Morrow	City of Boardman	6/23/75	NPDES Issued
Clackamas	Lake Oswego - Mountain Park Recreation Center	6/23/75	NPDES Issued
Multnomah	Portland - Daniels Dock	6/24/75	NPDES Issued
Multnomah	Portland - Donaldson Marina	6/24/75	NPDES Issued
Multnomah	Portland - Island Harbor Marina	6/24/75	NPDES Issued
Multnomah	Portland - Toby's Marine Service	6/24/75	NPDES Issued
Multnomah	Portland - R. F. Wuerth (East Moorage)	6/24/75	NPDES Issued
Multnomah	Portland - R. F. Wuerth (West Moorage)	6/24/75	NPDES Issued
Multnomah	Portland - Big Eddy Marina	6/24/75	NPDES Issued
Multnomah	Portland - Columbia Corinthian Marina	6/24/75	NPDES Issued
Multnomah	Portland - Duck's Moorage	6/24/75	NPDES Issued
Multnomah	Portland - Rose City Yacht	6/24/75	NPDES Issued
Multnomah	Portland - Bill's Moorage	6/24/75	NPDES Issued
Multnomah	Portland - Bisonett Boat Marina	6/24/75	NPDES Issued
Multnomah	Portland - Captain's Moorage	6/24/75	NPDES Issued
Multnomah	Portland - Hargrave Moorage	6/24/75	NPDES Issued
Multnomah	Portland - Kappler Marina	6/24/75	NPDES Issued
Multnomah	Portland - Kappler Moorage	6/24/75	NPDES Issued
Multnomah	Portland - North Portland Harbor Moorage	6/24/75	NPDES Issued
Multnomah	Portland - Suttle Road Marina	6/24/75	NPDES Issued
Multnomah	Portland - Port of Portland Moorage	6/24/75	NPDES Issued
Multnomah	Portland - Tomahawk Moorage	6/24/75	NPDES Issued

Municipal Sources (Continued)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Gilliam	City of Condon	6/26/75	NPDES Issued
Wheeler	City of Fossil	6/26/75	NPDES Issued
Baker	City of Huntington	6/26/75	NPDES Issued
Wallowa	City of Enterprise	6/26/75	NPDES Issued
Hood River	Hood River - Neighbors of Woodcraft Home	6/26/75	NPDES Issued
Douglas	City of Yoncalla	6/26/75	NPDES Issued
Lincoln	City of Siletz	6/26/75	NPDES Issued
Douglas	Yoncalla - Ranch Motel (Rice Hill East Lagoon)	6/26/75	NPDES Issued
Lincoln	Toledo - Lincoln County School District (Toledo High School)	6/26/75	NPDES Issued

Industrial Sources (2 State, 112 NPDES)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Hood River	Odell - Stadelman Fruit Inc.	6/9/75	State Issued
Hood River	Van Horn - Walter Wells & Sons	6/9/75	State Issued
Linn	Foster - Fish Commission of Oregon (South Santiam Salmon Hatchery)	6/12/75	NPDES Issued
Linn	Cascadia Highway - Tomco, Inc.	6/12/75	NPDES Issued
Clatsop	Klaskanine - Fish Commission of Oregon (Klaskanine River Salmon Hatchery)	6/12/75	NPDES Issued
Multnomah	Portland - Nicolai Company	6/12/75	NPDES Issued
Hood River	Cascade Locks - Columbia Plywood Corp. (Cascade Locks Lumber Co.)	6/12/75	NPDES Issued
Linn	Aumsville - Fish Commission of Oregon (Aumsville Rearing Pond)	6/12/75	NPDES Issued
Multnomah	Bonneville - Fish Commission of Oregon (Cascade Salmon Hatchery)	6/12/75	NPDES Issued
Linn	Salem - Fish Commission of Oregon (Salem Park Rearing Pond)	6/12/75	NPDES Issued

Industrial Sources (Continued)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Linn	Stayton - Fish Commission of Oregon (Stayton Rearing Pond)	6/12/75	NPDES Issued
Multnomah	Bonneville - Fish Commission of Oregon (Wahkeena Rearing Pond)	6/12/75	NPDES Issued
Tillamook	Hebo - Oregon Wildlife Commission (Cedar Creek Hatchery)	6/12/75	NPDES Issued
Multnomah	Portland - Ameron Pipe Products	6/13/75	NPDES Issued
Lane	Eugene - Seneca Sawmill Company	6/13/75	NPDES Issued
Washington	Beaverton - Mears Controls, Inc.	6/13/75	NPDES Issued
Marion	Salem - Stayton Canning Company Cooperative (Liberty Plant)	6/13/75	NPDES Issued
Clackamas	Boring - Harris Stud Mill	6/13/75	NPDES Issued
Multnomah	Portland - Halton Tractor Co.	6/13/75	NPDES Issued
Multnomah	Portland - Acme Trading and Supply Company	6/13/75	NPDES Issued
Washington	Beaverton - Tektronix, Inc.	6/13/75	NPDES Issued
Marion	Stayton - Stayton Canning Co. Cooperative (Brooks Plant)	6/13/75	NPDES Issued
Lane	Eugene - Southern Pacific Transportation Co. (Eugene Yard Office)	6/13/75	NPDES Issued
Lane	Springfield - Brand S Corp. (Natron Division)	6/13/75	NPDES Issued
Hood River	Near Cascade Locks - Fish Comm. of Oregon (Oxbow Salmon Hatchery)	6/13/75	NPDES Issued
Klamath	Near Klamath Agency - Oregon Wildlife Comm. (Klamath Hatchery)	6/19/75	NPDES Issued
Jackson	White City - SWF Plywood Company (White City Plant)	6/19/75	NPDES Issued
Coos	Coos Bay - Coos Bay Packing Co.	6/19/75	NPDES Issued
Malheur	City of Ontario (Water Treatment Plant)	6/19/75	NPDES Issued

Industrial Sources (Continued)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Multnomah	Portland - Carnation Company (Albers Milling Div.)	6/19/75	NPDES Issued
Washington	Tualatin - Conrad Veneers, Inc.	6/19/75	NPDES Issued
Polk	Pedee - Pedee Lumber Company	6/19/75	NPDES Issued
Marion	Stayton - Santiam Water Control District	6/19/75	NPDES Issued
Washington	Tigard - Western Foundry Co.	6/19/75	NPDES Issued
Multnomah	Portland - Oregon Army National Guard (Kliever Memorial Armory)	6/19/75	NPDES Issued
Yamhill	City of Newberg (Water Treatment Plant)	6/19/75	NPDES Issued
Clackamas	Portland - Thorolyte Fiberglass, Inc.	6/19/75	NPDES Issued
Multnomah	Portland - Willamette Hi-Grade Concrete Co. (Ivon St. Plant)	6/19/75	NPDES Issued
Klamath	Gilchrist - Gilchrist Timber Co. (Industrial Waste)	6/20/75	NPDES Issued
Lane	Mapleton - U. S. Plywood-Champion Papers, Inc. (Mapleton Operations)	6/20/75	NPDES Issued
Lane	Eugene - Pape Bros., Inc.	6/20/75	NPDES Issued
Lane	Eugene - Shell Oil Company	6/20/75	NPDES Issued
Lane	Leaburg - Eugene Water & Electric Board (Leaburg Project)	6/20/75	NPDES Issued
Lane	Walterville - Eugene Water & Electric Board (Walterville Project)	6/20/75	NPDES Issued
Lane	Springfield - Springfield Quarry Rock Products	6/20/75	NPDES Issued
Linn	Eugene - Eugene Water & Electric Board (Carmen-Smith Project)	6/20/75	NPDES Issued
Lane	Eugene - Eugene Water & Electric Board (Hilyard St. Steam Plant)	6/20/75	NPDES Issued

Industrial Sources (Continued)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Lane	Springfield - Georgia-Pacific Corporation	6/20/75	NPDES Issued
Jackson	Medford - Southern Oregon Sales, Inc.	6/23/75	NPDES Issued
Jackson	Central Point - Steve Wilson Company (Central Point Plant)	6/23/75	NPDES Issued
Douglas	Yoncalla - Woolley Enterprises, Inc. (Yoncalla Log Pond)	6/23/75	NPDES Issued
Benton	Philomath - Hobin Lumber Co.	6/23/75	NPDES Issued
Douglas	Near Drain - Woolley Enterprises, Inc. (HWY 38 Log Pond)	6/23/75	NPDES Issued
Jackson	White City - White City Plywood Company	6/23/75	NPDES Issued
Lane	Junction City - Bohemia, Inc. (Junction City Plant)	6/23/75	NPDES Issued
Lane	Springfield - Willamette Industries Inc. (Springfield Division)	6/23/75	NPDES Issued
Jackson	White City - Olson-Lawyer Lumber, Inc. (White City Plant)	6/23/75	NPDES Issued
Jackson	Medford - Modoc Orchard Company	6/23/75	NPDES Issued
Multnomah	Portland - Koppers Company, Inc.	6/23/75	NPDES Issued
Klamath	Klamath Falls - D. G. Shelter Products Co. (Klamath Lumber Co.)	6/23/75	NPDES Issued
Linn	So. Brownsville - Wyne Poultry Farms, Inc.	6/23/75	NPDES Issued
Klamath	Klamath Falls - Burlington Northern, Inc.	6/23/75	NPDES Issued
Linn	Millersburg - Simpson Timber Co. (Albany Plant)	6/23/75	NPDES Issued
Multnomah	Portland - Libby, McNeill & Libby	6/23/75	NPDES Issued
Clackamas	Clackamas - Portable Equipment Company	6/23/75	NPDES Issued

Industrial Sources (Continued)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Multnomah	Portland - Schnitzer Steel Products Co.	6/23/75	NPDES Issued
Malheur	Nyssa - America Fine Foods, Inc. (Nyssa, Oregon Plant)	6/23/75	NPDES Issued
Wallowa	Joseph - Boise Cascade Corp. (Joseph Sawmill)	6/26/75	NPDES Issued
Wallowa	Wallowa - Idaho Power Company (Hells Canyon Dam & Power Project)	6/26/75	NPDES Issued
Baker	Oxbow - Idaho Power Company (Oxbow Hydroelectric Development)	6/26/75	NPDES Issued
Malheur	Ontario - Thomas Iseri Produce Co.	6/26/75	NPDES Issued
Klamath	Keno - Keno Irrigation District	6/26/75	NPDES Issued
Umatilla	Pilot Rock - Louisiana-Pacific Corp. (Pilot Rock)	6/26/75	NPDES Issued
Umatilla	Athena - Athena Cattle Feeders	6/26/75	NPDES Issued
Baker	Burnt River Irrigation District	6/26/75	NPDES Issued
Wheeler	Kinzua - Kinzua Corporation (Kinzua Operations)	6/26/75	NPDES Issued
Wallowa	Wallowa County - Oregon Wildlife Commission (Wallowa Hatchery)	6/26/75	NPDES Issued
Hood River	Odell - Stadelman Fruit, Inc. (Lenz & Whitney Plants)	6/26/75	NPDES Issued
Umatilla	City of Umatilla (McNary Townsite)	6/26/75	NPDES Issued
Baker	Elk Creek - Henry L. Williams (Elk Creek Placer Mine)	6/26/75	NPDES Issued
Lane	Springfield - Chembond Corp.	6/26/75	NPDES Issued
Lane	Eugene - Pacific Resins & Chemicals, Inc. (Eugene Plant)	6/26/75	NPDES Issued
Klamath	Klamath Falls - Columbia Plywood Corporation (Klamath Plywood Div.)	6/26/75	NPDES Issued

Industrial Sources (Continued)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Douglas	Reedsport - Bohemia, Inc. (Umpqua Division, Reedsport)	6/26/75	NPDES Issued
Multnomah	Portland - Oregon Steel Mills (Rivergate Plant, Portland)	6/26/75	NPDES Issued
Coos	Coos Bay - Georgia-Pacific Corp. (Coos Bay Complex)	6/26/75	NPDES Issued
Douglas	Dillard - Permaneer Corp. (Dillard Particleboard Plant)	6/26/75	NPDES Issued
Hood River	Hood River - Luhr Jensen & Sons, Inc.	6/26/75	NPDES Issued
Curry	Brookings - Meredith Fish Company	6/26/75	NPDES Issued
Curry	Brookings - South Coast Lumber Co.	6/26/75	NPDES Issued
Wasco	The Dalles - Stadelman Fruit, Inc. (The Dalles Plant)	6/26/75	NPDES Issued
Wasco	The Dalles - The Dalles Cherry Growers, Inc.	6/26/75	NPDES Issued
Douglas	Roseburg - Douglas County Lumber Company	6/26/75	NPDES Issued
Multnomah	Portland - Liquid Air, Inc.	6/26/75	NPDES Issued
Linn	Marion Forks - Fish Commission of Oregon (Marion Forks Salmon Hatchery)	6/26/75	NPDES Issued
Douglas	Dillard - Roseburg Lumber Company (Dillard Plywood Plant)	6/26/75	NPDES Issued
Douglas	Roseburg - U. S. Plywood Champion Papers, Inc. (Plywood Plant & Sawmill, Rifle Range Road)	6/26/75	NPDES Issued
Clatsop	Astoria - Union Oil Company of California (Astoria Terminal)	6/26/75	NPDES Issued
Douglas	Reedsport - Reedsport Cheese Factory	6/26/75	NPDES Issued
Lincoln	Newport - Road & Driveway Company	6/26/75	NPDES Issued

Industrial Sources (Continued)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Douglas	Glendale - The Robert Dollar Company	6/26/75	NPDES Issued
Douglas	Roseburg - U. S. Plywood-Champion Papers, Inc. (Roseburg Veneer Plant)	6/26/75	NPDES Issued
Coos	Coos Bay - Coos Head Timber Company (McKenna Operations)	6/26/75	NPDES Issued
Coos	Coos Bay - Mayflower Farms	6/26/75	NPDES Issued
Douglas	Roseburg - Keller Lumber Co.	6/26/75	NPDES Issued
Multnomah	Portland - Rhodia, Inc. (Agricultural Division)	6/26/75	NPDES Issued
Marion	Mill City - Green Veneer, Inc.	6/26/75	NPDES Issued
Linn	Lebanon - U. S. Plywood-Champion Papers, Inc. (Lebanon Operations)	6/26/75	NPDES Issued
Lane	Near Oakridge - Oregon Wildlife Commission (Willamette Hatchery)	6/26/75	NPDES Issued
Lane	Dexter Dam - Fish Commission of Oregon (Dexter Rearing Ponds)	6/26/75	NPDES Issued
Lane	Near Oakridge - Fish Commission of Oregon (Willamette River Salmon Hatchery)	6/26/75	NPDES Issued
Umatilla	Pendleton - Harris Pine Mills	6/26/75	NPDES Issued
Lane	Creswell - Willamette Poultry Company, Inc.	6/26/75	NPDES Issued
Hood River	Hood River - U. S. Plywood-Champion Papers, Inc. (Neal Creek Plant)	6/26/75	NPDES Issued

Permit Actions Pending (104)

Water Quality Program

June, 1975

Municipal and Industrial Sources (26 NPDES; 78 State)

NPDES Applications

<u>County</u>	<u>City and Source</u>	<u>Date of Initial Appl.</u>	<u>Date of Completed Appl.</u>	<u>Status & Type</u> ^{1/}
Columbia	Rainier - Cascade Energy	4/11/74	11/30/74	(N) EPA Final Review
Clatsop	Astoria - Sundown S. D.	4/24/74		(E) To be drafted in July.
Columbia	Columbia City - Charter Energy	9/13/74	11/30/74	(N) EPA Final Review
Coos	Charleston - Gold Coast Fisherman's Coop.	10/29/74		(N) Dormant
Multnomah	Portland - CIRI	11/1/74	11/30/74	(N) EPA Final Review
Linn	Lebanon - Pineway Apartments	3/6/75		(E) Waiting for Information.
Baker	Baker - Parkerville Placers	3/25/75	4/24/75	(N) To be drafted in July.
Coos	Bandon - Ocean Spray Cranberries	4/3/75	5/1/75	(N) To be drafted in July.
Multnomah	Portland - Chempro of Oregon	4/4/75	5/1/75	(N) Drafted
Lane	Springfield - Parker & Son Tire Co.	4/8/75	5/1/75	(E) To be drafted in July.
Lane	Springfield - SWF Plywood	4/9/75	5/1/75	(R) To be drafted in July.
Clackamas	Wilsonville - Joe Bernert Towing	4/18/75	5/1/75	(R) To be drafted in July.

Permit Actions Pending - NPDES (Continued)

<u>County</u>	<u>City and Source</u>	<u>Date of Initial Appl.</u>	<u>Date of Completed Appl.</u>	<u>Status & Type</u>
Union	Elgin - Boise Cascade	4/30/75	5/1/75	(R) To be drafted in July.
Douglas	Roseburg - Hub Lumber	5/8/75	5/23/75	(E) Public Notice
Yamhill	City of Amity - Filter Plant	5/13/75	5/23/75	(N) Drafted
Coos	Coos Bay - Bunker Hill S. D.	5/14/75	5/23/75	(E) Public Notice
Douglas	City of Drain	5/19/75	5/23/75	(E) Public Notice
Gilliam	Arlington - PGE, Pebble Springs	5/21/75	6/23/75	(N) Drafted
Multnomah	Portland - Tyee Yacht Club	5/22/75	6/2/75	(E) Public Notice
Lane	Lane County - Camp Lane	5/27/75	5/30/75	(R) To be drafted in Aug.
Jackson	Shady Cove - Shady Vista Mobile Park	5/27/75	5/30/75	(E) To be drafted in July.
Polk	Grand Ronde - Fort Hill Lumber Co.	5/27/75	5/27/75	(E) Public Notice
Washington	Progress - Willamette Hi-Grade	5/30/75	5/30/75	(R) Public Notice
Douglas	Sutherlin - Roseburg Lumber	5/30/75	6/2/75	(E) Applicant Review
Jackson	Ashland - Don Callahan's, Inc.	6/2/75	6/4/75	(N) To be drafted in July.
Klamath	Merrill - Klamath Potato	6/3/75	6/4/75	(E) To be drafted in Aug.

Permit Actions Pending (Continued)

State Applications

<u>County</u>	<u>City and Source</u>	<u>Date of Initial Appl.</u>	<u>Date of Completed Appl.</u>	<u>Status & Type</u>
Various	40 State Permits	Various	Various	Not Drafted ^{2/}
Various	18 State Permits	Various	Various	Pencil Drafts
Various	12 State Permits	Various	Various	Applicant Review
Clackamas	Clackamas - Damascus Sand & Gravel	4/7/75	4/11/75	(E) Public Notice
Umatilla	Umatilla - Alumax Pacific Corp.	5/20/75	5/27/75	(N) Public Notice
Various	6 State Permits	Various	Various	Ready for issuance

1/ (N) refers to an application for a new facility. (E) refers to an existing facility which either has a new discharge or has been operating without the proper permit. (R) refers to renewal of an existing permit.

2/ Most of these applications are for renewal of existing permits. Old permit remains in force until new permit is drafted.

Plan Actions Completed (8)

Air Quality Program

June, 1975

Direct Stationary Sources (8)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Clackamas	Milwaukie, Milwaukie Plywood, scrubber control of veneer driers.	6/5/75	Approved
Union	Elgin, Boise Cascade, new veneer drier.	6/6/75	Approved
Union	Elgin, Boise Cascade, conversion of veneer drier from gas to steam.	6/6/75	Approved
Multnomah	Portland, Albers Milling, new oil-gas boiler	6/16/75	Approved
Multnomah	Portland, Boeing of Portland, scrubber to control salt fumes.	6/17/75	Approved
Multnomah	Portland, Bureau of Parks, knife, reel and stationary hand grinder dust control system.	6/24/75	Approved
Multnomah	Portland, Nicolai Company, two baghouses to control shavings, sawdust and sanderdust emissions from two existing cyclones.	6/25/75	Approved
Multnomah	Portland, Georgia-Pacific Chip Export Facility, modification of chip loading system.	6/27/75	Approved

Indirect Sources (0)

Plan Actions Pending (28)

Air Quality Control

June, 1975

Direct Stationary Sources (28)

<u>County</u>	<u>City and Project</u>	<u>Date Recd.</u>	<u>Status</u>
Douglas	Roseburg, Raintree Wood Products. New cyclone to control dry sawdust from several saws. <u>1/</u>	4/9/74	Awaiting information to determine if type of material should be collected by baghouse. Expect completion by July 15, 1975.
Multnomah	Portland, Port of Portland bulk commodity rail receiving and ship loading facility. <u>1/</u>	6/12/74	Reviewing adequacy of additional information submitted 6/2/75. Expect action by 7/11/75.
Marion	Salem, Boise Cascade new countercurrent pulp washers. <u>1/</u>	7/7/74	Reviewing additional information received 6/27/75. Expect action by 7/31/75.
Washington	USA-Durham, New sludge incinerator. <u>2/</u>	12/31/74	Review completed 6/26/75. Drafting approval letter, expect to be mailed out by 7/3/75.
Klamath	Bly, Weyerhaeuser Co., new boiler with two (2) multiclones for control. <u>1/</u>	1/6/75	Information submitted 4/21/75. Company notified of deficiency in information submitted on 5/8/75. Action expected within 30 days after receipt of information.
Columbia	Clatskanie, Kaufman Chemical Corp., bulk sulphur rail receiving and ship loading facility. <u>2/</u>	2/25/75	Additional information requested 4/22/75. Action expected within 15 days after receipt of information.
Multnomah	Troutdale, Reynolds Metals Co., new particulate and fluoride baghouse collection system for all aluminum reduction pot lines. <u>1/</u>	3/10/75	Review completed. Drafted approval letter expected to be mailed out by 7/10/75.

Plan Actions Pending - Direct Stationary Sources (continued)

<u>County</u>	<u>City and Project</u>	<u>Date Recd.</u>	<u>Status</u>
Grant	John Day, Edward Hines Company, new hog fuel boiler controlled by wet scrubber. <u>1/</u>	4/18/75	Reviewing additional information received 6/25/75. Expect action by 7/15/75.
Coos	North Bend, Weyerhaeuser, spray chamber control of veneer drier emissions. <u>1/</u>	4/21/75	Reviewing additional information received 6/26/75. Expect action by 7/15/75.
Union	LaGrande, Boise Cascade, new cyclone for conveying wood chips and sawdust. <u>1/</u>	4/21/75	Review indicated additional opacity reading needed. Expect completion of review by 7/15/75.
Lane	Springfield, Weyerhaeuser, new condensate stripper. <u>1/</u>	4/21/75	Reviewing adequacy of additional information submitted 6/5/75. Expect action by 7/25/75.
Lane	Springfield, Weyerhaeuser, new countercurrent pulp drum washer. <u>1/</u>	4/21/75	Reviewing adequacy of additional information submitted 6/5/75. Expect action by 7/25/75.
Lane	Springfield, Weyerhaeuser, control odorous emissions from the causticizing equipment. <u>1/</u>	4/21/75	Reviewing adequacy of additional information submitted 6/5/75. Expect action by 7/25/75.
Lane	Springfield, Weyerhaeuser, new digester to convert wood chips into pulp. <u>1/</u>	4/21/75	Reviewing adequacy of information submitted 6/5/75. Expect action by 7/25/75.
Lane	Springfield, Weyerhaeuser, new concentrator evaporator. <u>1/</u>	4/21/75	Reviewing adequacy of additional information submitted 6/5/75. Expect action by 7/25/75.
Lane	Springfield, Weyerhaeuser, new sawdust conveying and screening system. <u>2/</u>	4/21/75	Reviewing adequacy of additional information submitted 6/5/75. Expect action by 7/25/75.
Multnomah	Portland, Bank Check Supply, new lead remelt furnace. <u>1/</u>	4/30/75	Reviewing adequacy of additional information submitted on 5/23/75. Expect action by 7/15/75.

Plan Actions Pending - Direct Stationary Sources (continued)

<u>County</u>	<u>City and Project</u>	<u>Date Recd.</u>	<u>Status</u>
Clackamas	Eagle Creek, Eagle Foundry Co. two new induction furnaces and associated grinding equipment. <u>1/</u>	5/27/75	Requested additional information on 6/10/75. Action expected within 30 days after receipt of information.
Umatilla	Umatilla, Western Farmers Asso., new bulk fertilizer blending plant.	6/9/75	Requested additional information on 6/18/75. Expect final action within 15 days of receipt of requested information.
Douglas	Dillard, Roseburg Lumber, hog fuel boiler with turbulaire scrubber. <u>1/</u>	6/11/75	Reviewing adequacy of information submitted. Expect action by 7/10/75.
Douglas	Dillard, Roseburg Lumber, Kipper hog fuel boiler with Ducon scrubber. <u>1/</u>	6/11/75	Reviewing adequacy of information submitted. Expect action by 7/10/75.
Multnomah	Portland, Kerr Grain Corp., Modernization of dust control system. <u>1/</u>	6/12/75	Reviewing adequacy of information submitted. Expect final action by 8/15/75.
Lincoln	Toledo, Georgia-Pacific, scrubber on hog fuel boilers No. 3 and No. 4. <u>1/</u>	6/16/75	Reviewing adequacy of information submitted. Expect action by 7/15/75.
Multnomah	Portland, Albers Milling, new pellet cooler with conveying equipment. <u>1/</u>	6/16/75	Reviewing adequacy of information submitted. Expect action by 7/11/75.
Multnomah	Portland, Atlantic Richfield, new steam boiler (residual fuel oil fired). <u>1/</u>	6/17/75	Reviewing adequacy of information submitted. Expect action by 7/31/75.
Clackamas	Milwaukie, North Clackamas School District, Physical plant, sawdust collection system. <u>1/</u>	6/19/75	Reviewing adequacy of information submitted. Expect action by 7/31/75.

Plan Actions Pending - Direct Stationary Sources (continued)

<u>County</u>	<u>City and Project</u>	<u>Date Recd.</u>	<u>Status</u>
Clackamas	Milwaukie, Milwaukie Jr. High School, school workshop sawdust collection system. <u>1/</u>	6/19/75	Reviewing adequacy of information submitted. Expect action by 7/31/75.
Clackamas	Milwaukie, Dale Ickes Jr. High School, school workshop sawdust collection system. <u>1/</u>	6/19/75	Reviewing adequacy of information submitted. Expect action by 7/31/75.

Indirect Sources (0)

None

Footnotes:

- 1/ These plan reviews are for modifications or additions to existing facilities. Pending action by the Department is not materially affecting production or operation of the facility.
- 2/ These plan reviews are for new facilities. Production or operation of the facility is dependent on Department action.

Permit Actions Completed (96)

Air Quality Program

June, 1975

Direct Stationary Sources (95)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Multnomah	Portland, Nicolai Company (26-2074), Millwork	5/29/75	Permit Issued
Clackamas	Estacada, Mt. Hood Redi-Mix (03-2570), Ready Mix Concrete	5/30/75	Permit Issued
Washington	Tualatin, Durametal Foundry Co., Inc. (34-1882), Steel Foundry	6/2/75	Permit Issued
Clackamas	Canby, Buchanan Cellers Grain Co., (03-25180, Grain Elevator and Seed Cleaning	6/2/75	Permit Issued
Multnomah	Portland, Western Farmers Assoc. (26-2181), Prepared Animal Feeds	6/2/75	Permit Issued
Clatsop	Astoria, Sunset Crushed Rock Co. (04-0031), Rock Crusher	6/2/75	Permit Issued
Washington	Beaverton, Mercer Industries, Inc (34-2579), Millwork	6/2/75	Permit Issued
Washington	Hillsboro, Noblecraft Industries Inc. (34-2060), Millwork	6/2/75	Permit Issued
Clackamas	Canby, Hiway Concrete Products Inc. (03-2032), Ready Mix Concrete and Rock Crusher	6/2/75	Permit Issued
Clatsop	Seaside, Howard E. Johnson & Sons (04-0029), Rock Crusher	6/2/75	Permit Issued
Clackamas	Clackamas, Portable Equipment Co. (03-2079), Incinerator	6/2/75	Permit Issued
Multnomah	Portland, Triangle Milling Co. (26-1959), Animal Feeds	6/2/75	Permit Issued
Clackamas	Oregon City, Willamette Hi-Grade Concrete Co. (03-2469), Asphalt Paving	6/2/75	Permit Issued
Clackamas	Wilsonville, Metalcrafts, Inc. (03-2636), Aluminum Foundry	6/2/75	Permit Issued

Permit Actions Completed - Direct Stationary Sources (Continued)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Lincoln	Lincoln City, Oceanlake Ready Mix (21-0030), Concrete Plant	6/10/75	Permit Issued
Lincoln	Lincoln City, Oceanlake Ready Mix (21-0034), Concrete Plant	6/10/75	Permit Issued
Wasco	The Dalles, The Dalles Concrete Products Co., (33-0019), Concrete Plant	6/10/75	Permit Issued
Crook	Prineville, Ochoco Ready Mix (07-0011), Concrete Plant	6/10/75	Permit Issued
Deschutes	Redmond, Redmond Ready-Mix (09-0039), Concrete Plant	6/10/75	Permit Issued
Lincoln	Toledo, Lincoln Ready Mix, Inc. (21-0028), Concrete Plant	6/10/75	Permit Issued
Lincoln	Toledo, Lincoln Ready Mix, Inc. (21-0035), Concrete Plant	6/10/75	Permit Issued
Klamath	Klamath Falls, Concrete Products Industries (18-0041), Concrete Plant	6/10/75	Permit Issued
Hood River	Hood River, Hood River Sand, Gravel and Ready-Mix, Inc. (14-0015), Concrete Plant	6/10/75	Permit Issued
Hood River	Hood River, Hood River Sand, Gravel and Ready-Mix, Inc. (14-0016), Concrete Plant	6/10/75	Permit Issued
Josephine	Medford, Gilbert Rock & Redimix (17-0048), Concrete Plant	6/10/75	Permit Issued
Jackson	Medford, M.C. Lininger & Sons, Inc (15-0071), Concrete Plant	6/10/75	Permit Issued
Jackson	Medford, M.C. Lininger & Sons, Inc (15-0062), Concrete Plant	6/10/75	Permit Issued
Josephine	Grants Pass, Davison's Readymix Ltd (17-0040), Concrete Plant	6/10/75	Permit Issued
Jackson	Medford, Morton Milling Co. (15-0061), Feed Mill	6/10/75	Permit Issued

Permit Actions Completed - Direct Stationary Sources (continued)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Malheur	Ontario, Flynn Sand & Gravel (23-0022), Rock Crusher	6/24/75	Permit Issued
Union	La Grande, Eastern Oregon St. College (31-0026), Boiler	6/24/75	Permit Issued
Portable	Walla Walla, Peter Kiewit Sons, Co. (37-0024), Asphalt Plant	6/24/75	Permit Issued
Malheur	Ontario, Monroc, Inc. (23-0015), Concrete Plant	6/24/75	Permit Issued
Mahleur	Nyssa, Oregon Concrete Products, Co. (23-0014), Concrete Plant	6/24/75	Permit Issued
Baker	Baker, Redi-Mix Inc. (01-0028), Concrete Plant	6/24/75	Permit Issued
Douglas	Myrtle Creek, Tri-City Redy-Mix, Inc. (10-0087), Concrete Plant	6/24/75	Permit Issued
Umatilla	Pendleton, Central Cement Products, Inc. (30-0020), Concrete Plant	6/24/75	Permit Issued
Union	La Grande, R.D. Mac, Inc. (31-0010), Concrete Plant	6/24/75	Permit Issued
Malheur	Ontario, Flynn's Sand & Gravel, Inc. (23-0013), Concrete Plant	6/24/75	Permit Issued
Umatilla	Pendleton, Pendleton Ready Mix Co. (30-0019), Concrete Plant	6/24/75	Permit Issued
Douglas	Roseburg, Roseburg Lumber Co. (10-0020), Lumber Company	6/24/75	Permit Issued
Umatilla	Milton-Freewater, Ready Mix Sand & Gravel Co. (25-0014), Concrete Plant	6/24/75	Permit Issued
Umatilla	Milton-Freewater, Ready Mix Sand & Gravel Co. (30-0057), Concrete Plant	6/24/75	Permit Issued
Umatilla	Milton-Freewater, Ready Mix Sand & Gravel Co. (37-0054), Concrete Plant	6/24/75	Permit Issued

Permit Actions Completed - Direct Stationary Sources (continued)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Jackson	White City, Southern Oregon Dry Kiln (15-0053), Sawmill	6/24/75	Permit Issued
Clatsop	Seaside, Seaside Concrete Co. (04-0026), Concrete Plant	6/24/75	Permit Issued
Tillamook	Nehalem, Vermilyea Shingle (29-0054), Shake & Shingle Mill	6/24/75	Permit Issued
Tillamook	Nehalem, Cook Creek Shake & Shingle Mill (29-0015), Shake & Shingle Mill	6/24/75	Permit Issued
Tillamook	Tillamook, Coast Wide Ready Mix Co. (29-0034), Concrete Plant	6/24/75	Permit Issued
Josephine	Grants Pass, Lew Merrill Lumber Sales, (17-0034), Sawmill	6/26/75	Permit Issued
Clatsop	Seaside, Howard E. Johnson & Son (04-0029), Rock Crusher	6/26/75	Permit Issued
Portable	Tillamook, Tillamook County Road Dept. (37-0034), Asphalt Plant	6/26/75	Permit Issued
Portable	Neskowin, Nesko Rock Inc. (37-0101), Rock Crusher	6/26/75	Permit Issued
Douglas	Roseburg, Jimelcrete, Inc. (10-0095), Concrete Plant	6/26/75	Permit Issued
Douglas	Roseburg, Umpqua Redi-Mix Co. (10-0086), Concrete Plant	6/26/75	Permit Issued
Josephine	Grants Pass, Webco Lumber Co. (17-0004), Planing & Sawmill	6/26/75	Permit Issued
Josephine	Grants Pass, Southern Oregon Lumber Dist. (17-0012), Planing & Sawmill	6/26/75	Permit Issued
Portable	McMinnville, John C. Compton (37-0065), Rock Crusher	6/26/75	Permit Issued
Josephine	Grants Pass, Cabax Mills-Lumber Div. (17-0005), Planing & Sawmill	6/26/75	Permit Issued
Josephine	Grants Pass, Morris Lumber Inc. (17-0010), Planing & Sawmill	6/26/75	Permit Issued

Permit Actions Completed - Direct Stationary Sources (continued)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Deschutes	Bend, Bend Redi-Mix, Inc (09-0038), Concrete Plant	6/10/75	Permit Issued
Douglas	Roseburg, Box J Pellet Co. (10-0040), Feed Mill	6/10/75	Permit Issued
Wasco	Tygh Valley, Tygh Valley Sand and Gravel (33-0017), Concrete Plant	6/10/75	Permit Issued
Coos	Coos Bay, Al Pierce Lumber Co (06-0004), Sawmill & Planing	6/10/75	Permit Issued
Crook	Prineville, Clear Pine Mouldings Inc. (07-0001), Sawmill	6/10/75	Permit Issued
Josephine	Grants Pass, Gary L. Peterson (17-0053), Concrete Plant	6/10/75	Permit Issued
Josephine	Cave Junction, Mel Barlow (17-0051), Concrete Plant	6/10/75	Permit Issued
Jackson	Medford, Tru-Mix Leasing Co. (15-0090), Concrete Plant	6/10/75	Permit Issued
Portable	Hood River, B & D Paving (37-0047), Asphalt Plant	6/10/75	Permit Issued
Deschutes	Bend, Deschutes Ready Mix Sand and Gravel Company (09-0053), Concrete Plant	6/10/75	Permit Issued
Jefferson	Bend, Deschutes Ready Mix Sand and Gravel Company (16-0018), Concrete Plant	6/10/75	Permit Issued
Deschutes	Bend, Deschutes Ready Mix Sand and Gravel Company (09-0052), Concrete Plant	6/10/75	Permit Issued
Deschutes	Bend, North Pacific Products, Inc. (09-0051), Sawmill	6/12/75	Permit Issued
Portable	Eugene, Bohemia-Umpqua Navigation Division (37-0063), Concrete Plant	6/13/75	Permit Issued

Permit Actions Completed - Direct Stationary Sources (continued)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Multnomah	Portland, R. Leninger Polishing and Plating Co. (26-2928), Electroplating	6/2/75	Permit Issued
Washington	Hillsboro, Permapost Products Co. (35-2580), Wood Preserving	6/2/75	Permit Issued
Clackamas	Oregon City, PED Manufacturing Ltd. (03-2505), Steel Foundry	6/2/75	Permit Issued
Multnomah	Portland, Riverview Abbey Crematorium and Mausoleum (26-2545) Incinerator	6/2/75	Permit Issued
Clatsop	Warrenton, Warrenton Lumber Co. (04-0041), Sawmill	6/2/75	Permit Issued
Washington	Tualatin, Conrad Veneers, Inc. (34-2560), Veneer Manufacturing	6/3/75	Permit Issued
Multnomah	Portland, Centennial Mills (26-2006), Flour Mill	6/6/75	Permit Issued
Portable	State Wide, Caffall Brothers Construction Co. (37-0093), Rock Crusher	6/10/75	Permit Issued
Multnomah	Portland, Terminal Flour Mills Co (26-2013), Flour Mill	6/10/75	Permit Issued
Washington	Beaverton, Leonetti Furniture Mfg. Co. (34-2018), Furniture Manufacturing	6/10/75	Permit Issued
Clackamas	Clackamas, Hall Process Company (03-2637), Pipe Coating	6/11/75	Permit Issued
Tillamook	Tillamook, Louisiana-Pacific Corp (29-0019), Plywood and Sawmill	6/24/75	Permit Issued
Washington	Banks, Empire Building Materials Company (34-2180), Expanded Shale	6/24/75	Permit Issued

Permit Actions Completed - Direct Stationary Sources (continued)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Multnomah	Portland, Penwalt Corporation Expansion of chlorine-caustic soda manufacturing	6/6/75	Addendum Issued
Multnomah	Portland, Oregon Steel Mills Rivergate New Pellet Metallizing Furnace	6/10/75	Addendum Issued
Washington	Forest Grove, Stimson Lumber Co. (34-2066), Sawmill	6/10/75	Addendum Issued
Malheur	Nyssa, Amalgamated Sugar Co. (23-0002), Beet Sugar Plant	6/16/75	Addendum Issued
Multnomah	Portland, Louis Dreyfus Corp. (26-2000), Grain Elevator	6/24/75	Addendum Issued
Clatsop	Astoria, Astoria Plywood Corp. (04-0014), Plywood	6/24/75	Addendum Issued
Multnomah	Portland, Boyd Coffee Co. (26-2083), Coffee Roasting	6/2/75	Permit Re-Issued
Grant	Bates, Edward Hines Lumber Co. (12-0001), Sawmill and Planing	6/26/75	Permit Re-Issued

Indirect Sources (1)

Washington	Washington County, Sommerset West 149 space commercial center parking facility	6/30/75	Permit Issued
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Fuel Burning Boilers (0)

Permit Actions Pending (346)

Air Quality Program

June, 1975

(New Sources - - - - - 14 - - - - - See listing below)
 (Existing Sources- - - - - 255 - - - - - See footnote 1/)
 (Fuel Burning (boilers)- - - - - 77 - - - - - See footnote 2/)

New Direct Stationary Sources

<u>County</u>	<u>City and Project</u>	<u>Date of Initial Appl.</u>	<u>Date of Completed Appl.</u>	<u>Status</u>
Clatsop	Astoria, Layton Funeral Home, New cremation incinerator.	2/28/74	5/19/75	Proposed permit mailed 5/19/75. Expect to issue permit by 7/4/75.
Washington	USA-Durham, New sludge incinerator, lime recalciner and steam boilers.	12/21/74	6/27/75	(See plan action pending). Permit being drafted. Expect to mail out proposed permit by 7/12/75.
Columbia	Clatskanie, Kaufman Chemical Corp., Bulk sulfur rail receiving and ship loading facility.	2/25/75		(See plan action pending) Permit to be drafted within 15 days of plan approval.
Umatilla	Umatilla, Alumax Pacific Corporation, New aluminum reduction plant.	4/18/75	6/18/75	Proposed permit mailed out 6/18/75. Public hearing to be held 7/25/75. Expect to issue permit by 8/15/75.

Permit Actions Pending

Indirect Sources (10)

<u>County</u>	<u>City and Project</u>	<u>Date of Initial Appl.</u>	<u>Date of Completed Appl.</u>	<u>Status</u>
Clackamas	Milwaukie Area, Clackamas Town Center, 6000+ space shopping center	7/19/74		Environmental Impact Statement received, no further review by Department necessary until land use is approved by local planning comm.
Multnomah	Rockwood Area, Mt. Hood Mall, 6000+ space shopping center	7/19/74		Additional information requested environmental assessment. No further review by Dept. necessary until land use is approved by local planning comm.
Clackamas	Oak Grove Area, Stuart Andersons' Black Angus, 115 space parking facility	4/14/75		Transit information received 5/8/75. No further review until land use is approved by local planning comm.
Jackson	Central Point Area, Jackson County Exhibition Center, 1500+ parking facility for fairgrounds	4/14/75		Requested environmental assessment, carbon monoxide, traffic, noise impact, 4/16/75.
Clackamas	Clackamas, Clackamas Industrial Complex, 68+ space parking facility	4/21/75		Requested additional information 5/5/75. Including revision of size of facility to no more than 44 spaces.
Clackamas	Milwaukie, Waverly Greens, 145 space residential parking facility.	4/23/75		Requested additional information, transit incentive and traffic controls, 5/5/75.

Indirect Sources (continued)

<u>County</u>	<u>City and Project</u>	<u>Date of Initial Appl.</u>	<u>Date of Completed Appl.</u>	<u>Status</u>
Multnomah	Portland, Culver Brown Apartments, 63 space parking facility	4/27/75		Requested additional information, transit incentive program 6/9/75.
Washington	Beaverton, Herzog Motors, 91 space auto sales facility	6/17/75		Anticipate request for additional information 7/2/75, transit incentive program.
Multnomah	Multnomah County, Tri-Met bus parking and service facility, 220 auto and 250 bus parking spaces.	6/19/75		Anticipate request for additional information 7/2/75. Request reduction in auto spaces, transit incentive program.
Washington	Tigard, McDonald's 81 space restaurant parking facility	6/17/75		Anticipate request for additional information 7/3/75.

Footnotes:

- 1/ These permit actions are of existing sources that are operating on automatic extensions or on temporary permits. Our previous estimated completion date on these permit actions is being extended into September because additional time was needed by our regional staff for reviewing and drafting. It is now anticipated that the majority of these permit actions be completed prior to September 30, 1975, approximately 35% in July, 30% in August and 35% in September.
- 2/ These fuel burning (boiler) permit actions are all of existing sources and do not hinder the operation of the sources. Because of vacations and assignment of other priority projects it is now estimated that the issuance of these permits will be completed by Mid-August.

Plan Actions Completed (14)

Land Quality Program

June 1975

General Refuse (Garbage) Projects (8)

<u>County</u>	<u>City and Site</u>	<u>Date of Action</u>	<u>Action</u>
Gilliam County	South Gilliam County Disposal Facility New Site Construction and Operational Plan	6/10/75	Approved
Deschutes County	Brothers Highway Disposal Site Existing Site Operational Plan	6/18/75	Approved
Marion County	Brown's Island Sanitary Landfill Existing Site Operational Plan	6/18/75	Provisional Approval
Gilliam County	North Gilliam County Disposal Facility Existing Site Operational Plan	6/18/75	Approved
Baker County	Baker Sanitary Landfill Existing Site Operational Plan	6/27/75	Approved
Deschutes County	Southwest Deschutes County Disposal Site New Site Construction and Operational Plan	6/27/75	Approved
Douglas County	Reedsport Landfill	6/27/75	Not Approved
Douglas County	Canyonville Landfill	6/30/75	Not Approved

Demolition Solid Waste Disposal Projects (0)

Industrial Solid Waste Disposal Projects (4)

<u>County</u>	<u>City and Site</u>	<u>Date of Action</u>	<u>Action</u>
Josephine County	Marvin Lee Existing Site	6/11/75	Letter of Authorization
Douglas County	Round Prairie Lumber Company Existing Site Operational Plans	6/16/75	Approved
Lincoln County	Georgia-Pacific Corporation Existing Site Operational Plans	6/23/75	Provisional Approval
Linn County	Western Kraft Corporation Existing Site #2 Operational Plans	6/27/75	Approved

Sludge Disposal Projects (0)

Planning Projects (2)

<u>County</u>	<u>City and Site</u>	<u>Date of Action</u>	<u>Action</u>
Klamath County	Solid Waste Management Action Plan	6/18/75	Approved with Comments
Clatsop-Tillamook Intergovernmental Council	Addendum to Plan for Clatsop County regarding barge haul of waste.	6/23/75	Approved

Plan Actions Pending (7)

Land Quality Program

June 1975

General Refuse (Garbage) Projects (3)

<u>County</u>	<u>City and Site</u>	<u>Date Received</u>	<u>Status</u>
Umatilla County	Pendleton Landfill	10/15/74	Final Grades Requested
Douglas County	Myrtle Creek Transfer Station	1/6/75	Awaiting Revised Plans
Klamath County	Chiloquin Solid Waste Disposal Site	5/12/75	In Process of Approval

Demolition Solid Waste Disposal Projects (0)

Industrial Solid Waste Disposal Projects (4)

<u>County</u>	<u>City and Site</u>	<u>Date Received</u>	<u>Status</u>
Linn County	Western Kraft Corporation Existing Site #1	4/24/75	Awaiting Revised Plans
Benton County	Miller Lumber, Inc.	6/18/75	Plan Incomplete More Data Requested
Deschutes County	Deschutes Valley Disposal Site	6/27/75	In Process Action 7/75
Linn County	Teledyne Wah-Chang, Albany	6/30/75	In Process Action 7/75

Sludge Disposal Projects (0)

Permit Actions Completed (22)

Land Quality Program
June 1975

General Refuse (Garbage) Facilities (10)

<u>County</u>	<u>City and Site</u>	<u>Date of Action</u>	<u>Action</u>
Jackson	Prospect Landfill Existing Facility	6/3/75	Permit Issued (renewal)
Klamath	Crescent Landfill Existing Facility	6/5/75	Permit Amended
Lane	Franklin Landfill Existing Facility	6/6/75	Permit Issued (renewal)
Deschutes	McGrath Landfill Existing Facility	6/6/75	Permit Issued
Gilliam	North Gilliam County Disposal Facility Existing Facility (Arlington)	6/18/75	Permit Issued
Marion	MacLeay Landfill	6/19/75	Permit Amended
Deschutes	Negus Landfill	6/20/75	Permit Issued
Gilliam	South Gilliam County Disposal Facility New Facility (Condon)	6/26/75	Permit Issued
Umatilla	Umatilla Tribal Landfill	6/26/75	Permit Issued (renewal)
Deschutes	Fryrear Landfill	6/27/75	Permit Issued

Demolition Solid Waste Disposal Facilities (0)

Industrial Solid Waste Disposal Facilities (12)

<u>County</u>	<u>City and Site</u>	<u>Date of Action</u>	<u>Action</u>
Josephine	Marvin Lee New Facility	6/11/75	Letter author- ization Issued
Benton	Hobin Lumber Co.	6/26/75	Temporary Permit Amended *
Benton	Paul Barber Hardwood	"	" "
Douglas	Reedsport Mill	"	" "
Josephine	Josephine Co. Industrial Sludge Disposal Site	"	" "
Josephine	Rough & Ready Lumber	"	" "
Lane	Georgia-Pacific, Irving Road, Eugene	"	" "
Lane	Georgia-Pacific, Springfield	"	" "
Lane	Hines Lumber	"	" "
Marion	Green Veneer	"	" "
Multnomah	Pacific Carbide	"	" "
Clatsop	Crown Zellerbach Wauna Mill	6/27/75	Permit Issued (renewal)

Sludge Disposal Facilities (0)

* Existing facilities operating under temporary permits which were due to expire 7-1-75. Permits amended so as to expire 6-30-76.

Permit Action Pending (147)

Land Quality Program

June 1975

General Refuse (Garbage) Facilities (100)

<u>County</u>	<u>City and Site</u>	<u>Date of Initial Applcn.</u>	<u>Date of Completed Applcn.</u>	<u>Status</u>
Benton	Coffin Butte Landfill	5/13/75	5/13/75	Renewal. Proposed Permit mailed 6/23/75
Clackamas	Rossman's Landfill	4/21/75	4/21/75	Renewal. Proposed permit mailed 6/19/75.
Columbia	Santosh Landfill	5/5/75	5/5/75	Renewal. Permit Expires 8/1/75. Regional staff to draft permit 7/75.
Coos	Fairview Disposal Site	6/2/72	6/16/72	Under temporary permit. Proposed regular permit mailed 4/1/75. County requested additional review time.
Curry	Brookings Landfill	5/16/72	6/16/72	Under temporary permit. Proposed regular permit mailed 4/16/75. County requested additional review time.
Curry	Nesika Beach Landfill	6/16/72	6/16/72	Under temporary permit. Proposed regular permit mailed 4/16/75. County requested additional review time.

General Refuse (Garbage) Facilities (Continued)

<u>County</u>	<u>City and Site</u>	<u>Date of Initial Applcn.</u>	<u>Date of Completed Applcn.</u>	<u>Status</u>
Multnomah	St. Johns Landfill	1/30/75	1/30/75	Renewal. Proposed permit mailed 6/27/75.
Deschutes	Highway Disposal Site (Brothers)	6/13/72	4/22/75	Under temporary permit. Proposed regular permit mailed 6/18/75.
Deschutes	Knott Pit Landfill	5/2/75	5/2/75	Renewal. Proposed permit mailed 6/25/75.
Deschutes	Southwest Landfill	6/19/74	-	Proposed new facility. <u>Application incomplete.</u> Proposed permit mailed 6/27/75. Regular permit will <u>not</u> be issued until application is complete.
Douglas	Elkton Landfill	6/12/72	7/9/74	Under temporary permit. Proposed regular permit mailed 6/25/75.
Douglas	Myrtle Creek Landfill	6/12/72	7/9/74	Under temporary permit. Proposed regular permit mailed 6/23/75.
Douglas	Oakland Landfill	6/12/72	7/9/74	Under temporary permit. Proposed regular permit mailed 6/24/75.
Douglas	Reedsport Landfill	6/12/72	7/9/74	Under temporary permit. Proposed regular permit mailed 6/25/75.
Douglas	Yoncalla Landfill	6/12/72	7/9/74	Under temporary permit. Proposed regular permit mailed 6/25/75.

General Refuse (Garbage) Facilities (Continued)

<u>County</u>	<u>City and Site</u>	<u>Date of Initial Applcn.</u>	<u>Date of Completed Applcn.</u>	<u>Status</u>
Douglas	Lookingglass Landfill	6/12/72	7/9/74	Under temporary permit. Proposed regular permit mailed 6/26/75.
Douglas	Canyonville Landfill	6/12/72	7/9/74	Under temporary permit. Proposed regular permit mailed 6/30/75.
Douglas	Glendale Landfill	6/12/72	7/9/74	Under temporary permit. Proposed regular permit mailed 6/30/75.
Jackson	Dry Creek Landfill	5/7/75	5/7/75	Renewal. Proposed permit mailed 6/11/75.
Lane	Florence Landfill	5/12/75	5/12/75	Renewal. Proposed permit mailed 6/27/75.
Lane	Veneta Landfill	5/12/75	5/12/75	Renewal. Proposed permit mailed 6/13/75.
Marion	Brown's Island			Expansion of existing facility. Proposed permit mailed 6/18/75.
(78)	other sites with temporary permits (incomplete applications)			Most awaiting completion of regional solid waste management plans. Regional staff to draft permits prior to 12/75.

Demolition Solid Waste Disposal Facilities (3)

<u>County</u>	<u>City and Site</u>	<u>Date of Initial Applcn.</u>	<u>Date of Completed Applcn.</u>	<u>Status</u>
Marion	Salem Airport Landfill	6/20/72	8/14/74	Under temporary permit. Regional staff to draft regular permit 7/75.
Polk	Fowler Demolition	8/8/72	8/14/74	Under temporary permit. Regional staff to draft regular permit 7/75.
Linn	Roche Road	5/13/75	5/13/75	Renewal. Proposed permit mailed 6/23/75.

Industrial Solid Waste Disposal Facilities (43)

<u>County</u>	<u>City and Site</u>	<u>Date of Initial Applcn.</u>	<u>Date of Completed Applcn.</u>	<u>Status</u>
Columbia	Crown Zellerbach (Camp 8)	4/22/75	4/22/75	Renewal. Permit expires 6/30/75. Regional staff denied proposed expansion. Permittee has appealed. Solid Waste Management Division to review.
Coos	Weyerhaeuser, Dellwood Shop	6/21/73	4/12/74	Existing site. Proposed regular permit mailed 5/30/75. Permittee requested additional review time.
Coos	Weyerhaeuser, Horse Flats	6/21/73	4/12/74	Existing site. Proposed regular permit mailed 5/30/75. Permittee requested additional review time.

Industrial Solid Waste Disposal Facilities (Continued)

<u>County</u>	<u>City and Site</u>	<u>Date of Initial Applcn.</u>	<u>Date of Completed Applcn.</u>	<u>Status</u>
Curry	Rogge Lumber Co.	11/18/74	11/18/74	Renewal. Permit expired 12/31/74. Proposed new permit mailed 5/29/75. Permittee requested additional review time.
Linn	Western Kraft	4/25/75	4/25/75	Renewal. Proposed permit mailed 6/26/75.
Douglas	Round Prairie Lumber Co.	10/2/74	11/12/74	Proposed new facility will not be used until summer. Proposed permit mailed 6/16/75.
Lane	Pope & Talbot	5/12/74	5/14/75	Renewal. Permit expired 6/30/75. Regional staff to draft new permit 7/75.
Lincoln	Georgia-Pacific, Toledo	7/2/73	3/14/74	Existing site. Proposed permit mailed 6/23/75.
Benton	Hobin Lumber Co.	6/21/73	6/29/73	Under temporary permit. Expires 6/30/76. Regional staff to draft regular permit as soon as possible.
Benton	Paul Barber Hardwood	12/19/73	5/20/74	" " "
Douglas	Reedsport Mill	8/8/73	8/8/73	" " "
Josephine	Josephine Co. Industrial Sludge Disposal Site	7/18/73	7/18/73	" " "
Josephine	Rough & Ready Lumber	6/22/73	6/22/73	" " "

Industrial Solid Waste Disposal Facilities (Continued)

<u>County</u>	<u>City and Site</u>	<u>Date of Initial Applcn.</u>	<u>Date of Completed Applcn.</u>	<u>Status</u>
Lane	Georgia-Pacific, Irving Road, Eugene	6/22/73	6/22/73	Under temporary permit expires 6/30/76. Regional staff to draft regular permit as soon as possible.
Lane	Georgia-Pacific Springfield	6/28/73	9/7/73	" " "
Lane	Hines Lumber	6/29/73	5/30/74	" " "
Marion	Green Veneer	6/1/73	7/3/73	" " "
Multnomah	Pacific Carbide	6/25/73	6/25/73	" " "
<u>1/</u> Benton	Willamette Industries	7/3/73	7/3/73	Under temporary letter authorization. Regional staff to draft regular letter authorization or permit prior to 12/75.
<u>1/</u> Coos	Coos Bay Plywood Millington Flats	6/20/73	7/2/73	" " "
<u>1/</u> Curry	U. S. Plywood, Gold Beach	7/13/73	7/13/73	" " "
<u>1/</u> Douglas	D & D Lumber	6/29/73	6/29/73	" " "
<u>1/</u> Douglas	U. S. Plywood Roseburg	7/13/73	7/13/73	" " "
<u>1/</u> Hood River	Champion International	7/13/73	7/13/73	" " "
<u>1/</u> Jackson	Boise Cascade, Medford	7/2/73	7/2/73	" " "
<u>1/</u> Lincoln	Publishers Paper, Toledo	9/28/73	9/28/73	" " "

Industrial Solid Waste Disposal Facilities (Continued)

	<u>County</u>	<u>City and Site</u>	<u>Date of Initial Applcn.</u>	<u>Date of Completed Applcn.</u>	<u>Status</u>
<u>1/</u>	Linn	Bauman Lumber	6/19/73	6/19/73	Under temporary letter authorization. Regional staff to draft regular letter authorization or permit prior to 12/75.
<u>1/</u>	Linn	Cedar Lumber	7/1/73	7/1/73	" " "
<u>1/</u>	Linn	Dean Morris Lumber	6/28/73	6/28/73	" " "
<u>1/</u>	Linn	Willamette Industries Foster	7/5/73	7/5/73	" " "
	Baker	Oregon-Portland Cement Co.	6/1/73	- - -	Existing site, requested letter authorization. Regional staff to investigate.
	Jackson	Jackson County, Park	1/12/74	- - -	" " "
	Coos	Coos Head Timber	6/21/73	6/21/73	Existing site. Regional staff to investigate.
	Coos	International Paper	12/13/74	12/13/74	" " "
	Coos	Roseburg Lumber Coquille	7/18/73	7/18/73	" " "
	Coos	Westbrook Pole and Piling	5/7/74	5/7/74	" " "
	Douglas	L & H Lumber	6/20/74	6/20/74	" " "
	Douglas	Roseburg Lumber Co. 5 mill sites	7/9/73	6/3/74	" " " 5 applications
	Linn	Willamette Industries Sweet Home	7/5/73	12/28/73	" " "

1/ Permit applications indicated that these were very low volume disposal sites with minimal environmental impact. Regulations provide for letter authorizations in lieu of permits in such cases.

Sludge Disposal Facilities (1)

<u>County</u>	<u>City and Site</u>	<u>Date of Initial Applcn.</u>	<u>Date of Completed Applcn.</u>	<u>Status</u>
Coos	Hempstead Sludge Lagoon	5/9/75	5/9/75	Renewal. Proposed new permit drafted to be mailed 7/75.

DEPARTMENT OF ENVIRONMENTAL QUALITY

Technical Programs

Plan and Permit Actions

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Department of Environmental Quality
Technical Programs

Monthly Activity Report

Water Quality
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PLAN ACTIONS COMPLETED (110)

City and County	Name of Source/Project/Site and Type of Same	Date of Action	Action
<u>Municipal Sewerage Projects - (95)</u>			
Gresham Multnomah	Sonco Estates Sewers & Marpol Ridge, Ph. 1 Sewers	7/1/75	Prov. Approval
Clackamas	Kellogg Creek STP - C.O. #6	7/1/75	Approved
Washington	USA (Sunset) - Jesta Hills No. 1 Sewers	7/2/75	Prov. Approval
Lane	Eugene Sewer Projects - Hazel Park Subdn. Wilona Park Subdn. K & R Subdn. English Oaks Subdn. 2nd Ave.	7/7/75 7/7/75 7/7/75 7/7/75 7/7/75	Prov. Approval Prov. Approval Prov. Approval Prov. Approval Prov. Approval
Washington	USA (Rock Cr.) - Addendum No. 1 to Contracts 7, 8, 9 & 10 Addendum No. 2 to Contract 2	7/7/75 7/7/75	Each Approved Approved
Heppner Morrow	Willow View Dr. Sewer	7/7/75	Prov. Approval
Corvallis Benton	Circle Blvd. Sewer (Hewlett-Packard)	7/7/75	Prov. Approval
Cottage Grove Lane	Wright's Grove Subdn. - 3rd Addn. Sewers	7/7/75	Prov. Approval
Washington	USA (Durham) - Connections to Fanno Cr. Int.	7/7/75	Prov. Approval
Monmouth Polk	College Estates Sewers	7/8/75	Prov. Approval
Washington	USA (Tigard) - McDonald Restaurant Sewer	7/9/75	Prov. Approval
Salem (Willow Lake) Marion	McLoud Estates Sewers	7/10/75	Prov. Approval
Washington	USA (Durham) - C. O. #9-10 Durham STP	7/10/75	Approved
Medford Jackson	Sandra J Subdivision Sewer	7/10/75	Prov. Approval

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PLAN ACTIONS COMPLETED

City and County	Name of Source/Project/Site and Type of Same	Date of Action	Action
<u>Municipal Sewerage Projects - Continued</u>			
Salem (Willow Lake) Marion	Davidson St. Sewer	7/10/75	Prov. Approval
Roseburg Douglas	Verncrest Hts. Sewers	7/11/75	Prov. Approval
Salem (Willow) Marion	Royal Oaks Estates, Phases II & III Sewers	7/11/75	Prov. Approval
Umatilla Umatilla	Addendum No. 1 - McNary Int. Proj.	7/15/75	Approved
Jackson	BCVSA - C. O. #2 S. Medford Trunk Sewer	7/15/75	Approved
Fairview Multnomah	Marjorie Meadows Subdn. Sewers	7/15/75	Prov. Approval
Washington	USA (Fanno) - Tallwood Apts. Sewers & 78th Ave. Sewers	7/15/75	Prov. Approval
McMinnville Yamhill	Projects 1975-4 & 1975-8 Sewers	7/15/75	Prov. Approval
Salem (Willow) Marion	24th & State St. Sewer Royvonne Ave. Sewer	7/16/75 7/16/75	Prov. Approval Prov. Approval
The Dalles Wasco	C. O. #1 Eastside Int. Proj.	7/16/75	Approved
Portland Multnomah	C. O. #2 Grit Project	7/17/75	Approved
Veneta Lane	Lagoon Facilities Expansion	7/17/75	Prov. Approval
Albany Linn	Coverdale Farms Sewer	7/17/75	Prov. Approval
Dallas Polk	Dallas Motel & Trailer Park Sewer	7/17/75	Prov. Approval
Newport Lincoln	Neff Way & Cliff Street Sewer Separation	7/17/75	Prov. Approval
Washington	USA (Rock Creek STP) Contract No. 11	7/18/75	Prov. Approval

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PLAN ACTIONS COMPLETED

City and County	Name of Source/Project/Site and Type of Same	Date of Action	Action
<u>Municipal Sewerage Projects - Continued</u>			
Jackson	BCVSA - Kogap Mfg. Co. Sewer	7/18/75	Prov. Approval
Washington	USA (Aloha) - Barlow Square Subdn. Sewers	7/18/75	Prov. Approval
East Salem Marion	S. & D. Dist. #1 - Kiewell Addn. Sewers	7/18/75	Prov. Approval
Hermiston Umatilla	Cottonwood Estates Sewers	7/21/75	Prov. Approval
Douglas	Green S.D. 7th & 8th Addn. to Sunnyslope Sewers	7/21/75	Prov. Approval
Lincoln	Gleneden S.D. Evergreen Ridge Sewers	7/21/75	Prov. Approval
Baker Baker	Alpine KOA Sewer	7/21/75	Prov. Approval
Woodburn Marion	Woodburn Industrial Park Sewers	7/21/75	Prov. Approval
Lebanon Linn	Rosewood St. 9th & Hobb Sts. Sewers	7/21/75 7/21/75	Prov. Approval Prov. Approval
Myrtle Creek Douglas	1st Addn. to Riverside Estates Sewers	7/21/75	Prov. Approval
Klamath Falls Klamath	"Merryman Replat" Sewers	7/21/75	Prov. Approval
La Grande Union	Sunny Hill Acres, Addn. II Sewers	7/22/75	Prov. Approval
Hubbard Marion	Hildebrand Estates No. II Sewers	7/22/75	Prov. Approval
Jackson	BCVSA - C. O. #2, Sch. B South Medford Trunk Sewer	7/22/75	Approved
Washington	USA (Aloha) - Tee-Jay No. 3 Sewers	7/23/75	Prov. Approval
Corvallis Benton	STP Expansion	7/24/75	Prov. Approval
Tillamook	NTCSA C. O. #A-2, B-10 & B-1-0, STP Proj.	7/24/75	Approved

Department of Environmental Quality
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PLAN ACTIONS COMPLETED

City and County	Name of Source/Project/Site and Type of Same	Date of Action	Action
<u>Municipal Sewerage Projects - Continued</u>			
Linn	Edgewood Estates Sewers & Mary B. Subdn. Sewers	7/24/75	Prov. Approval
Marion	Labish Village Project - Addenda Nos. 4 & 5	7/24/75	Approved
Astoria Clatsop	N. W. Fur Breeders Coop Sewer	7/25/75	Prov. Approval
Chiloquin Klamath	Sewer Rehabilitation	7/28/75	Prov. Approval
Tillamook	Twin Rocks S.D. - Washington St. Sewer	7/28/75	Prov. Approval
Multnomah	Inverness Sewers C. O. #7 to Unit 5C Project	7/29/75	Approved
Coos	Charleston S.D. - Boat Basin Sewers	7/30/75	Prov. Approval
Silverton Marion	Silner Loop Addn. Sewers	7/30/75	Prov. Approval
Salem Marion	(Willow Lake) Denver Court Sewer Ext.	7/30/75	Prov. Approval
Washington	USA (Aloha) - Willow Creek Interceptor Willow Creek West Sewers Portland Comm. College Sewer	7/31/75 7/31/75 7/31/75	Prov. Approval Prov. Approval Prov. Approval
Toledo Lincoln	Ollala Slough Interceptor	7/31/75	Prov. Approval
Springfield Lane	Ridge View Estates Sewers Sequoia Park 2nd Addn. Sewers Leonora Estates Sewers Shady Lane Subdn. Sewers Olympic St. Sewer	7/31/75 7/31/75 7/31/75 7/31/75 7/31/75	Prov. Approval Prov. Approval Prov. Approval Prov. Approval Prov. Approval
Philomath Benton	Newton & Jeffrey Sts. Sewers	7/31/75	Prov. Approval
Gresham Multnomah	El Camino, Phase 7 Sewers	7/31/75	Prov. Approval

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PLAN ACTIONS COMPLETED

City and County	Name of Source/Project/Site and Type of Same	Date of Action	Action
<u>Municipal Sewerage Projects - Continued</u>			
Lake Oswego Clackamas	Upper Cherry Lane View Estates Sewer	7/31/75	Prov. Approval
Hillsboro Washington	(Rock Creek) N.E. 37th, N.E. 15th & N.E. 18th Ct. Sewers	7/31/75	Prov. Approval
Stayton Marion	Westown Park No. 6 Sewers	7/31/75	Prov. Approval
Eugene Lane	Skyline Loop Annexation Sewer Project & Martin St. Sewer	7/31/75	Prov. Approval
Coos	Bunker Hill S.D. - McCallum St. Sewer	7/31/75	Prov. Approval
Washington	USA (Fanno) - Raleigh View Estates No. 2 Sewers	7/31/75	Prov. Approval

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PLAN ACTIONS COMPLETED

<u>City and County</u>	<u>Name of Source/Project/Site and Type of Same</u>	<u>Date of Action</u>	<u>Action</u>
<u>Industrial Waste Sources - (15)</u>			
Marion Woodburn	Skylane Farms - 3 Chicken Houses & Manure Handling System	5/15/75	Disapproved. Should not have been on list for June.
Clackamas Wilsonville	Joe Bernert Towing Co. - Wash Water Recirculation System	6/26/75 Info. not listed for June	Approved
Lincoln Toledo	Georgia Pacific - Final Plans Secondary Biological System	7/1/75	Approved
Tillamook Tillamook	George Porter Dairy Farm - Dairy Farm - Animal Waste Facilities	7/1/75	Approved
Tillamook Garibaldi	Edmunds Fish & Crab - Screening Facilities	7/1/75	Approved
Tillamook Tillamook	Earl W. Wyatt Dairy Farm - Animal Waste Facilities	7/2/75	Approved
Tillamook Tillamook	Clarence Borquist Dairy Farm - Animal Waste Facilities	7/2/75	Approved
Tillamook Tillamook	Roy Peterson Dairy Farm - Animal Waste Facilities	7/3/75	Approved
Coos North Bend	Menasha Corp. - Steam Plant Ash Removal System	7/7/75	Approved
Linn Near Larwood	Oregon Wildlife Comm. - Roaring River Hatchery - Settling Pond	7/8/75	Disapproved
Coos North Bend	Menasha Corp. - Press Washing Flow Control	7/10/75	Approved
Coos North Bend	Menasha Corp. - Screens at Settling Basin	7/17/75	Approved
Coos North Bend	Menasha Corp. - Hydropulper Area Effluent Recycling System	7/17/75	Approved
Benton Corvallis	Corvallis - Evans Products - Upgrade of Waste Water Treatment Facilities	7/23/75	Approved
Multnomah Portland	Phillips Petroleum - Oil/Water Separator	7/31/75	Disapproved

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PLAN ACTIONS PENDING (23)

City and County	Name of Source/Project/ Site & Type of Same	Date Received	Status
<u>Municipal Sewerage Projects - (12)</u>			
Curry	Harbor SD - Holly Lane Sewer	2/4/75	Held pending construction of Harbor SD System. Response dated 2/19/75).
Douglas	Spendthrift Mobile Park STP	2/14/75	Plans approvable waiting for bond required by ORS 454.425. Letter 6/27/75.
Lincoln	Starfish Cove Motel STP	4/25/75	Review to be completed upon resolution of administrative problems between state agencies.
Coos	Charleston SD Sewerage System	5/19/75	Revision requested by letter dated 6/30/75.
Grant	Long Creek - STP & Sewerage System	6/23/75	Revision requested by letter of 7/31/75.
Linn	Pioneer Villa Motel STP Expansion Preliminary	7/15/75	Requested additional information & required the services of a P.E. in phone call to Mr. Robert Stulrs 7/18/75.
Washington	USA - Rock Creek STP Equipment Contract No. 12	7/30/75	Under review. (Review completion projected 8/12/75).
Bend Deschutes	R & D Vacuum Pressure Sewage System	7/28/75	Under review. (Review completion projected 8/11/75).
Lane Eugene	Hawkins Lane Sewer 10th Addition to Nob Hill Sewers	6/26/75	Additional information requested by letter 7/7/75.
Wilsonville Clackamas	Joe Cooney Sewer	7/7/75	Additional information requested by letter 7/31/75.
Umatilla Umatilla	McNary Townsite Division No. 5 Sewers	7/21/75	Under review. (Review completion projected 8/7/75).

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PLAN ACTIONS PENDING

City and County	Name of Source/Project/ Site & Type of Same	Date Received	Status
<u>Industrial Waste Sources - (11)</u>			
Klamath Falls Klamath	Weyerhaeuser - Bark & Debris Control	4/24/75	Held pending review of log handling policy.
Lane Springfield	Weyerhaeuser - Evapo- rator Condensate System and Expansion	6/1/75	Initial review 6/6/75. Letter sent requesting additional information 6/20/75. Hold pending commission meet. 7/25/75.
Douglas Gardiner	International Paper Co. Gardiner Paper Mill - Preliminary Report for Upgrading System	6/11/75	Initial review 6/26/75. Meeting set for 8/12/75.
Clackamas Lake Oswego	Oregon Portland Cement Waste Water Treatment	6/26/75	Review completion projected 8/22/75.
Douglas	Douglas County Parks Fish cleaning Station	7/15/75	Review completion projected 8/29/75.
Clackamas Estacada	Park Lumber (Crown Zellerbach) Yard Drainage Diversion System	7/22/75	Review completion projected for 8/22/75.
Lincoln Toledo	Scrubber Water Recirculation System	7/24/75	Review completion projected for 8/29/75.
Columbia St. Helens	Kaiser Bypsum Process Water Recirculation System	7/25/75	Review completion projected for 8/29/75.
Washington North Plains	Permapost - Waste Water Collection & Evaporation System	7/31/75	Review completion projected for 8/29/75.
Hood River Dee	U.S. Plywood Champion International - Process Water Reuse	7/31/75	Review completion projected for 8/29/75.
Douglas Riddle	Roseburg Lumber Co. Veneer Dryer Wash Down Water-Elimination from Log Pond	7/31/75	Review completion projected for 8/20/75.

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PERMIT ACTIONS COMPLETED (21)

<u>City and County</u>	<u>Name of Source/Project/Site and Type of Same</u>	<u>Date of Action</u>	<u>Action</u>
<u>Municipal Sources (All State - 5)</u>			
Grants Pass Josephine	Oregon Highway Division Manzanita Rest Area	7/8/75	State Permit Issued
Culver Jefferson	City of Culver Sewage Disposal	7/11/75	State Permit Issued
Prineville Crook	Ochoco West SD Sewage Disposal	7/11/75	State Permit Issued
Gilchrist Klamath	Gilchrist Timber Domestic Waste	7/11/75	State Permit Issued
Salem Marion	Labish Village S & D Sewerage System	7/17/75	State Permit Issued
<u>Industrial Sources (All State - 16)</u>			
Bandon Coos	Erdman Packing Co. Slaughter House	7/8/75	State Permit Issued
Douglas	Joseph A. Baines Placer Mine	7/8/75	State Permit Issued
Josephine	Clarence F. Pruess Placer Mine	7/8/75	State Permit Issued
Lane	A. N. Renfro Placer Mine	7/8/75	State Permit Issued
Douglas	William Smith Placer Mine	7/8/75	State Permit Issued
Mt. Angel Marion	Mt. Angel Meat Slaughter House	7/9/75	Modified as State Permit
Clackamas	Portland General Electric Promontory Park	7/11/75	State Permit Issued
Josephine	Rosco M. Polk Placer Mine	7/17/75	State Permit Issued
Grants Pass Josephine	Carolina Pacific Plywood Wood Products	7/17/75	State Permit Issued
Central Point Jackson	Rogue River Paving Asphalt Plant	7/17/75	State Permit Issued
Eagle Point Jackson	Southern Oregon Tallow Rendering Plant	7/17/75	State Permit Issued

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PERMIT ACTIONS COMPLETED

<u>City and County</u>	<u>Name of Source/Project/Site and Type of Same</u>	<u>Date of Action</u>	<u>Action</u>
<u>Industrial Sources (Continued)</u>			
Josephine	Wesley Pieren Leipold Placer Mine	7/17/75	State Permit Issued
Hillsboro Washington	Crown Rendering Co. Rendering Plant	7/17/75	State Permit Issued
Oregon City Clackamas	Willamette Western Willamette Falls Sand & Gravel	7/17/75	State Permit Issued
Umatilla Umatilla	Alumax Pacific Corp Primary Aluminum Reduction	7/21/75	State permit Issued
Damascus Clackamas	Scott Pickens Damascus Sand & Gravel	7/25/75	State Permit Issued

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PERMIT ACTIONS PENDING (160)

City and County	Name of Source/Project/ Site & Type of Same	Date of Initial Appl.	Date of Completed Appl.	Type of Action and Status
<u>Municipal and Industrial Sources (39 NPDES; 64 State)</u>				
<u>NPDES Permits</u>				
Rainier Columbia	Cascade Energy Oil Refinery	4/11/74	11/20/74	(N) EPA Final Review
Astoria Clatsop	Sundown SD Sewage Plant	4/24/74	-	(E) Drafted
Columbia City Columbia	Charter Energy Oil Refinery	9/13/74	11/30/74	(N) EPA Final Review
Charleston Coos	Gold Coast Fishermans Coop - Fish Processing	10/29/74	-	(N) Dormant
Portland Multnomah	CIRI Oil Refinery	11/1/74	11/30/74	(N) EPA Final Review
Lebanon Linn	Pineway Apartments Sewage Plant	3/6/75		(E) EPA Final Review
Baker Baker	Parkerville Placers Placer Mining	3/25/75	4/24/75	(N) Permit not Required until 1976
Bandon Coos	Ocean Spray Cranberries Proposed New Facility	4/3/75	5/1/75	(E) Drafted
Portland Multnomah	Chempro of Oregon Disposal of Oil & Chemicals	4/4/75	5/1/75	(N) Applicant Review
Springfield Lane	Parker & Son Tire Co. Truck Wash	4/8/75	5/1/75	(E) Hold request by applicant
Springfield Lane	SWF Plywood Log Pond Overflow	4/9/75	5/1/75	(R) Renew before 9/30/75
Wilsonville Clackamas	Joe Bernert Towing Gravel Operation	4/18/75	5/1/75	(R) State Permit Drafted
Elgin Union	Boise Cascade Wood Products	4/30/75	5/1/75	(R) Renew before 9/30/75
Roseburg Douglas	Hub Lumber Wood Products	5/8/75	5/23/75	(E) EPA Final Review
Amity Yamhill	City of Amity Filter Plant	5/13/75	5/23/75	(N) Applicant Review
Coos Bay Coos	Bunker Hill SD Sewage Plant	5/14/75	5/23/75	(E) EPA Final Review

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PERMIT ACTIONS PENDING

City and County	Name of Source/Project/ Site & Type of Same	Date of Initial Appl.	Date of Completed Appl.	Type of Action and Status
Drain Douglas	City of Drain Sewage Plant	5/19/75	5/23/75	(E) EPA Final Review
Arlington Gilliam	PGE - Pebble Springs Proposed Nuclear Facility	5/21/75	6/23/75	(N) Applicant Review
Portland Multnomah	Tyee Yacht Club Sewage Plant	5/22/75	6/2/75	(E) EPA Final Review
Lane	Lane County Parks Camp Lane Sewage	5/27/75	5/30/75	(R) Renew before 10/31/75
Shady Cove Jackson	Shady Vista Mobile Park Sewage Plant	5/27/75	5/30/75	(E) Applicant Review
Grand Ronde Polk	Fort Hill Lumber Co. Wood Products	5/27/75	5/27/75	(E) EPA Final Review
Sutherlin Douglas	Roseburg Lumber Co. Wood Products	5/30/75	6/2/75	(E) Public Notice
Ashland Jackson	Don Callahan's, Inc. Sewage Plant	6/2/75	6/4/75	(E) Applicant Review
Merrill Klamath	Klamath Potato Potato Washing	6/3/75	6/4/75	(E) To be Drafted in August
Sheridan Yamhill	John C. Taylor Lumber Wood Preserving	6/13/75		(E) To be drafted in August
Portland Multnomah	Harbor - 1 Moorage Sewage Disposal	6/16/75		(E) Public Notice
Portland Multnomah	Columbia River Yacht Club - Sewage Disposal	6/20/75	6/20/75	(E) Public Notice
Portland Multnomah	Stevens Moorage Sewage Disposal	6/23/75	6/23/75	(E) Public Notice
Portland Multnomah	Cosmopolitan Airtel Sewage Disposal	7/7/75	7/8/75	(R) To draft in August
Lane	Dept. of Fish & Wildlife McKenzie River Salmon Hatchery	7/15/75	7/16/75	(N) New facility
Milton- Freewater Umatilla	Rogers Walla Walla Vegetable Processing	7/17/75	7/17/75	(R) Renew before 12/31/75
Powers Coos	City of Powers Sewage Disposal	7/17/75	7/17/75	(R) Renew before 12/31/75

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PERMIT ACTIONS PENDING

City and County	Name of Source/Project/ Site & Type of Same	Date of Initial Appl.	Date of Completed Appl.	Type of Action and Status
Port Orford Curry	City of Port Orford Sewage Disposal	7/17/75	7/17/75	(R) Renew before 11/30/75
Ashland Jackson	City of Ashland Sewage Disposal	7/18/75	7/23/75	(R) Renew before 11/30/75
Harrisburg Linn	City of Harrisburg Sewage Disposal	7/18/75	7/23/75	(R) Renew before 1/1/76
Hillsboro Washington	City of Hillsboro Rock Creek STP	7/18/75	7/23/75	(R) Renew before 12/31/75
Lincoln City Lincoln	City of Lincoln City Sewage Plant	7/21/75	7/23/75	(R) Renew before 12/31/75
Hermiston Umatilla	City of Hermiston Sewage Plant	7/25/75	7/25/75	(R) Renew before 1/1/76

Modifications - 57 - 2/

Various	20 NPDES Permit Modifications	Various	Various	Pencil draft
Various	4 NPDES Permit Modifications	Various	Various	Applicant Review
Various	23 NPDES Permit Modifications	Various	Various	Public Notice
Various	10 NPDES Permit Modifications	Various	Various	EPA Final Review

State Permits Pending

Various	37 State Permits	Various	Various	Not Drafted ^{1/}
Various	7 State Permits	Various	Various	Pencil Drafts
Various	10 State Permits	Various	Various	Applicant Review
Various	10 State Permits	Various	Various	Ready to Issue

1/ Most of these applications are for renewal of existing permits. The old permit remains in force until the new permit is drafted.

(N) Refers to an application for a new facility

(E) Refers to an existing facility which either has a new discharge or has been operating without the proper permit

(R) Refers to renewal of an existing permit

2/ Pending modification actions were not included in previous reports.

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PLAN ACTIONS PENDING (24)

City and County	Name of Source/Project. Site & Type of Same	Date Received	Status
<u>Direct Stationary Sources (24)</u>			
Roseburg, Douglas	Raintree Wood Products, new cyclone to control dry sawdust from several saws. <u>1/</u>	4/9/74	Awaiting information to determine if type of material should be collected by <u>baghouse. 3/</u>
Portland, Multnomah	Port of Portland bulk commodity rail, shipping, receiving and ship loading and unloading facility. <u>1/</u>	6/12/74	Port indicated on 7/27/75 plan revisions will be submitted by 8/15/75. Expect action by 8/25/75.
Salem, Marion	Boise Cascade new countercurrent pulp washers. <u>1/</u>	7/7/74	Review completed. Expect approval by 8/15/75.
Bly, Klamath	Weyerhaeuser Co. new boiler with two multiclones for control. <u>1/</u>	1/6/75	Company indicated on 6/25/75 that further requested information was not available. Department indicated on 7/16/75 that the proposed facility will have to be denied or a variance obtained. Awaiting company response.
Clatskanie, Columbia	Kaufman Chemical Corp. bulk sulfur rail receiving and ship loading facility. <u>1/</u>	2/25/75	Department indicated on 7/15/75 that requested information has not been received and that application would be cancelled on <u>7/25/75</u>
John Day, Grant	Edward Hines Company, new hog fuel boiler controlled by wet scrubber. <u>1/</u>	4/18/75	Review completed. Expect approval by 8/8/75.
La Grande, Union	Boise Cascade, new cyclone for conveying wood chips and sawdust. <u>1/</u>	4/21/75	Review completed. Expect approval by 8/8/75

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PLAN ACTIONS PENDING

<u>City and County</u>	<u>Name of Source/Project/ Site & Type of Same</u>	<u>Date Received</u>	<u>Status</u>
<u>Direct Stationary Sources (continued)</u>			
Eagle Creek, Clackamas	Eagle Foundry Co, two new induction furnaces and associated grinding equipment. <u>1/</u>	5/27/75	Requested additional information on 6/10/75. <u>3/</u>
Umatilla, Umatilla	Western Farmers Asso., new bulk fertilizer blending plant.	6/9/75	Requested Additional information on 6/18/75. <u>3/</u>
Dillard, Douglas	Roseburg Lumber, hog fuel boiler with turbulaire scrubber. <u>1/</u>	6/11/65	Review completed. Expect approval by 8/8/75.
Dillard, Douglas	Roseburg Lumber, Kipper hog fuel boiler with Ducon scrubber. <u>1/</u>	6/11/75	Review completed. Expect approval by 8/8/75.
Portland, Multnomah	Kerr Grain Corporation modernization of dust control system. <u>1/</u>	6/12/75	Reviewing adequacy of information submitted Expect final action by 8/15/75.
Toledo, Lincoln	Georgia-Pacific, scrubber on hog fuel boilers No. 3 and No. 4. <u>1/</u>	6/16/75	Requested additional information on 7/31/75. <u>3/</u>
Portland, Multnomah	Albers Milling new pellet cooler with conveying equipment. <u>1/</u>	6/16/75	Review complete. Expect approval by 8/15/75.
Portland, Multnomah	Atlantic Richfield, new steam boiler (residual fuel oil fired). <u>1/</u>	6/17/75	Review complete. Expect approval by 8/15/75.
Milwaukie, Clackamas	North Clackamas School Dist., physical plant, sawdust collection system. <u>1/</u>	6/19/75	Requested additional information on 7/19/75. <u>3/</u>
Milwaukie Clackamas	Milwaukie Jr. High School school workshop sawdust collection system. <u>1/</u>	7/19/75	Requested additional information on 7/19/75. <u>3/</u>

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PLAN ACTIONS PENDING

City and County	Name of Source/Project/ Site & Type of Same	Date Received	Status
<u>Direct Stationary Sources</u> (continued)			
Milwaukie, Clackamas	Dale Ickes Jr. High School school workshop sawdust collection system. <u>1/</u>	6/19/75	Requested additional information on 7/19/75. <u>3/</u>
Grants Pass, Josephine	Josephine General Hospital new boiler (fired on NG/diesel oil). <u>1/</u>	7/10/75	Review completed. Expect approval by 8/15/75.
Medford, Josephine	Providence Hospital, two new boilers (fired on NG/Diesel oil) <u>1/</u>	7/10/75	Review completed. Expect approval by 8/15/75.
Portland, Multnomah	Gilmore Steel (Direct Reduction Division), expansion of bentonite unloading building. <u>1/</u>	7/15/75	Reviewing information sub- mitted, expect action by 8/31/75
Nyssa, Malheur	Amalgamated Sugar Co. ungrading three pulp dryer scrubbers from spray to Doyle-type. <u>1/</u>	7/16/75	Expect completion of review by 8/15/75 and action by 8/31/75.
Klamath Falls, Klamath	Weyerhaeuser Co., new receiving system for hardboard plant. <u>1/</u>	7/22/75	Expect completion of review by 8/20/75 with final action by 9/5/75.
Portland, Multnomah	Pacific Coca Cola Bottling replacement of two existing boilers with two new boilers (fired on NG-#2 fuel oil). <u>1/</u>	7/23/75	Review complete. Expect approval by 8/15/75.

Footnotes:

- 1/ These plan reviews are for modifications or additions to existing facilities. Pending action by the Department is not materially affecting production or operation of the facility.
- 2/ These plan reviews are for new facilities. Production or operation of the facility is dependent on Department action.
- 3/ Expect action within 20 days of receipt of requested information.

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PLAN ACTIONS COMPLETED (11)

<u>City and County</u>	<u>Name of Source/Project/Site and type of Same</u>	<u>Date of Action</u>	<u>Action</u>
<u>Direct Stationary Sources (11)</u>			
Troutdale Multnomah	Reynolds Metals Co. New particulate and fluoride baghouse collection system for all aluminum reduction potlines	7/3/75	Approved
Portland, Multnomah	Bank Check Supply, new lead remelt furnace	7/14/75	Approved
Durham, Washington	USA, new sludge incinerator	7/15/75	Approved
Springfield, Lane	Weyerhaeuser, new condensate stripper	7/31/75	Approved
Springfield Lane	Weyerhaeuser, new countercurrent pulp drum washer	7/31/75	Approved
Springfield, Lane	Weyerhaeuser control odorous emissions from the causticizing equipment	7/31/75	Approved
Springfield, Lane	Weyerhaeuser, new digester to convert wood chips into pulp	7/31/75	Approved
Springfield, Lane	Weyerhaeuser, new concentrator evaporator	7/31/75	Approved
Springfield, Lane	Weyerhaeuser new sawdust conveying and screening system	7/31/75	Approved
Bend, Deschutes	Deschutes Memorial Gardens new crematorium	7/16/75	Approved
North Bend, Coos	Weyerhaeuser, spray chamber control of veneer dryer emissions.	7/22/75	Approved

Indirect Sources (0)

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PERMIT ACTIONS COMPLETED (42)

City and County	Name of Source/Project/Site and Type of Same	Date of Action	Action
<u>Direct Stationary Sources (42)</u>			
Astoria, Clatsop	Layton Funeral Home, New cremation incinerator	7/11/75	Permit Issued
Umatilla Umatilla	Alumax Pacific Corporation New aluminum reduction plant	7/22/75	Permit Issued
Astoria, Clatsop	Curtis Fluhrer, Shake and shingle	7/10/75	Permit Issued
Prineville, Crook	Hudspeth Pine, Inc. Sawmill and planning	7/10/75	Permit Issued
Prineville, Crook	Ochoco Lumber Co. Sawmill and planning	7/10/75	Permit Issued
Prineville, Crook	Pine Products Corporation Sawmill and planning	7/10/75	Permit Issued
Roseburg, Douglas	Pre-Mix Concrete Pipe Co. Redimix concrete	7/10/75	Permit Issued
Roseburg, Douglas	Beaver State Ready-Mix, Inc. Redimix concrete	7/10/75	Permit Issued
Pendleton, Umatilla	Blue Mountain Forest Products, Inc. Sawmill and planning	7/10/75	Permit Issued
White City, Jackson	Delah Timber Products Sawmill and planning	7/10/75	Permit Issued
Ashland, Jackson	Parsons Pine Products, Inc. Sawmill and planning	7/10/75	Permit Issued
Medford, Jackson	Olson-Lawyer Lumber, Inc. Sawmill and planning	7/10/75	Permit Issued
Medford, Jackson	Gemco Wood Products Sawmill and planning	7/10/75	Permit Issued

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PERMIT ACTIONS COMPLETED.

<u>City and County</u>	<u>Name of Source/Project/Site and Type of Same</u>	<u>Date of Action</u>	<u>Action</u>
<u>Direct Stationary Sources (continued)</u>			
Ashland, Jackson	Bigfoot Wood Products Sawmill and planning	7/10/75	Permit Issued
Grants Pass, Josephine	Grants Pass Moulding Millwork	7/10/75	Permit Issued
Cave Junction Josephine	Rough and Ready Lumber Co. Sawmill and planning	7/10/75	Permit Issued
Waldport, Lincoln	Waldport Ready Mix Redimix Concrete	7/10/75	Permit Issued
Athena, Umatilla	S & G Lumber Co. Sawmill and planning	7/10/75	Permit Issued
Pendleton, Umatilla	Blue Mt. Forest Products, Inc. Sawmill and planning	7/10/75	Permit Issued
Bandon, Coos	Bullard Sand & Gravel Asphaltic concrete	7/10/75	Permit Issued
Beaverton, Washington	Mulino Products Millwork	7/10/75	Addendum Issued
Portland, Multnomah	Hercules Incorporated Organic chemical mfg.	7/10/75	Addendum Issued
Astoria, Clatsop	Greenwood Cemetary Crematorium	7/11/75	Permit Issued
St. Helens, Columbia	Crown Zellerbach Sawmill	7/11/75	Permit Issued
Oregon City, Clackamas	Publishers Paper Sawmill	7/11/75	Permit Issued
Carver, Clackamas	Arrowhead Timber Company Sawmill	7/11/75	Permit Issued

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PERMIT ACTIONS COMPLETED

City and County	Name of Source/Project/Site and Type of Same	Date of Action	Action
<u>Direct Stationary Sources (continued)</u>			
Molalla, Clackamas	Rock Creek Builders Supply Sawmill	7/11/75	Permit Issued
Portland, Multnomah	Koppers Co., Inc. Petroleum pitch	7/11/75	Permit Issued
Portland, Multnomah	Bird and Son, Inc. Asphalt felt	7/11/75	Permit Renewal
Canby, Clackamas	Buckeroo Ready Mix Readymix	7/11/75	Permit Issued
Oregon City, Clackamas	Clackamas Co. Road Department Rock Crusher	7/11/75	Permit Issued
Tigard, Washington	Columbia Hardwood & Moulding Co. Millwork	7/11/75	Permit Issued
Vernonia, Columbia	Mist Shake and Ridge Shake mill	7/11/75	Permit Issued
North Plains, Washington	Northco-Plainco Sawmill	7/11/75	Permit Issued
Sandy, Clackamas	Sandy Shake Company Shake mill	7/11/75	Permit Issued
Oregon City Clackamas	Samuels Lumber Sawmill	7/11/75	Permit Issued
Gresham Multnomah	Olympic Mfg. Corp. Veneer	7/11/75	Permit Issued
Portland, Multnomah	W. R. Grace & Co. Vermiculite expansion	7/11/75	Permit Issued
Portland, Multnomah	Alaska Steel Company Incinerator	7/18/75	Permit Issued

Department of Environmental Quality
Technical Programs

Monthly Activity Report

Air Quality Control

July, 1975

PERMIT ACTIONS COMPLETED

<u>City and County</u>	<u>Name of Source/Project/Site and Type of Same</u>	<u>Date of Action</u>	<u>Action</u>
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Direct Stationary Sources (continued)

Oregon City, Clackamas	Willamette Falls Sand & Gravel Rock Crusher	7/18/75	Permit Issued
Portland, Multnomah	Zusman Metals Incinerator	7/18/75	Permit Issued
Estacada, Clackamas	Crown Zellerbach Sawmill	7/18/75	Permit Issued

Indirect Sources (0)

Fuel Burning (Boilers) (0)

Department of Environmental Quality
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Monthly Activity Report

Air Quality Control

July, 1975

PERMIT ACTIONS PENDING (323)

City and County	Name of Source/Project/ Site & Type of Same	Date of Initial Appl.	Date of Completed Appl.	Type of Action and Status
(New Sources.....(18).....See listing below)				
(Existing Sources.....(228).....See footnote 1/)				
(Fuel Burning [boilers].....(77).....See footnote 2/)				
<u>Direct Stationary Sources (2)</u>				
Durham, Washington	USA, New sludge incinerator, lime recalciner and steam boilers	12/21/74	6/27/75	Plans approved. Permit being drafted. Expect to mail out proposed permit by 8/12/75.
Clatskanie, Columbia	Kaufman Chemical Corp., bulk sulfur rail receiving and ship loading facility.	2/25/75		(See plan action pending.) Permit to be drafted within 15 days of plan approval.
<u>Indirect Sources (16)</u>				
Beaverton, Washington	Edwards Industries Apartments, 218 Space parking facility	7/27/73		Inquiry as to status of project 6/25/75 Applicant requests application remain pending, construction delayed.
Portland, Multnomah	Lloyd Corporation 1564 space expansion shopping center parking facility	7/12/74		Inquiry as to status project 6/25/75. Applicant requests application remain pending, construction delayed.
Milwaukie Area Clackamas	Clackamas Town Center 6000+ space shopping center	7/19/74		Application pending, land use approval still not final.
Rockwood Area	Mt. Hood Mall 6000+ space shopping center	7/19/74		EIS to be submitted, land use approval not final.

Department of Environmental Quality
Technical Services

Monthly Activity Report

Air Quality Control

July, 1975

PERMIT ACTIONS PENDING

City and County	Name of Source/Project/ Site & Type of Same	Date of Initial Appl.	Date of Completed Appl.	Type of Action and Status
<u>Indirect Sources (continued)</u>				
Oak Grove Area, Clackamas	Stuart Andersons' Black Angus, 115 space parking facility	4/14/75		Proposed permit to to be issued following confirmation of land use approval.
Central Point Area, Jackson	Jackson County Exhi- bition center, 1500+ parking facility for fairgrounds	4/14/75		Requested environ- mental assessment, carbon monoxide, traffic, noise impact, 4/16/75.
Clackamas Area, Clackamas	Clackamas Industrial Complex, 68+ space parking facility	4/21/75		Requested additional information 5/5/75. Including revision of size of facility to no more than 44 spaces.
Milwaukie, Clackamas	Waverly Greens, 145 space residential parking facility.	4/23/75		Proposed permit to be issued 8/5/75.
Portland, Multnomah	Culver Brown Apts. 63 space parking facility	4/27/75		Requested additional information, transit incentive program 6/9/75.
Beaverton, Washington	Herzog Motors, 91 space auto sales facility	6/17/75		Proposed permit to be issued following confirmation of transit incentive program.
Lents Area Multnomah	Tri-Met bus parking and service facility 220 auto and 250 bus parking spaces.	6/19/75		Request for additional information 7/2/75. Request reduction in auto spaces, transit incentive program.

Department of Environmental Quality
Technical Services

Monthly Activity Report

Air Quality Control

July, 1975

PERMIT ACTIONS PENDING

<u>City and County</u>	<u>Name of Source/Project. Site & Type of Same</u>	<u>Date of Initial Appl.</u>	<u>Date of Completed Appl.</u>	<u>Type of Action and Status</u>
<u>Indirect Sources (continued)</u>				
Tigard, Washington	McDonald's, 81 space space restaurant parking facility	6/17/75	7/17/75	Proposed permit issued 7/18/75.
S.E. Area Multnomah	Albertson's, Inc. expansion of existing facility resulting in 121 space parking facility	7/3/75	7/15/75	Proposed permit issued 7/18/75
Portland, Multnomah	Steak & Ale, Sellwood 113 space restaurant parking facility.		7/15/75	Proposed permit issued 7/18/75
Portland, Multnomah	Rhodes Building (Olds and King) 113 space parking facility	7/7/75		Requested additional information 7/9/75, anticipate additional request on 8/6/75. Transit incentive program, traffic information.
Tigard, Washington	Assembly of God Church 57 space parking facility expansion	7/14/75	7/30/75	Anticipate issuance of proposed permit on 8/4/75.

Footnotes:

- 1/ These permit actions are of existing sources that are operating on automatic extensions or on temporary permits. It is anticipated that the majority of these permit actions will be completed prior to September 30, 1975, approximately 50% in August and 50% in September.
- 2/ These fuel burning (boiler) permit actions are all of existing sources and do not hinder the operation of the sources. Issuance of the majority of these permits will be in August.

Department of Environmental Quality
Technical Programs

Monthly Activity Report

<u>Land Quality</u>	<u>July</u> <u>1975</u>
(Program)	(Month and Year)

PLAN ACTIONS COMPLETED (6)

<u>City and County</u>	<u>Name of Source/Project/Site and Type of Same</u>	<u>Date of Action</u>	<u>Action</u>
<u>Solid Waste (5)</u>			
Portland, Multnomah	St. John's Landfill Existing Disposal Site Amended Operational Plan	7/21/75	Approval with exceptions.
Hillsboro, Washington	Unified Sewerage Agency Rock Creek Plant New plant	7/21/75	Letter of authorization.
Woodburn, Marion	Woodburn Landfill Existing Site Operational Plan	7/21/75	Provisional approval.
Terrebonne, Deschutes	Deschutes Valley Industrial Waste Disposal Site New Site Construction and Operational Plan	7/28/75	Provisional approval.
Chiloquin, Klamath	Chiloquin Sanitary Landfill and Chiloquin Transfer Station Upgraded Site, New Transfer Station Construction and Operational Plans	7/29/75	Provisional approval.
<u>Hazardous Waste (1)</u>			
Albany, Linn	Teledyne Wah Change Albany, Disposal of effluent sludge	7/17/75-	Approved

Department of Environmental Quality
Technical Programs

Monthly Activity Report

Land Quality	July	1975
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PLAN ACTIONS PENDING (7)

City and County	Name of Source/Project/ Site & Type of Same	Date Received	Status
<u>Solid Waste Division (6)</u>			
Corvallis Benton	Coffin Butte Landfill Existing Site Interim operational plans	7/18/75	In process; plans incomplete.
Kerby, Josephine	Kerby Disposal Site Existing Site	7/30/75	Review finished; sent for signature to South- west Region Office.
Enterprise, Wallowa	Ant Flat Sanitary Landfill, New Site Construction and operational plans	7/28/75	In process; more data requested 8/1/75.
Joseph, Wallowa	Joseph Drop Box New transfer station Construction and operational plans	7/28/75	In process; more data requested 8/1/75.
Lake, County	Lake County Solid Waste Management Plan Regional Plan	7/15/75	In process; to be completed 8/75.
Grant, County	Grant County Solid Waste Management Plan Regional Plan	7/28/75	In process; to be completed 8/75.
<u>Hazardous Waste (1)</u>			
Beaverton, Washington	Tektronix, disposal of effluent sludge	7/22/75	Under review; to be completed 8/75.

Department of Environmental Quality
Technical Programs

Monthly Activity Report

Land Quality (Program)	July 1975 (Month and Year)
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PERMIT ACTIONS COMPLETED (27)

City and County	Name of Source/Project/Site and Type of Same	Date of Action	Action
<u>General Refuse (Garbage) Facilities (20)</u>			
Lane	Veneta Landfill Existing Facility	7/1/75	Permit issued.
Washington	Franks Landfill Existing Facility	7/2/75	Permit amended.
Douglas	Myrtle Creek Landfill Existing facility	7/10/75	Permit issued.
Douglas	Yoncalla Landfill Existing facility	7/10/75	Permit issued.
Jackson	Dry Creek Landfill Existing facility	7/10/75	Permit issued (renewal).
Deschutes	Highway Disposal Site Existing facility	7/11/75	Permit issued (renewal).
Tillamook	Bay City Disposal Site Existing facility (recently closed)	7/11/75	Emergency Letter permit issued.
Benton	Coffin Butte Landfill Existing facility	7/18/75	Permit issued (renewal).
Clackamas	Rossmann's Landfill Existing facility	7/18/75	Permit issued (renewal).
Lane	Florence Landfill Existing facility	7/18/75	Permit issued (renewal).
Deschutes	Knott Pit Landfill Existing facility	7/21/75	Permit issued (renewal).
Multnomah	St. Johns Landfill Existing facility	7/21/75	Permit issued (renewal).
Deschutes	Southwest Landfill New facility	7/24/75	Permit issued.

Department of Environmental Quality
Technical Programs

Monthly Activity Report

Land Quality
(Program)

July 1975
(Month and Year)

PERMIT ACTIONS COMPLETED

City and County	Name of Source/Project/Site and Type of Same	Date of Action	Action
<u>General Refuse (Garbage) Facilities (continued)</u>			
Marion	Brown's Island Landfill Eastward expansion New facility	7/24/75	Permit issued.
Douglas	Canyonville Landfill Existing facility	7/25/75	Permit issued.
Douglas	Elkton Landfill Existing facility	7/25/75	Permit issued.
Douglas	Lookingglass Landfill Existing facility	7/25/75	Permit issued.
Douglas	Oakland Landfill Existing facility	7/25/75	Permit issued.
Douglas	Reedsport Landfill Existing facility	7/25/75	Permit issued.
Douglas	Glendale Landfill Existing facility	7/29/75	Permit issued.

Demolition Solid Waste Disposal Facilities (1)

Benton	Roche Road Landfill Existing facility	7/1/75	Permit issued (renewal)
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Department of Environmental Quality
Technical Programs

Monthly Activity Report

Land Quality July 1975
(Program) (Month and Year)

PERMIT ACTIONS COMPLETED

<u>City and</u> <u>County</u>	<u>Name of Source/Project/Site</u> <u>and Type of Same</u>	<u>Date of</u> <u>Action</u>	<u>Action</u>
<u>Industrial Solid Waste Disposal Facilities</u> (4)			
Coos	Weyerhaeuser Horse Flats Existing Facility	7/10/75	Permit issued.
Douglas	Round Prairie Lumber New facility	7/10/75	Permit issued.
Lincoln	Georgia-Pacific Toledo Existing facility	7/18/75	Permit issued.
Washington	CH ₂ M-Hill Engineers New facility	7/21/75	Letter authoriza- tion issued.
<u>Sludge Disposal Facilities</u> (1)			
Lane	Florence Sludge Existing facility	7/23/75	Permit issued (renewal)
<u>Hazardous Waste Disposal</u> (1)			
Albany, Linn	Teledyne Wah Chang Albany; Disposal site for effluent sludge	7/31/75	Solid Waste Disposal Permit issued.

Department of Environmental Quality
Technical Programs

Monthly Activity Report

Land Quality
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July 1975
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PERMIT ACTIONS PENDING (138)

City and County	Name of Source/Project/ Site & Type of Same	Date of Initial Appl.	Date of Completed Appl.	Type of Action and Status
<u>General Refuse (Garbage) Facilities (94)</u>				
Benton	Coffin Butte Landfill Existing facility	5/13/75	5/13/75	Renewal. Proposed permit mailed 7/23/75
Columbia	Santosh Landfill	5/5/75	5/5/75	Renewal Proposed permit mailed 7/23/75.
Coos	Fairview Disposal Site	6/2/72	6/16/72	Under temporary permit. Proposed regular permit mailed 4/1/75. County requested additional review time.
Curry	Brookings Landfill	5/16/72	6/16/72	Under temporary permit. Proposed mailed 4/16/75. County requested additional review time.
Curry	Nesika Beach Landfill	6/16/72	6/16/62	Under temporary permit. Proposed regular permit mailed 4/16/75. County requested additional review time.
Douglas	Camas Valley Landfill Existing facility	6/12/72	7/9/74	Under temporary permit. Proposed regular permit mailed 7/22/75.
Douglas	Glide Landfill	6/12/72	7/9/74	Under temporary permit. Proposed regular permit mailed 7/22/75.

Department of Environmental Quality
 Technical Programs

Monthly Activity Report

Land Quality (Program) July 1975 (Month and Year)

PERMIT ACTIONS PENDING

City and County	Name of Source/Project/ Site & Type of Same	Date of Initial Appl.	Date of Completed Appl.	Type of Action and Status
<u>General Refuse (Garbage) Facilities (continued)</u>				
Douglas	Glide Transfer Station New facility	6/30/75	6/30/75	Proposed new facility. Proposed regular permit mailed 7/31/75.
Douglas	Tiller Landfill	6/12/72	7/9/74	Under temporary permit. Proposed regular permit mailed 7/21/75.
Grant	Hendrix Landfill Existing facility	7/11/75	7/11/75	Renewal. Regional staff to draft permit 8/75.
Grant	Seneca Landfill Existing facility	7/3/75	7/3/75	Renewal. Regional staff to draft permit 8/75.
Harney	Burns Landfill Existing facility	5/17/72	8/1/74	Under temporary permit. Proposed regular permit mailed 7/8/75.
Klamath	Chiloquin Transfer Station & Landfill New facility	5/12/75	7/15/75	Proposed new facility. Proposed permit mailed 7/29/75.
Linn	Lebanon Landfill Existing facility	7/11/75	7/11/75	Renewal. Regional staff to draft permit 8/75.
Washington	Franks Landfill	7/11/75	7/11/75	Renewal. Regional staff to draft permit 8/75.
(79)	Other sites with temporary permits (incomplete applications)*			Most awaiting completion of regional solid waste management plans. Regional staff to draft permit prior to 12/75

*on last month's report this figure was erroneously reported as 78 instead of 83.

Department of Environmental Quality
Technical Programs

Monthly Activity Report

Land Quality	July
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PERMIT ACTIONS PENDING

City and County	Name of Source/Project/ Site & Type of Same	Date of Initial Appl.	Date of Completed Appl.	Type of Action and Status
<u>Industrial Solid Waste Facilities (continued)</u>				
Curry	Rogge Lumber Co.	11/18/74	11/18/74	Renewal. Permit expired 12/31/74. Proposed new permit mailed 5/19/75. Permittee requested additional review time.
Deschutes	Deschutes Valley Sanitation Inc.	3/28/75	7/1/75	Proposed new facility. Proposed permit mailed 7/28/75.
Lane	Pope & Talbot	5/12/75	5/14/75	Renewal. Permit expired 6/30/75 Regional staff to draft new permit 8/75.
Linn	Western Kraft	4/25/75	4/25/75	Renewal. Proposed permit mailed 6/26/75. Permittee's comments being reviewed.
Benton	Hobin Lumber Co.	6/21/73	6/29/73	Under temporary permit. Expires 6/30/76. Regional staff to draft regular permit as soon as possible.
Benton	Paul Barber Hardwood	12/19/73	5/20/74	" " "
Josephine	Josephine Co. Industrial Sludge Disposal Site	7/18/73	7/18/73	" " "
Josephine	Rough & Ready Lumber	6/22/73	6/22/73	" " "

Department of Environmental Quality
Technical Programs

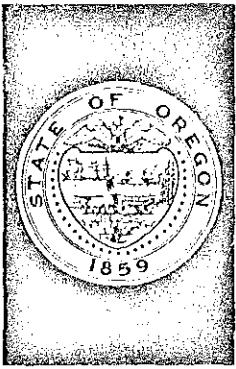
Monthly Activity Report

Land Quality
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PERMIT ACTIONS PENDING

City and County	Name of Source/Project/ Site & Type of Same	Date of Initial Appl.	Date of Completed Appl.	Type of Action and Status
<u>Industrial Solid Waste Disposal Facilities (continued)</u>				
Lane	Georgia-Pacific, Irving Road, Eugene	6/22/73	6/22/73	Under temporary permit expires 6/30/76. Regional staff to draft regular permit as soon as possible.
Lane	Georgia-Pacific Springfield	6/28/73	9/7/73	" " "
Lane	Hines Lumber	6/29/73	5/30/74	" " "
Marion	Green Veneer	6/1/73	7/3/72	" " "
Multnomah	Pacific Carbide	6/25/73	6/25/73	" " "
<u>1</u> /Benton	Willamette Industries	7/3/73	7/3/73	Under temporary letter authoriza- tion. Regional staff to draft regular letter authorization or permit prior to 12/75.
<u>1</u> /Coos	Coos Bay Plywood Millington Flats	6/20/73	7/2/73	" " "
<u>1</u> /Curry	U. S. Plywod, Gold Beach	7/13/73	7/2/73	" " "
<u>1</u> /Douglas	D & D Lumber	6/29/73	6/29/73	" " "
<u>1</u> /Douglas	U.S. Plywood Roseburg	7/13/73	7/13/73	" " "
<u>1</u> /Hood River	Champion International	7/13/73	7/13/73	" " "
<u>1</u> /Jackson	Boise Cascade, Medford	7/2/73	7/2/73	" " "
<u>1</u> /Lincoln	Publishers Paper, Toledo	9/28/73	9/28/73	" " "



ENVIRONMENTAL QUALITY COMMISSION

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MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item C., August 22, 1975, EQC Meeting
Tax Credit Applications

Attached are review reports on nine (9) Tax Credit Applications. These applications and the recommendations of the Director are summarized on the attached table.

LOREN KRAMER

AHE

August 11, 1975

Attachments

Tax Credit Summary
Tax Credit Review Reports (9)



Contains
Recycled
Materials

TAX CREDIT APPLICATIONS

<u>Applicant/Plant Location</u>	<u>Appl. No.</u>	<u>Facility</u>	<u>Claimed Cost</u>	<u>% Allocable to Pollution Control</u>	<u>Director's Recommendation</u>
Mazama Timber Products, Inc. Creswell	T-581	Asphalt paving of log handling and storage yard.	\$449,937.14	80% or more	Issue
Georgia-Pacific Corporation Coos Bay Division Coos Bay	T-637	Hog used to break up waste bark	30,462.62	100%	Issue
Oregon Portland Cement Madison Street, Portland	T-664	Six paving projects	51,081.55	80% or more	Issue
Oregon Portland Cement Madison Street, Portland	T-665	Bahouse to control cement dust emissions from silos #26 & #27	12,132.97	80% or more	Issue
Oregon Portland Cement Madison Street, Portland	T-666	Expansion to existing baghouse	15,981.55	80% or more	Issue
Roseburg Lumber Company Roseburg	T-668	Two turbulaire scrubbers on #2 boiler	437,829.13	80% or more	Issue
International Paper Company Long-Bell Division Veneta	T-674	Three recording smoke meters	11,322.61	80% or more	Issue
International Paper Company Long-Bell Division Veneta	T-675	Two baghouses	38,834.95	80% or more	Issue
Weyerhaeuser Company Wood Products Division Springfield	T-676	Three oxygen analyzers	15,100.00	80% or more	Issue

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

1. Applicant

Mazama Timber Products, Incorporated
Post Office Box 37
Creswell, Oregon 97426

The applicant owns and operates a green veneer plant at Creswell, Oregon.

2. Description of Claimed Facility

The claimed facility is described to be asphalt paving of about twelve (12) acres of the Company's log handling and storage yard.

The facility was completed in June, 1974. Certification is claimed under the 1969 Act. The percentage claimed for pollution control is 100%.

Facility cost: \$449,937.14 (Accountant's certification was provided).

3. Evaluation of Application

The applicant purchases timber through government timber sales and from private individuals. Therefore, all of the logs received at the Creswell plant are not suitable for peeling into veneer. Logs are received by truck, dumped onto the ground, and sorted into peelers or sawlogs. Peelers are then debarked and routed to the veneer plant. Sawlogs are stored in stacks for subsequent sale or use at another Mazama facility.

The unloading, sorting, and storing is accomplished by large rubber-tired mobile log stackers. This vehicular activity caused dirt and wood materials to become airborne and subsequently be deposited on neighboring properties. In order to solve this problem which was causing the neighbors to complain to the Lane Regional Air Pollution Authority (LRAPA), the company decided to pave the log handling and storage yard and water the areas traveled by vehicles.

The claimed facility was reviewed and approved by the Regional Air Pollution Authority under Notice of Construction No. 205109B. Complaints from the neighbors have ceased since the facility was installed.

The material obtained by cleaning the sorting area is piled and hogged on weekends. During the week, the hog processes material from the debarker. The economic value of the clean-up material is insufficient to offset the cost of handling, hogging, and transporting it to the Weyerhaeuser complex in Springfield, Oregon.

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

T-581
August 11, 1975
Page 2

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$449,937.14 with 80% or more allocated to pollution control be issued for the facility claimed in Tax Credit Application Number T-581.

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

1. Applicant

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

The applicant owns and operates a plywood and lumber manufacturing plant at Coquille, Coos County.

2. Description of Claimed Facility

The claimed facility breaks up the waste bark so it can be used as fuel in a power boiler. The facility described in this application consists of one Williams 50 KS hog complete with motors, hammers, and sprockets, and 55 feet of conveyor troughing.

The claimed facility was placed in operation in July 1974.

Facility cost: \$30,462.62 (Accountant's certification was attached to application).

Certification is claimed under ORS 468.165(1)(b) as a facility the substantial purpose of which is to prepare solid waste so that it can be utilized as a fuel in a power boiler.

3. Evaluation of Application

The primary reason for installation of this facility was to utilize the Georgia-Pacific plant's log yard bark and other wood waste material as a fuel. Waste wood is also brought in from other small plants. Prior to this installation the waste wood was burned in wigwam burners or landfilled.

The Department concludes that the claimed facility meets the requirements of ORS 468.165(1)(b) and is therefore eligible for certification.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$30,462.62 with 100% allocated to pollution control be issued for the facility claimed in Tax Credit Application Number T-637.

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

1. Applicant

Oregon Portland Cement Company
111 S. E. Madison Street
Portland, Oregon 97214

The applicant owns and operates a cement plant in the City of Lake Oswego, Oregon.

2. Description of Claimed Facility

The claimed facility consists of six paving projects which are described as paving:

- A. at LSD mill work area,
- B. adjacent to cement silos #26 and #27,
- C. of road from Agri.-lime Department to Foothills Road,
- D. of parking area West of Kiln #4,
- E. of new roadway to silos #26 and #27,
- F. of street and passageway at substation west of the clinker shed.

The facility was completed and placed in service in calendar year 1974.

The percentage claimed for pollution control is 100%.

Facility costs: \$51,081.55 (accountants' certification was provided).

3. Evaluation of Application

Additional paving of road and parking areas at the plant is required per Condition 16.a of the plant's Air Contaminant Discharge Permit. Five of the six paving projects were submitted to the Department for approval after the fact and were approved by the Department on November 5, 1974 and December 9, 1974.

The paving is required to reduce the dust caused by trucks churning up bare ground, and to allow sweepers to operate to gather up the cement fallout dust. Tax credits Nos. 39, 155, 253, and 378 have been issued for prior paving projects in prior years to this plant.

ORS 468.175(1) states, "Any person proposing to apply for certification of a pollution control facility pursuant to ORS 468.165, before the commencement of erection, construction or installation of the facility, shall file a notice of construction with the Department of Environmental Quality." ORS 468.175 took effect October 5, 1973. Because of the word "before" in ORS 468.175(1), and because one paving project was not submitted for approval, and because the other five projects were submitted for approval after the projects were begun, this tax credit should be disapproved.

However, Environmental Specialist Barbara A. Burton of the Department's Portland Region reports that the plant submitted the notices of construction in an attempt to comply with ORS 468.175 upon being told by the Department of its existence. The paving is being swept as often as possible and to the increasing satisfaction of Department observers. Ms. Burton is of the opinion that tax credit should be given for these paving projects as Department approval prior to commencement was given generally in Permit Condition 16.a.

It is concluded that the Company has substantially performed the installation of these pollution control paving projects in accordance with OAR, ORS, and its own Air Contaminant Discharge Permit. The change of procedures caused by ORS 468.175 was adhered to in a tardy but good faith effort by the plant. The Department has been urging the plant to do more paving and sweeping as funds become available, and considers a claim for 100% allocable for pollution control for this facility as not unreasonable.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the costs of \$51,081.55 with 80% or more of the cost allocated to pollution control be issued for the facility claimed in Tax Application T-664.

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

1. Applicant

Oregon Portland Cement Company
111 S. E. Madison
Portland, Oregon 97214

The applicant owns and operates a cement manufacturing plant in the City of Lake Oswego, Oregon.

2. Description of Claimed Facility

The claimed facility is described as a baghouse to control cement dust emissions from the operation of silos #26 and #27. The claimed facility consists of:

- A. Wheelabrator Frye baghouse, size 60, model 108
- B. Air Valve and Flap Valve
- C. Other parts, labor, miscellaneous

The facility was completed on June 20, 1974 and placed into operation on June 25, 1974.

The percentage claimed for pollution control is 100%.

Facility cost: \$12,132.97 (accountant's certification was provided).

3. Evaluation of Application

Oregon Portland Cement Company submitted plans to add silos #26 and #27, with emissions controlled by a baghouse, to the Department on November 14, 1973. The plans were approved by the Department on February 25, 1974. The emission control part of this project is the facility claimed herein and was required to meet Department emission standards. The baghouse has been observed to be operating in compliance with Department rules.

The value of the cement dust caught by the baghouse is estimated at \$200 annually. This is more than offset by the cost of utilities, maintenance labor and parts, estimated as an annual cost of \$1,738.

It is concluded that the claimed facility can be said to be installed 100% for air pollution control.

T-665
June 16, 1975
Page 2

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the costs of \$12,132.97 with 80% or more of the cost allocated to pollution control be issued for the facility claimed in Tax Application T-665.

PBB:cs
June 18, 1975

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

1. Applicant

Oregon Portland Cement Company
111 SE Madison
Portland, OR 97214

The applicant owns and operates a cement making plant in the city of Lake Oswego, Oregon.

2. Description of Claimed Facility

The claimed facility is described as an expansion to an existing baghouse. The added 2400 sq. ft. of cloth allows more effective cleaning of the dusty effluent from the dolomite grinding mill and the limestone grinding mill in the plant's Agri-limestone Department. The claimed facility consists of:

1. Installation labor costs.
2. Dust collector, ICA 3-800.
3. Electrical installation costs.
4. Miscellaneous.

The facility was completed on December 27, 1974 and placed into operation on December 30, 1974.

The percentage claimed for pollution control is 100%.

Facility cost: \$15,981.55 (accountant's certification was provided).

3. Evaluation of Claimed Facility

Oregon Portland Cement Company submitted plans to the Department on March 4, 1974, for this facility, and received approval on May 3, 1974. The existing baghouse had visible emissions; upon completion of this project, the air discharged from the expanded baghouse had no visible emissions. The additional control of this facility was required by the Department.

The particulate material caught by the baghouse is returned to the process. The Company estimates the value at \$30.00 per year, which is more than offset by the estimated annual maintenance cost of \$775.00.

It is concluded that the claimed facility was installed solely for air pollution control, and is operating satisfactorily.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the costs of \$15,981.55 with 80% or more of the cost allocated to pollution control be issued for the facility claimed in Tax Application T-666.

PBB:mh

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

1. Applicant

Roseburg Lumber Company
P. O. Box 1088
Roseburg, OR 97470

The applicant owns and operates a wood products complex of plants on Highway 99 south of Dillard, in Douglas County, Oregon.

2. Description of Claimed Facility

The claimed facility consists of two turbulaire scrubbers installed on the plant's #2 boiler as a final flue gas cleaning device, and the scrubbers' ash disposal handling system. The boiler burns hogged wood waste generated on the premises. The claimed facility can be described as:

1. Two Western Precipitation turbulaire wet scrubbers.
2. Ash Handling Equipment.
3. Other materials and labor.

The facility was completed and placed in operation on May 31, 1974. The percentage claimed for pollution control is 100%.

Facility cost: \$437,829.13 (accountants' certification was provided).

3. Evaluation of Application

Department standards required emission controls on the boiler. The claimed facility was submitted to the Department for review and received approval on May 31, 1972. The boiler was brought into compliance by this equipment.

The scrubbers catch fly ash at the rate of 820 lb/hr which is disposed of at the company's approved landfill. The installed cost of \$437,000 was considerably above the Turbulaire's price of \$166,000 due to the unusually high cost of the ash slurry separation, water re-cycling, and ash disposal ancillary equipment.

It is concluded that the applicant receives no return from the installation and operation of the claimed facility and that it was installed solely for pollution control.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the costs of \$437,829.13 with 80% or more of the cost allocated to pollution control be issued for the facility claimed in Tax Application T-668.

PBB:mh

Appl. T-674

Date 7/22/75

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

1. Applicant

International Paper Company
Long-Bell Division
P. O. Box 308
Veneta, Oregon 97438

The applicant owns and operates a lumber and plywood mill at Vaughn in Lane County, Oregon.

2. Description of Claimed Facility

The claimed facility consists of three recording smoke meters consisting of:

- a. Three Lear-Siegler RMT transmissometers
- b. Three Foxboro chart recorders
- c. A visual alarm
- d. Electrical transformer and associated wiring
- e. Labor to install

The facility was completed and placed in service on October 31, 1974.

The facility is claimed under the current statutes and the percentage claimed for pollution control is 100%.

Facility costs: \$11,322.61 (Accountant's certification was provided).

3. Evaluation

The recording smoke meters provide the wood waste fired boiler operators with visual and recorded information which help them to minimize visual smoke and particulate emissions.

Lane Regional Air Pollution Authority required the installation of smoke monitors in July 1973 in Section A, Part III of the Company's Air Contaminant Discharge Permit.

The first installation of Rimcor smoke monitors in 1973 was unsatisfactory. They were removed and the more expensive Lear-Sieglers were installed in 1974.

Personnel of both the mill and Lane Regional state that the present smoke monitors have improved the plume opacity from the three boiler house stacks.

The smoke meter recorders do not directly control or reduce air pollution. The addition of recorders does assist the monitoring effort, but it was not required by the Air Contaminant Discharge Permit.

However, the operators react well to rising opacity readings, and swiftly to the alarms, and the end results are, as stated above: less smoke and less particulate emissions. The recordings serve as an unbiased record, relieving the local authority of tedious visual readings, and become a record of boiler performance at night when visual readings are not valid.

It is concluded that the claimed facility was installed solely for air pollution control.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the costs of \$11,322.61 with 80% or more of the cost allocated to pollution control be issued for the facility claimed in Tax Application T-674.

Date July 22, 1975

STATE OF OREGON
Department of Environmental Quality
TAX CREDIT APPLICATION REVIEW REPORT

1. Applicant

International Paper Company
Long-Bell Division
P. O. Box 308
Veneta, Oregon 97438

The applicant owns and operates a lumber and plywood mill at Vaughn in Lane County, Oregon.

2. Description of Claimed Facility

The claimed facility consists of two baghouses comprised of:

- a. Two Aero Vac Inv-114 baghouses, installed,
- b. Electrical wiring and foundation.

The facility was completed and placed in service on October 31, 1974.

The facility is claimed under the current statutes and the percentage claimed for pollution control is 100%.

Facility costs: \$38,834.95 (accountant's certification was provided).

3. Evaluation of Application

The baghouses are used to capture sanderdust emissions from the outlets of two cyclones at the plywood plant. Lane Regional Air Pollution Authority standards required the installation. Lane Regional received a Notice of Construction for these Aero Vac baghouses on August 26, 1974 and subsequently approved the plans.

It is estimated that the baghouses are capturing 43.5 lb/hr of the 44.0 lb/hr cyclone effluent. The sanderdust which is caught is sent to the woodwaste boilers where it is used as fuel. The annual value of this fuel is about \$320 which is more than offset by the \$1,980 costs of maintenance and electrical service for the baghouses' operation.

It is concluded that the claimed facility was installed solely for air pollution control.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the costs of \$38,834.95 with 80% or more of the cost allocated to pollution control be issued for the facility claimed in Tax Application T-675.

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

1. Applicant

Weyerhaeuser Company
Wood Products Division
P. O. Box 275
Springfield, Oregon 97477

The applicant owns and operates a wood products complex at Springfield, Oregon.

2. Description of Claimed Facility

The facility described in this application are three oxygen analyzers, Lear-Seigler S/N's 186, 188, 189 used on hogged fuel boilers No. 3, No. 4 and No. 5.

Installation was started in March 1974, completed in August 1974, and placed in operation in September 1974. Certification is claimed under the 1973 Act as amended in 1974, with 100% allocable to pollution control.

Facility cost: \$15,100 (accountant's certification was provided).

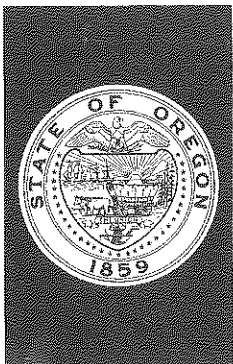
3. Evaluation of Application

Two of Weyerhaeuser's boilers were out of compliance. Lane Regional Air Pollution Authority required Weyerhaeuser to complete corrective action by February 1, 1975. Weyerhaeuser submitted a Notice of Construction for oxygen analyzers in February 1974 as part of the corrective action, and received approval from Lane Regional on March 25, 1974. The oxygen analyzers allow better combustion control which reduces black smoke emissions.

Lane Regional reports better combustion control and less emissions as a result of this equipment. It is concluded that the claimed facility was installed substantially for air pollution control.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$15,100 be issued for the facility claimed in Tax Credit Application No. T-676 with 80% or more allocated to pollution control.



ENVIRONMENTAL QUALITY COMMISSION

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MEMORANDUM

August 12, 1975

TO: Environmental Quality Commission

FROM: Director

SUBJECT: Agenda Item No. D, August 22, 1975, EQC Meeting

Staff Report - Petition to Amend Noise Standard for 1976 and Future Diesel Vehicles

Background

Oregon Revised Statute Chapter 467 directs the Environmental Quality Commission to "investigate and after appropriate public notice and hearing, establish maximum permissible levels of noise emission for each category" In the Fall of 1973 the Department proposed rules establishing maximum permissible levels of noise emission for various categories of sources, and held hearings on the rules throughout the state. From testimony received at these hearings, it became evident that the rules needed to be revised. Revised proposed rules were completed early in 1974 and two additional public hearings were held in Portland and Medford.

The Commission held a public hearing on June 21, 1974, in Coos Bay, to consider the adoption of the new and in-use motor vehicle noise regulations. At the July 19th EQC meeting the Commission approved and adopted the new and in-use motor vehicle noise rules.

The Department has received a petition to amend OAR, Chapter 340, Section 35-025, Noise Control Regulations For The Sale of New Motor Vehicles, and Section 35-030, Noise Control Regulations for In-Use Motor Vehicles. This petition would amend the new motor vehicles rules in a manner to maintain the present noise levels of new manufactured trucks and buses. The petition would also amend the in-use motor vehicle rules such that the reductions in noise levels on new trucks and buses would not be maintained after the vehicle is purchased.

Evaluation

In the staff report to the Commission in May, 1974, the Department compared the, then proposed, Oregon noise rules to the adopted California rules for new motor vehicles. This comparison showed that the Oregon



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rules were consistent with regulations of other states. Within the state of California, new trucks must now meet a standard of 83 dBA. The city of Chicago allows only new trucks of 84 dBA. The present Oregon rule allows trucks of 83 dBA to be sold in the 1976 thru 1978 model years. In 1978 the California standards allow only 80 dBA trucks to be sold, whereas, the Oregon rule drops to 80 dBA in model year 1979 and beyond. In general, the Oregon standard is consistent with the California standard with allowances due to the difference in using model years in Oregon and manufactured years in California. The Department realizes that not all configurations of trucks that are now being manufactured meet the 1976 Oregon standards. However, all truck manufacturers are certifying to the Department those models that meet the appropriate standards as required by the Oregon noise rules. The petitioner has offered six items of rationale for argument in favor of amending the rules. The Department will address each of these items in the order they were offered:

- A. The petitioner claims that "reducing allowable noise emissions below those proposed in this petition will have no appreciable effect on the overall noise heard by the public."

On June 24, 1974, the Federal Environmental Protection Agency identified medium and heavy trucks as being the major source of noise in the United States. The total sound energy from this source was determined to be 5800 KW-Hrs./Day as compared to the next highest source on the list of 1150 KW-Hrs./Day for sports and compact automobiles. It has also been estimated by the EPA that 47.3 million Americans are impacted by excessive truck noise. The proposed EPA truck rules, which are numerically identical to the Departments' rules, would reduce that impact by approximately 33% in 1980 and 59% in 1990 at highway speeds.

In another study, it was determined that a reduction in the standard of 3 dBA, would result in a 3 dBA decrease in noise levels at highway cruise speeds. The study also stated that a reduction of 6 dBA would gain a 5 dBA reduction at highway speeds.

A study conducted by the EPA evaluated the impact of their proposed truck rules and subsequent reduction in overall freeway traffic noise. Their model projections indicate freeway noise will be reduced by 8.4 dBA in the year 1990 and 3.6 dBA by 1980 as a result of the proposed regulations.

A recent study conducted by the Federal Department of Transportation presented the following information:

- a) If the current standard of 86 dBA is maintained, freeway noise will be reduced 1.1 dBA and urban street noise will be reduced 3.5 dBA in the year 2000.
- b) If the 83 dBA standard is imposed, by the year 2000, freeway noise will drop 4.6 dBA and urban street noise will drop 5.7 dBA.

- c) The 80 dBA standard will reduce freeway noise by 5.2 dBA and street noise by 7.2 dBA in the year 2000.

The above reductions will have an appreciable effect on the overall noise heard by the citizens of Oregon. A reduction of 3 dBA and then 6 dBA is certainly a significant reduction in noise. Although, some of the noise reduction is off-set by tire generated noise, it does not appear to be as significant as claimed by the petitioner. It should also be noted, as the technology to develop quieter tires catches up with other areas of noise reduction, the benefits of quiet tires will not be nullified by noisy exhaust systems and other components.

- B. The petitioner has stated, "the increased cost of operating a vehicle meeting the regulations is disproportionate to any public interest."

The public is very interested in motor vehicle noise. In a state-wide public information survey conducted by the Department in 1972 the category of motor vehicle noise ranked far above any other broad category. Motor vehicle noise complaints currently far exceed any other category that the Department is regulating. Thus, it is evident that public interest in motor vehicle noise is very high.

A recent study has been conducted on operating costs of trucks meeting the 83 dBA and 80 dBA standards. It was determined that the operating cost benefits of an 83 dBA standard result in \$607 savings per truck per year. Included are savings in fuel of 1313 gallons per year due to increased horsepower gained from a demand-actuated fan control eliminating the noise caused by the cooling fan. The savings in operating a truck meeting the 80 dBA standard result in annual operating cost savings of \$380 per truck per year. Although these trucks will also save over 1300 gallons of fuel per year, added truck weight that reduces cargo capacity yields less savings than the 83 dBA trucks.

It is thus concluded that although some operating costs increase due to increased truck weight and other factors, these costs are more than off-set by the operating savings that will be realized for the quieter configurations.

- C. The petitioner stated that "the increased initial cost of a vehicle meeting the regulations is also disproportionate to any public benefit."

The Federal EPA has recently presented the following approximate increases in retail prices over the 1973 price of trucks meeting the standards:

(dBA) Level	<u>Truck Categories</u>		
	<u>Gasoline</u>	<u>Medium</u>	<u>Heavy</u>
83	\$ 0	\$105	\$195
80	\$125	\$265	\$490

The Federal Department of Transportation has researched the cost benefits of highway noise on residential property values. A cost of \$60 per household per decibel of highway noise reduction was calculated through extensive regression analysis of census tract location and pollution level characteristics. Thus, a heavy truck meeting the 83 dBA rule and reducing its highway and urban noise by 3 dBA would result in a cost benefit of \$180 per household. Therefore, only 1.1 households per new truck are necessary to show a benefit to cost ratio greater than unity. If 6,725 new heavy trucks were registered in Oregon in 1974 then approximately 7,300 impacted homes would be necessary. It is estimated that in Oregon over 100,000 homes are exposed to excessive truck noise.

- D. The petitioner states that increased costs will be passed to the consumer.

The Department believes that any increased costs are justified. It should also be noted that the true cost of noise control includes, not only money paid by manufacturers to apply technology, but the cost to the public if noise control is not regulated. The figure should include reduced value of land and property, cost of medical care, corporate payments for health care and compensation cost of insulating buildings.

- E. The petitioner states that the Oregon rules will be pre-empted by Federal EPA rules.

The EPA has adopted rules for in-use trucks over 10,000 GVWR which is effective October 15, 1975. The Oregon in-use truck rule for model years before 1976 are identical to the Federal law and will not be pre-empted.

The recently proposed EPA standards for new trucks are numerically consistent with the present Oregon rules. The Federal law would pre-empt inconsistent state rules; however, the proposed EPA rules have not yet been adopted and until they are, Oregon should continue, as are other cities and states, to be a leader in environmental controls.

- F. The petitioner claims that an effective enforcement program should be implemented.

The Department knows that enforcement of standards on the current population of trucks is important. Although the resources of the Department are small, some enforcement of the in-use truck standards is being accomplished. In October, the Bureau of Motor

Carrier Safety will begin to enforce the in-use truck rules. Inspection and surveillance will be carried out through terminal surveys and equipment inspection and driver-equipment compliance checks at roadside sites.

The control of motor vehicle noise cannot be accomplished by keeping the existing truck levels at the point they are presently. An effective program must reduce the level of new vehicles being manufactured and regulate the user of the vehicle in such a manner that will maintain the vehicle to the quiet level it was built.

Conclusions

The following conclusions may be made in summary:

1. Trucks must be manufactured to progressively stricter noise standards to eliminate the serious impact of truck noise to Oregon's citizens.
2. High benefits to cost are realized in the initial purchase and operation of trucks manufactured to meet the 83 dBA and 80 dBA noise standards.
3. These rules are energy efficient, in that fuel savings of over 1300 gallons per truck per year will be realized in the operation of trucks meeting both the 83 dBA and 80 dBA standards.
4. The Oregon rules are consistent with current regulations of other environmentally progressive states. Oregon's present in-use truck rule is identical to the EPA rule. The recently proposed EPA rules for new trucks are also consistent with present Oregon rules.

Directors' Recommendation

It is the Directors' recommendation that the Commission deny the petition to amend OAR, Chapter 340, Section 35-025 and 35-030 pertaining to noise regulations for new and in-use trucks and buses. It is also recommended that the Commission formalize its action with a written order to be served on Petitioner.


LOREN KRAMER
Director

JMH/cam
August 12, 1975

PETITION TO AMEND REGULATION 35-000
 (VEHICLE NOISE EMISSIONS)
 AS ADOPTED JULY 19, 1974

I. Petitioner, Freightliner Corporation, 2525 S.W. Third Avenue, Portland, Oregon, is a manufacturer of Class 8 diesel vehicles operated in the State of Oregon. These vehicles are subject to regulation by the Department.

II. The Environmental Quality Commission is hereby petitioned, pursuant to Chapter 340, Section 11-045, of the Oregon Administrative Rules, to amend Department of Environmental Quality Regulation 35-000 in the following particulars:

A. Table "A" referred to in Section 35-025 be amended for truck and bus vehicle type as follows:

- 1) Maintain a maximum specified noise level of 86 dB(A) after 1975.
- 2) Delete 83 dB(A) level specified for 1976-1978.
- 3) Delete 80 dB(A) level specified after 1978.

Table "A" as amended is shown below--additions are underlined; deletions are slashed (///):

TABLE A
 MOVING TEST AT 50 FEET

<u>Vehicle Type</u>	<u>Model Year</u>	<u>Maximum Noise Level, dB(A)</u>
Motorcycles	1975	86
	1976	83
	1977 - 1978	80
	after 1978	75
Snowmobiles as defined in ORS 481.048	1975	82
	1976 - 1978	78
	after 1978	75
Truck and Bus as defined under ORS 481.030 and 481.035	after 1975	86
	1976 - 1978	83
	after 1978	80
Automobiles, light trucks and all other ROAD VEHICLES	1975	83
	1976 - 1978	80
	after 1978	75

B. Table "B" referred to in Section 35-030 be amended for truck and bus vehicle type as follows:

- 1) Maintain a maximum specified noise level of 94 dB(A) for all model years.
- 2) Delete 91 dB(A) for level specified for 1976-1978.
- 3) Delete 88 dB(A) level specified for after 1978.

Table "B" as amended is shown below--additions are underlined; deletions are slashed (///):

TABLE B
STATIONARY TEST AT 25 FEET OR GREATER

<u>Vehicle Type</u>	<u>Model Year</u>	<u>Maximum Noise Level, dB(A)</u>
Truck and Bus as defined under ORS 481.030 and 481.035	before 1976 <u>All</u>	94
	1976 + 1978	91
	after 1978	88
Motorcycles	before 1976	94
	1976	91
	1977 - 1978	88
	after 1978	83
Automobiles, light trucks and all other ROAD VEHICLES	before 1976	92
	1976 - 1978	88
	after 1978	83

C. Table "C" referred to in Section 35-030 be amended for truck and bus vehicle type as follows:

- 1) Maintain maximum specified noise levels of 86 dB(A) for 35 mph or less and 90 dB(A) for speeds greater than 35 mph for all model years.
- 2) Delete 85 and 87 dB(A) levels specified for 1976-1978.
- 3) Delete 82 and 84 dB(A) levels specified for after 1978.

Table "C" as amended is shown below--additions are underlined; deletions are slashed (///):

TABLE C
MOVING TEST AT 50 FEET OR GREATER AT VEHICLE SPEED

<u>Vehicle Type</u>	<u>Model Year</u>	<u>Maximum Noise Level dB(A)</u>	
		<u>35 Mph or less</u>	<u>Greater than 35 Mph</u>
Truck and Bus as defined under ORS 481.030 and 481.035	before 1976 <u>All</u>	86	90
	1976 - 1978	85	87
	after 1978	82	84
Motorcycles	before 1976	84	88
	1976	81	85
	1977 - 1978	78	82
	after 1978	73	77
Automobiles, light trucks and all other ROAD VEHI- CLES	before 1976	81	85
	1976 - 1978	78	82
	after 1978	73	77

III. Petitioner asserts these amendments should be made for the following reasons as more fully explained and supported in the section, "Data, Views and Arguments" below:

- A. Reducing allowable noise emissions below those proposed in this petition will have no appreciable effect on the overall noise heard by the public.
- B. The increased cost of operating a vehicle meeting the regulations is disproportionate to any public interest.
- C. The increased initial cost of a vehicle meeting the regulations is also disproportionate to any public benefit.
- D. The ultimate cost to the public is 100 percent nonproductive and inflationary.
- E. Since initial adoption of the Department of Environmental Quality regulation, the Federal EPA has made proposals to regulate this very area which would pre-empt regulations by Oregon.
- F. The effect of an aggressive enforcement program has not been adequately considered, and, if developed and implemented, would accomplish the objective of the present regulation and at a lower cost.

IV. Petitioner asserts the following point of law:

The legislative standard for regulation by the commission is contained in ORS 471.010, and is to adopt "reasonable" regulations to protect "the health, safety and welfare of Oregon citizens from the hazards and deterioration of the quality of life imposed by excessive noise emissions..." (emphasis added). As more fully set forth below, the standards which are the subject of this petition are neither necessary nor reasonable to effectuate the legislative policy. Furthermore, the noise levels petitioned for after 1975 are not "excessive" in light of surrounding circumstances, i.e., tire noise.

V. Petitioner knows of no specific person interested in the proposed statement, but for the purpose of Department of Environmental Quality rules 11-045(3)(a), the following are assumed to be interested:

- A. American Trucking Association, 1616 P Street, N.W., Washington, D.C. 20036
- B. Oregon Trucking Association, 1500 N.E. Irving Street, Portland, Oregon 97232
- C. Truck Industry Service, Suite 1100, 900 17th St., N.W., Washington, D.C. 20006
- D. Motor Vehicle Manufacturers' Association, 320 New Center Building, Detroit, Michigan 48202
- E. Western Highway Institute, 333 Pine Street, San Francisco, California 94104

VI. Data, Views, and Arguments:

Interest and Qualifications of Freightliner

We are vitally interested in commercial vehicle noise control. Freightliner Corporation manufactures White-Freightliner trucks in the state of Oregon. White-Freightliner trucks are diesel-powered vehicles, of both cab-over and conventional configuration, and are generally used in over-the-road transportation. These vehicles are marketed by the

White Motor Corporation. Approximately 10 percent of the Class 8 diesel vehicles and over 20 percent of the Class 8 vehicles of cab-over design sold in the United States last year were built by Freightliner. Ninety-four percent of our vehicles pull a semi-trailer; an additional 5 percent plus are straight trucks pulling a full trailer.

Freightliner is currently under contract to the Office of Noise Abatement, U.S. Department of Transportation, to develop and demonstrate noise control technology in terms of its economic impact and user acceptability. This we suggest has given us valuable insight into the field of commercial vehicle noise control.

Freightliner submitted comments on the noise regulations proposed by the Department of Environmental Quality, dated October 30, 1973, under the signature of Norman B. Chew, Senior Vice-President of Engineering, and under the signature of Ray W. Murphy, Director of Research and Development, dated March 4, 1974, and again on June 18, 1974, under signature of Thomas D. Hutton, Research Supervisor. We are pleased to note that many of the suggestions that we were able to offer in our previous comments have been incorporated into the noise control regulations. We are especially pleased to note that the D.E.Q. has given serious consideration to the problems and costs involved in retrofitting vehicles manufactured prior to 1970 to meet noise requirements at levels below 88 dB(A).

We are, however, dismayed that the D.E.Q. was unresponsive to comments in the following particulars:

- A. Has in Section 35-025, Noise Control Regulations for Sale of New Motor Vehicles set a standard of 83 dB(A) in 1976 and 80 dB(A) in 1978.
- B. Has in Section 35-030, Noise Control Regulations for In-Use Motor Vehicles set a standard in Table "B" of 91 dB(A) in 1976 and 88 dB(A) in 1978.
- C. Has in Section 35-030 in Table "C" for speeds under 35 mph of 85 dB(A) in 1976 and 82 dB(A) in 1978, and for speeds over 35 mph of 87 dB(A) in 1976 and 84 dB(A) in 1978.

Freightliner asserts these sections should be amended for truck and bus vehicle type as follows:

- A. In Section 35-025 maintain a maximum specified noise level of 86 dB(A) for the foreseeable future.
- B. In Section 35-030 maintain a maximum specified noise level of 94 dB(A) for all model years as measured by the procedures in Table "B".
- C. In Section 35-030 maintain maximum specified noise levels of 86 dB(A) for 35 mph or less and 90 dB(A) for speeds greater than 35 mph for all model years.

Petitioner's Rationale for Amendment

- A. NO EFFECT ON NOISE PUBLIC HEARS. Setting limits lower than those we have suggested will have the net effect of increasing the cost of commercial vehicles without any significant benefit to the public. Lower limits do not significantly decrease the noise the public hears at highway speeds because the dominant noise at highway speeds is tire noise.

The noise controlled, heavy-duty diesel tractor that Freightliner produced under contract DOT-OS-20095 demonstrated that it is possible, but not necessarily practical or cost-effective, to manufacture a vehicle of this type to a noise level of 72 dB(A) at 50 ft., as tested in accordance with the D.E.Q. procedures. This noise level is not much above that produced by just coasting a solo tractor (with the engine turned off and the transmission out of gear) past a microphone located 50 feet from the vehicle's path at 35 mph. Under these conditions, a bobtail tractor having straight ribbed (quiet) tires produces a noise level of 68 dB(A). In other words, the noise produced by the truck under full power acceleration was only 4 dB(A) higher than it was just coasting with the engine turned off. Coast-by under the same conditions with a 6x4 tractor and a loaded semi-trailer with new straight ribbed tires all around produces a noise nearly 80 dB(A) at 60 mph, which demonstrates the influence of not only increased speed, but of adding the trailer as well.

The straight ribbed tread patterns used in these tests are known to generate a lower noise level than other tread designs, but they are inferior to the lug pattern in durability and traction characteristics. It should be pointed out that the economic operation of a large fleet of trucks is dependent upon the selection of tires having performance properties and endurance characteristics matched to the intended service conditions so that maximum tire mileage and lowest cost per tire mile will be ensured.

A loaded tractor-trailer equipped with the quietest practical tires commercially available will have a coast-by noise level of 84 dB(A) at 55 mph. The overall noise level of the tractor-trailer combination with an 86 dB(A) tractor under full power will then be 88.1 dB(A) at 55 mph.

However, with a tractor meeting the 83 dB(A) drive-by requirement, the noise level of the combination under full power will be 86.5 dB(A). The noise that the public hears at highway speed is reduced by only 1-1/2 dB(A)! A change of 1-1/2 dB(A) is barely perceptible to the human ear.

Under the same test conditions, a tractor whose noise rating is 80 dB(A) would, when in combination with the above trailer, have an overall noise level at 55 mph of 85.5 dB(A), or only 1 dB(A) lower than the combinations having the tractor quieted to 83 dB(A). In these examples, which are illustrated in Table I, even though the noise produced by the tractor is reduced from 86 dB(A) to 80 dB(A), or by 6 dB(A), the overall noise of the vehicle combination was only reduced from 88.1 dB(A) to 85.5 dB(A), or by 2.6 dB(A).

TABLE I
NOISE LEVEL OF TRACTOR AND TRAILER EQUIPPED
WITH QUIETEST TIRES AVAILABLE - TIRES HALF WORN

Tractor DEQ Noise Rating @ 50 Ft	Tractor & Trl, 55 Mph @ 50 Ft		Reduction in Noise Level	
	Coast-By Noise Level	Full Power Noise Level	Tractor DEQ Test	Trt & Trl Traffic
86	84	88.1	0	0
83	84	86.5	3	1.5
80	84	85.5	6	2.6

The inflationary aspects of increased truck cost for compliance with the low levels specified by the D.E.Q. cannot be justified by the small reduction in traffic noise levels that they will produce.

To reiterate, a significant breakthrough in tire design must be made (and none is on the horizon*) before noise control design changes to the truck itself will result in appreciably lower overall noise produced by heavy-duty trucks at normal highway speeds.

The questions to be resolved: Is a 1-1/2 dB(A) reduction in traffic noise worth the cost penalty to the intrastate truck operators and ultimately the residents of Oregon for compliance with the specified 83 dB(A) noise standard?

B. INCREASED OPERATING COST

The commercial vehicle has evolved over the years as a design compromise. The chassis, cab, engine, power train, and tires are each part of a system, the primary aim of which is to haul freight in a safe, reliable, and economical manner within the operational regime defined for the commercial vehicle. This regime is characterized by high payload/vehicle weight ratios, and minimal operating and maintenance costs. These vehicles are generally custom built to suit the specific needs of the particular user. To introduce a requirement for severely decreased noise levels for commercial vehicles necessarily requires an extensive re-evaluation of the design of the entire vehicle. Our experience in building vehicles to meet the current 86 dB(A) levels, in developing special "quiet packages" to meet the Oregon 1976, 83 dB(A) level, and our work on the D.O.T.-sponsored Quiet Truck Project, indicates the effect of modifying trucks to meet the lower levels specified by the D.E.Q. are as follows:

1. The additional weight required for noise control equipment reduces the payload/vehicle weight ratio and thus decreases productivity.

-
1. Testimony of W.H. Close at Public Hearings of the U.S. Environmental Protection Agency, February 20, 1975.
 2. "Regulatory Implications of Truck Tire Noise Studies," S.A.E. Paper 740606, authored by W.H. Close, Chief, Office of Noise Abatement, U.S. D.O.T.

2. The redesigned exhaust system, cooling system, air intake system, and engine enclosures increase the initial cost of the vehicle.
3. Maintenance costs are increased due to the requirement to keep the noise attenuation equipment at "specified" performance levels and the extra effort required to attain access through engine panels and enclosures for normal maintenance.

To achieve 83 dB(A), the weight of a Freightliner truck is increased by 38 to 285 lbs., depending upon engine and cab configuration. In a general freight operation, it is estimated that the cost of lost cargo due to increased weight is \$1.95 per pound per million miles. This is lost revenue. On the basis of 125,000 miles/year per tractor, this would amount to between \$8 and \$69 per year to achieve the 83 dB(A) level. In a bulk hauling operation, the cost of increased weight is \$12.50 per pound per million miles, which increases the costs to achieve 83 dB(A) to between \$51 and \$445 per year, depending upon engine and cab configuration.*

C. INCREASED INITIAL COST

The proposed noise control regulations for trucks will not adversely affect Freightliner or other manufacturers of heavy duty diesel powered trucks as all the vehicles we are currently producing comply with the D.E.Q. 1975 regulation of 86 dB(A) at 50 feet, and we are also manufacturing vehicles for sale with special quiet kits designed for compliance with an 83 dB(A) standard. However, we are concerned over the increased costs associated with the 83 dB(A) requirement. The major noise sources contributing to the overall 86 dB(A) level are the engine, the fan, and the exhaust system. Individual contributions for each of these sources vary widely. For example: the engine source level ranges from 76 dB(A) to 85 dB(A) depending upon engine type and design; the fan source level ranges from 75 dB(A) to 85 dB(A) depending upon fan diameter, speed, and shroud design; and the exhaust source level ranges from 75 dB(A)

*Figures based upon information contained in the attached document, "The Economics of Quietening the Freightliner Cab-Over-Engine Diesel Truck," by G.E. Fax and M.C. Kaye, October, 1974, Report No. Truck Noise III-d, for the Office of Noise Abatement, Department of Transportation.

to 85 dB(A) depending upon muffler design, size and mounting, exhaust pipe mounting, and exhaust flex joint design. To achieve the 86 dB(A) requirement, if the engine is quiet, exhaust and fan need less treatment. If the engine is close to 85 dB(A), however, extreme care must be taken in treating fan and exhaust noise. This points up the problem with the 83 dB(A) level.

To achieve the 83 dB(A) level, the following modifications must be made beyond those made to achieve the current 86 dB(A) levels:

- 1) For our most popular engine/vehicle configuration, representing 30% of our production, a dual muffler exhaust system must be substituted for the single muffler that is now used, the radiator cooling fan must be increased in diameter and slowed down in speed, and engine mechanical noise treated with a quiet kit. The increased cost to the customer for this noise control is currently \$580.
- 2) For our second most popular engine/vehicle configuration, representing nearly 26% of our production, no change is required to the exhaust system. However, the fan and engine must be treated as above for a customer cost increase of \$568.
- 3) For our third most popular engine/vehicle configuration, representing 15% of our production, dual exhaust mufflers are required, the fan must be increased in diameter and slowed down in speed, a quiet kit must be added to the engine, and a super cooling package is required for adequate engine cooling. Customer cost increase is \$743 per vehicle.

Based upon our current product mix, the composite, average cost per vehicle for controlling noise to the 83 dB(A) level is \$458. In 1974, a total of 56,953 new trucks were registered in the state of Oregon. Over half of these (30,767) were light trucks having a gross vehicle weight (GVW) rating of 6,000 lbs. or less. Heavy duty trucks, having a GVW rating of 19,501 lbs. or more, accounted for 6,725 new vehicle registrations. Eight hundred seventy-two of these were new Freightliners. If a similar number of new Freightliners

are sold in Oregon in 1976, truck buyers and ultimately the public will pay an additional \$399,376 for Freightliner trucks for compliance with the D.E.Q. 83 dB(A) limit. If the average cost increase for noise control to the 83 dB(A) limit on other heavy duty trucks is similar to Freightliner, then in 1976, these new trucks will cost Oregon truck buyers and additional \$3,080,050 just for compliance with Section 35-025 of the D.E.Q. regulation. This three million dollar figure represents increased capital costs only and does not include increased operating costs, which we have shown will be nearly as high as the increased capital costs for certain types of trucking operations.

D. COST IS ULTIMATELY PASSED ON TO THE CONSUMER

It must be emphasized that increased costs of new equipment purchased by motor carriers and increased operational and maintenance costs are ultimately passed on to the consumer. These costs are not accompanied by increases in productivity, so the results are clearly inflationary.

An effective statewide enforcement program (utilizing existing personnel in the D.E.Q., Permits Section of the State Highway Division, and/or the State Highway Patrol) at the level we are petitioning for will drastically reduce the public complaints about truck noise without imposing undue economic penalty on the motor carrier or the public.

E. FEDERAL PRE-EMPTION

In the past, we have supported noise control regulations based upon both the level and time frame of the state of California. These regulations have been used as a model by the state of Oregon. Now, however, the Federal Environmental Protection Agency has established noise emission standards for vehicles in-use by interstate motor carriers and has also proposed noise standards for new motor vehicles. The noise emissions of in-use vehicles having a gross combination weight rating in excess of 10,000 lbs. operated by motor carriers engaged in interstate commerce will, on October 15, 1975, be regulated by Federal Environmental Protection Agency Noise Emission Standard Part 202 of Title 40 of the Code of Federal Regulations.

Under Section 18(c)(1) of the Noise Control Act of 1972, the federal noise emission standards will pre-empt those of the states and their political subdivisions. After the effective date of the federal regulations, no state or political subdivision thereof may adopt or enforce any noise emission standard unless it is identical to the federal standard.

The E.P.A. regulations for in-use vehicles engaged in interstate commerce specifies a noise level of 86 dB(A) at 50 feet for 35 mph or less and 90 dB(A) for speeds greater than 35 mph. These are the same levels we seek, for in-use trucks, in our petition. It hardly seems reasonable for the state of Oregon to penalize truckers engaged in intrastate commerce to lower noise emission levels than those engaged in interstate commerce. This anomaly is corrected by our petition.

We are further concerned that the Oregon 83 dB(A) noise level at 50 feet for new trucks in 1976 will result in Oregon having a substantially lower noise level requirement than most of the other states, as federal E.P.A. standards for new vehicles are not apt to be enacted by then because of serious deficiencies in their original proposal. This could result in the residents of the state of Oregon paying more for nearly everything they purchase to offset increased shipping costs as the truck operators must obtain an increase in freight design to comply with the 83 dB(A) noise level.

F. THE MOST IMPORTANT ASPECT OF NOISE CONTROL IS ENFORCEMENT

Unless an effective program is implemented to enforce noise emission standards, we will continue to be faced with public pressure to have unrealistically stringent standards. Without strong local enforcement, there is continued public clamor for lower limits to solve the problem, while the vehicles most complained about already violate existing regulations.

In summary, we believe that environmental improvement is possible, at lower total cost, by enforcement of petitioned-for noise levels. In view of the marginal difference in sound levels impacting the public, we believe the cost to the residents of Oregon for noise

standards lower than we have petitioned for are grossly out of proportion to the benefits. We do not believe that Oregon can afford to squander resources to achieve a benefit that will be barely perceived, if at all, by the public who will ultimately have to pay for it. This pitfall is avoided at the sound levels petitioned for, levels which we believe will provide optimum public interest.

Respectfully Submitted,



Ray W. Murphy
Director, Research & Development
Freightliner Corporation
July 30, 1975

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R+D File

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SOCIETY OF AUTOMOTIVE ENGINEERS, INC.
Two Pennsylvania Plaza, New York, N.Y. 10005

Regulatory Implications of Truck Tire Noise Studies

William H. Close
Office of Noise Abatement, U. S. Department of Transportation

SOCIETY OF AUTOMOTIVE ENGINEERS

West Coast Meeting
Anaheim, Calif.
August 12-16, 1974

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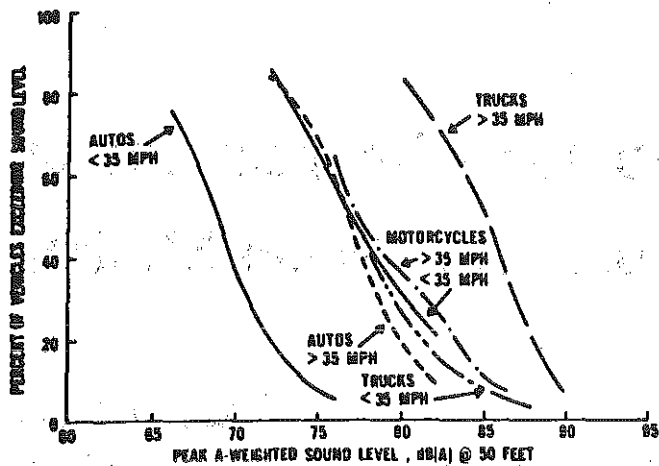


Fig. 1 - Summary of California Highway Patrol vehicle noise survey

and no idea at all as to what he will be really up against if he is going to have to comply with federal or state or local regulations that are going to say: "You can't make so much tire noise."

The problem that is confronting us with the interstate motor carrier regulations right now is what to do about this wide variety of tires; why are more than 1000 different truck tire treads offered for sale; what does it mean to industry; and what should the government noise regulator do about it? The U.S. Department of Transportation (DOT) has been active in the field of truck tire noise for four years trying to get some answers. Some pilot truck tire noise work had been done and was published in the open literature by the General Motors Corp. (2), and this information served as a basis for the DOT's research planning and for testing now under way by the tire manufacturers.

TIRE TYPES TESTED

Fig. 4 represents the kind of data the DOT got from two summers of solid testing of commercially available tires acquired from the American Trucking Association's fleet tire banks. The National Bureau of Standards performed the tests, and details are published in Refs. 3 and 4. This figure illustrates the sound level, as a function of speed, for four test tires on the rear of a straight truck, coasting by the microphone 50 ft to the side; there is no engine noise at all. Rib A, which has only circumferential grooves around it, is the control tire. It is a tire that is sometimes used on the steering axes of tractor-trailers but is generally not found in regular highway service. A completely bald tire, that is, a new tire that was cast without any tread features, would probably illustrate a sound level 1 or 2 dB lower than our control tire.

The quietest tires are the so-called rib tires. These tires have treads that look like the kind of tread pattern that you would run on the steering axle of your automobile and on the rear axle in the summer. The louder tires are called crossbars; these are tires that have aggressive lug features somewhat like snow tires. One can see that there is a considerable difference in sound level between rib tires and crossbars, and, within the

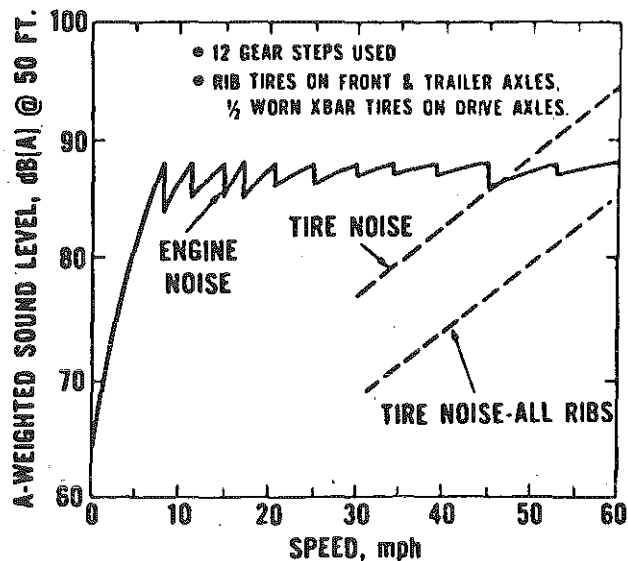


Fig. 2 - Diesel truck pull-away and highway noise profile

class of the crossbars, there are appreciable differences between brands.

Finally, there is a recap; it is a tire that has pockets cast into the middle, ostensibly to give it traction. It is a very loud tire that is very tonal in nature. The persistence of the sound as it goes down the highway is quite long, and it is not too surprising that it is called "Singing Sam" in the trade.

VARIABLES

TIRE WEAR - One other problem we are confronted with in this business is that as the tires wear, the sound level increases. Fig. 5 is a cross-plot of some of our data to show the noise effects as tires are worn in normal service. The data points on the right-hand end of the lines are for the new or newly re-treaded tire tread depth. As the tires wear, the tread depth, of course, becomes less, and the sound level increases to a point; then it decreases, in most cases. Unhappily, the maximum noise occurs at about the half-worn point and, if one were to give a realistic appraisal, one would say that most tires are half worn. At least that is what must be taken into account in looking at regulatory approaches to the problem.

On the right-hand side of Fig. 5, the tread patterns for the various tire types are illustrated. Two representative crossbars, a "semitraction" retread and a rib tire, are shown by the "patch prints." The light areas are the pockets or the recesses in the tire tread.

In trying to assess this problem of wear, we merely connected data points for the several conditions of wear that were tested. We did not have the time or the resources to take those test tires and to wear them and test them sufficiently to obtain continuous curves which would positively determine where the real maximum noise occurred. The manufacturers of tires will have to do this.

One of the problems in testing is that you cannot just take a tire and grind it down to simulate wear. Fig. 6, for example, presents data from a new tire and a tire that is ground down.

Regulatory Implications of Truck Tire Noise Studies

William H. Close

Office of Noise Abatement, U. S. Department of Transportation

THIS PAPER is an attempt to make the case for tire noise regulation and to illustrate the implications of such regulations to tire users. Fig. 1 is a product of the 1971 California Highway Patrol noise survey (1)* reflecting the percentage of vehicles exceeding given A-weighted sound levels measured 50 ft to the side of the center lane of travel for a variety of vehicles at high and at low speeds. The quietest group of vehicles is automobiles travelling at speeds less than 35 mph, and the noisiest group is trucks at speeds in excess of 35 mph. In the middle are low speed trucks, high speed autos, and motorcycles at all speeds.

In the case of automobiles, we have a relatively quiet machine when driven sensibly in the urban street situation. At higher speeds, the auto engine noise increases some, and the tire noise increases appreciably, resulting in about an 8 dB translation of the distribution. The trucks are fairly noisy to start with but, as the speed is increased, the engine noise actually does not increase; the increase in sound level shown in Fig. 1 is mainly attributable to tire noise. Motorcycles have light wheel loading and, hence, their noise illustrates very little speed dependency.

*Numbers in parentheses designate References at end of paper.

EFFECT OF TIRES ON NOISE LEVEL

Looking in more detail at truck tire noise, Fig. 2 illustrates the A-weighted sound level 50 ft to the side of a truck as it accelerates away from a stop light and accelerates to cruising speed, with the measurement taken theoretically always beside the vehicle as it accelerates. From idle, the engine revs up through the first gear step and continues to operate within 300-400 rpm of the governed engine speed as it goes through the full gear box, in this case 12 gear steps, up to highway speed. Depending on the kind of tires that are used on this 18 wheel tractor-trailer, we can get tire noise levels as shown which would be added to the rather constant engine noise. Only if the truck were run on all new rib tires would the tire noise level be low enough to keep from appreciably raising the overall vehicle sound level at speeds up to 60 mph.

Fig. 3 represents only a few of about a thousand different types of truck tires a user can select to put on his trucks. Many times this is the only kind of information the user has to select by, augmented perhaps by brochures that a salesman will bring in. Of course, the trucker very quickly begins to accumulate some experience and feel for the reliability of the product and of the company that supplies it. But he really does not have much idea about the tire noise that it generates

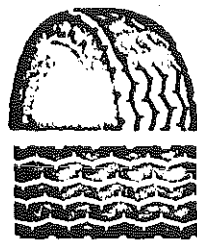
ABSTRACT

Based on the past research of the U.S. Department of Transportation, this paper is an attempt to make the case for tire noise regulation and to illustrate the implications of such regulations to tire users. The paper examines the effects of speed, load, tire tread type, road surface, and placement of tires on combination truck vehicles insofar as passby sound levels are concerned. A concluding table of expected roadside sound

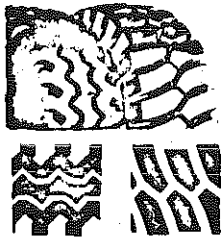
levels based upon typical tire use indicates the potential restrictions in tire types that are inherent in presently proposed federal noise regulations on interstate motor carriers. It is concluded that as significant technological improvements are implemented in the design and regulation of truck engine noise, more severe tire user requirements will follow in order that tire noise keep pace with declining engine noise.

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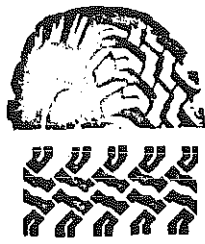
GENERAL



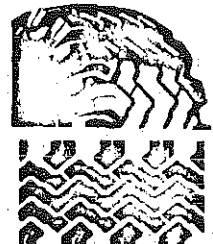
Power-Jet L.P.T.



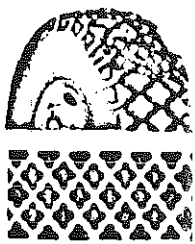
H.C.T. N.D. Lugger



Super All-Grip

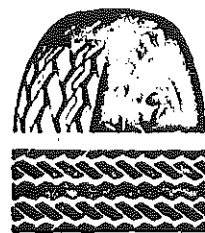


Jumbo Super All-Grip

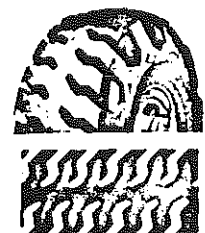


All Grip

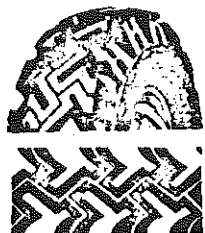
GOODYEAR



Custom Hi-Miler



Super Road Lug



Hi-Miler Xtra Grip

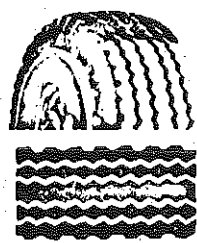


Super Single Road Lug

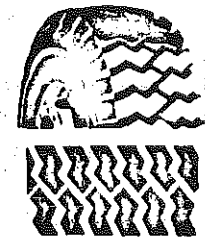


Road Lug

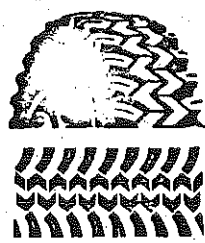
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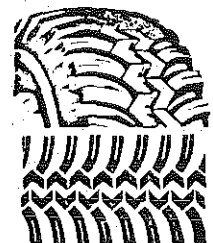
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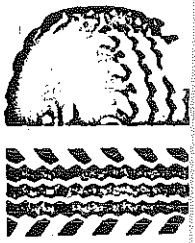
Transport All Traction Premium



Super All Traction

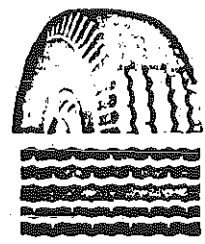


Super All Traction Duplex

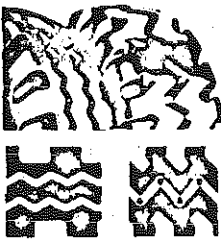


All Traction

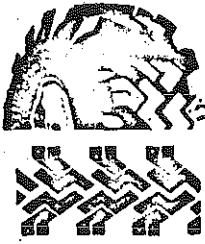
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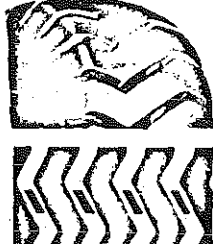
Trailer Express



Rib Logger Rock Logger



All Purpose Extra Traction

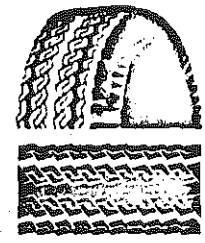


SDR-Lug

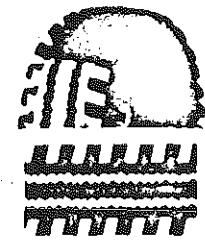


All Purpose

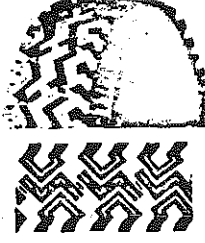
UNIROYAL



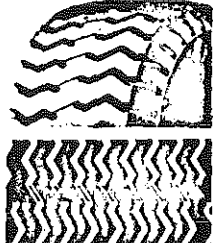
Fleet Master Triple Tread Trailer



Super Fleetmaster



Fleetmaster Deep Lug



Fleet Uni-Master Lug

Fig. 3 - Comparable truck tire types and tread designs, May 1969

COMPARABLE TRUCK TIRE TYPES

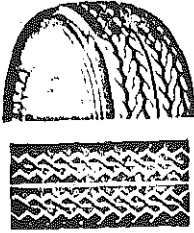
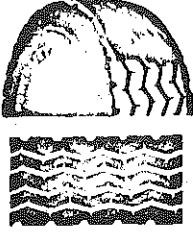
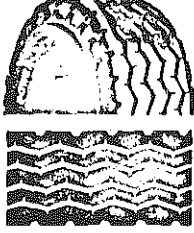

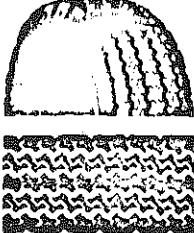


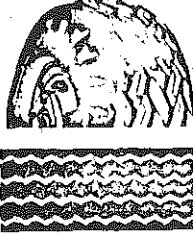
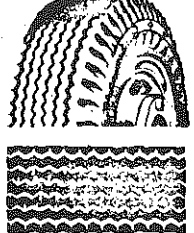
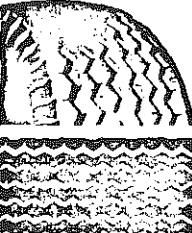
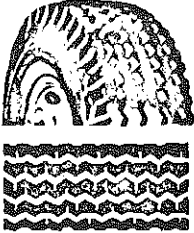
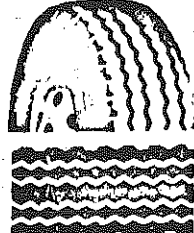
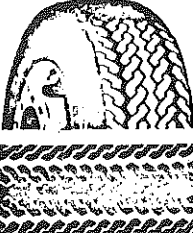
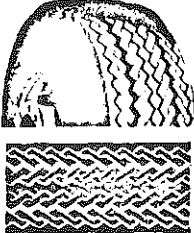

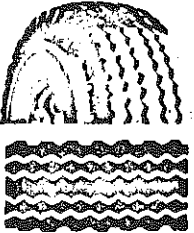
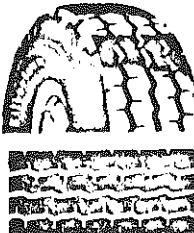
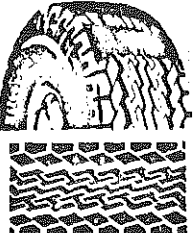
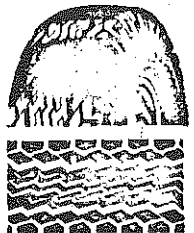
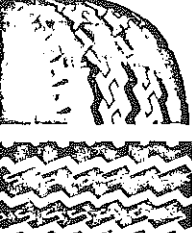
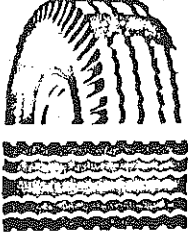
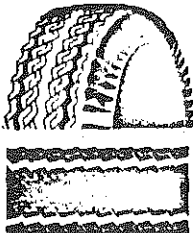
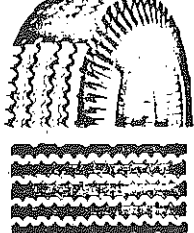
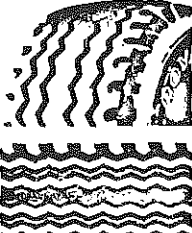
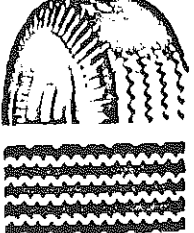


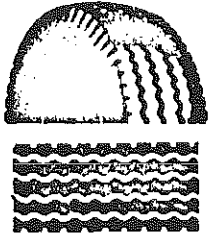
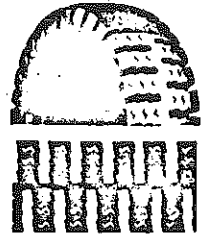
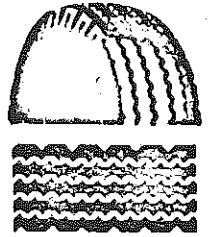
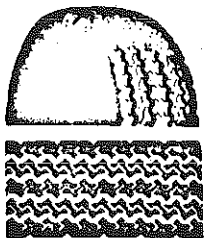
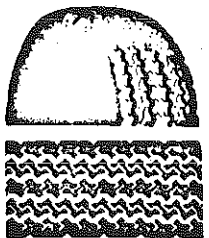
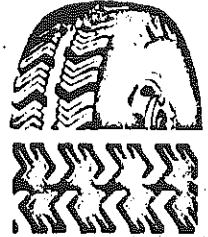
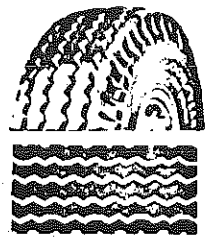
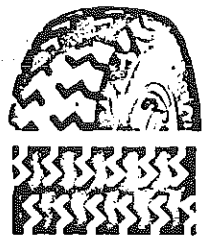
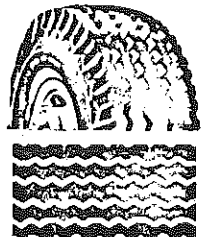
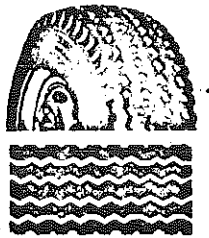
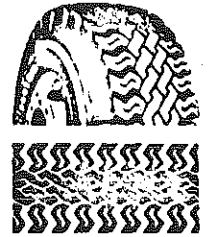
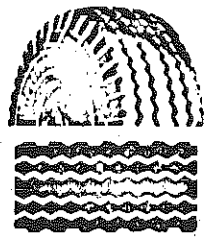
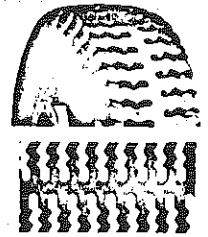
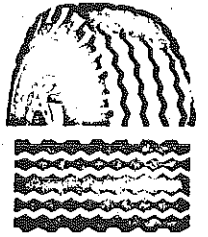
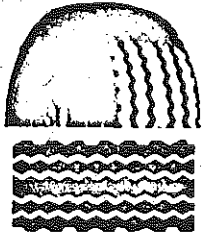
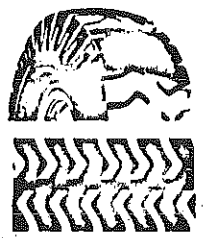
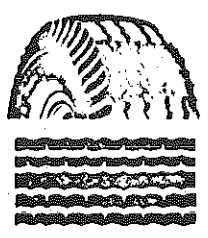
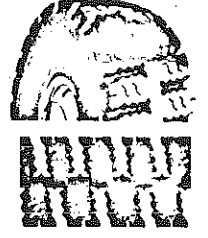
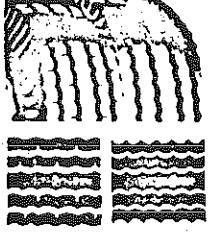
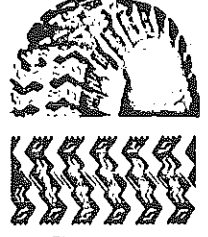
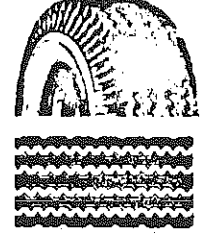
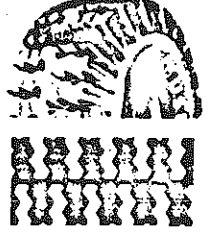
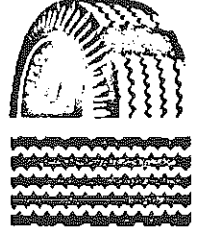
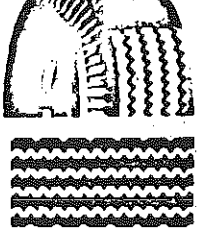
Radial	HIGHWAY				
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 <p>Hi-Miler Flexsteel</p>	 <p>Custom Hi-Miler</p>	 <p>Super Hi-Miler</p>	 <p>Super Single Hi-Miler</p>	 <p>Traction Hi-Miler</p>	
 <p>Transport Steel</p>	 <p>Transport 150 Premium</p>	 <p>Transport 110</p>	 <p>Transport Duplex</p>	 <p>H.D. Transport</p>	
 <p>Maxi-Miler Express</p>	 <p>Extra Miler Premium</p>	 <p>Silvertown Extra Miler</p>	 <p>SDR-Rib</p>	 <p>Power Express</p>	
 <p>Fleetmaster Triple Tread</p>	 <p>Fleet Carrier</p>	 <p>Fleet Uni-Master Rib</p>	 <p>Fleetway</p>		

Fig. 3 - Comparable truck tire

AND TREAD DESIGNS - MAY 1969

SERVICE					* Third line or discontinued tires (limited sizes)	Playback Service Only
 HCR	 Jet-Trac	 D.C.L. Nygen	 Super Expressway	 D.C.L. Nylon	 Traction Rib Special Service	 Railvan
	 Custom Cross Rib Hi-Miler	 Hi-Miler Xtra Tread	 Hi-Miler Cross Rib	 Rib High-Miler	 T/T Special	
	 Transport 200 Premium	 Super Transport Premium	 Transport Cross Bar	 Transport	 Transport Trailer	
	 Traction Express Nylon	 Silvertown Super Express	 Power Traction	 Commercial Heavy Duty Express		
	 Fleetmaster Super Lug	 Super Fleet Carrier	 Fleet Traction	 Stalwart Nylon-C Fleet Trailer	 Fleet Trailer	

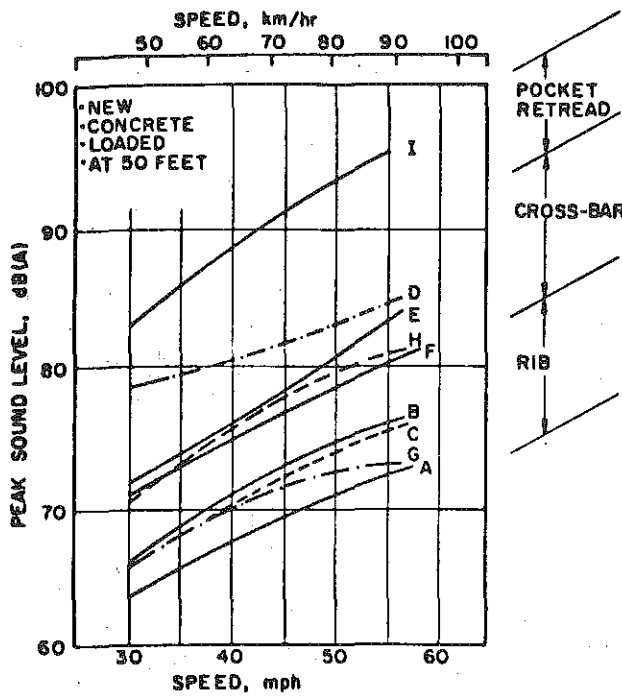


Fig. 4 - Truck tire noise as a function of speed (four test tires on drive axle, truck coasting)

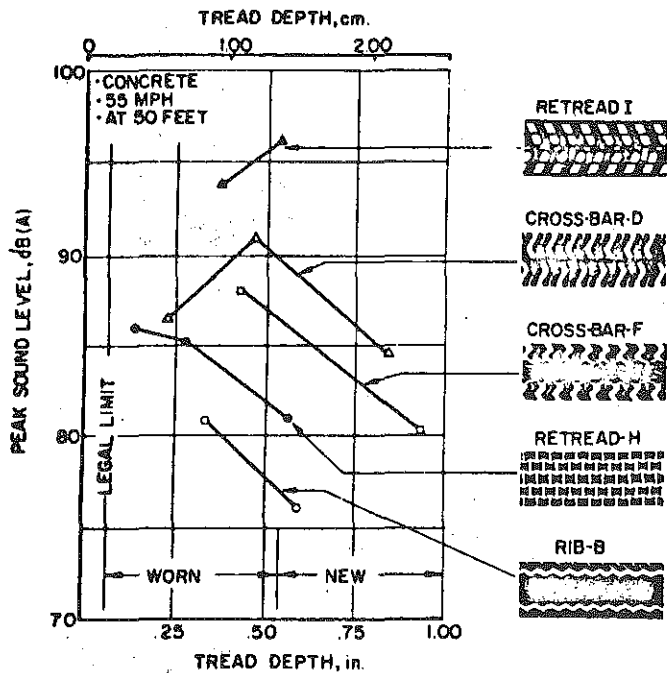


Fig. 5 - Effects of wear on truck tire noise (four test tires on drive axle, truck coasting)

The sound level really does not change that much as a result of the amount of grinding. One would have to know what the curvature of the half-worn or fully-worn tire is to begin to approximate the sound level by grinding the tire, and even then, there would be rather gross disparities in the points here. The only way a manufacturer, user, or regulator can obtain a fairly accurate idea of what is the actual variation in tire sound through the wear cycle is to take the tire out and put it in actual fleet service, wear it, and test it. When you consider that

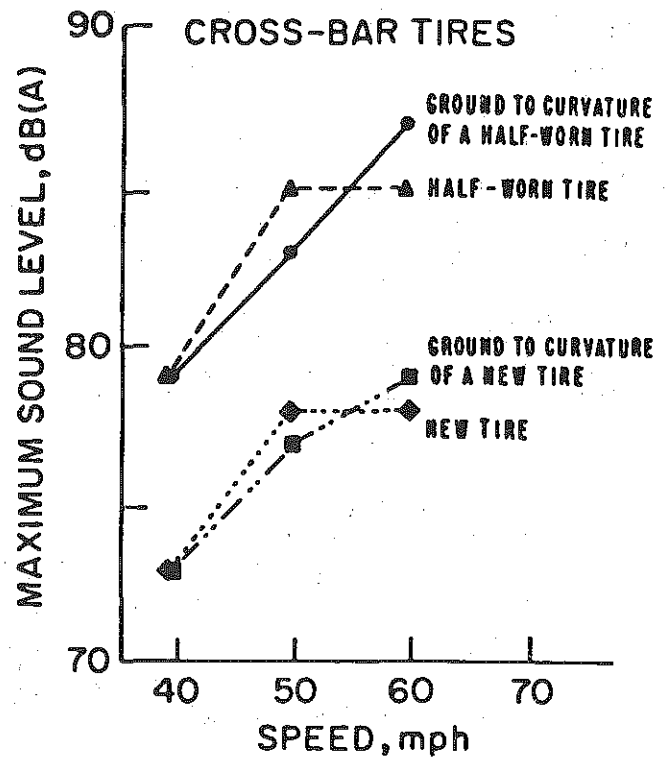


Fig. 6 - Sound level comparison of new and worn tires with tires artificially ground

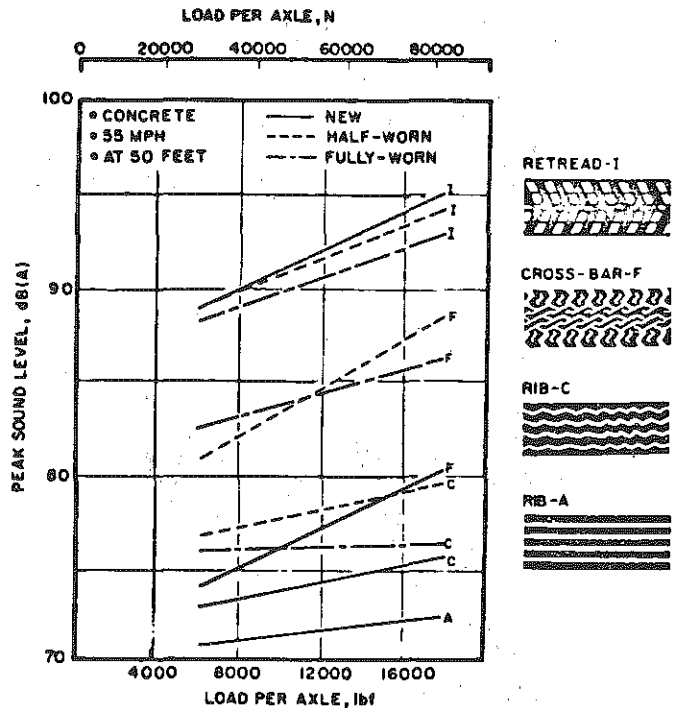


Fig. 7 - Effects of load on truck tire noise

truck tires will last in some situations over 125,000 miles, this is a lot of testing between long waiting periods to get the needed noise data.

LOAD - One of the other variables that has to be considered in establishing roadside enforcement levels is what happens as the load on the truck is changed. Fig. 7 again shows the four test tires on the drive axle, quiet tires on the front, and a con-

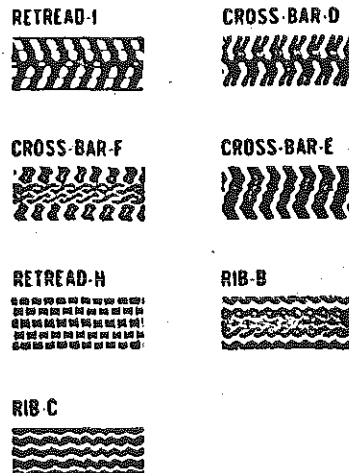
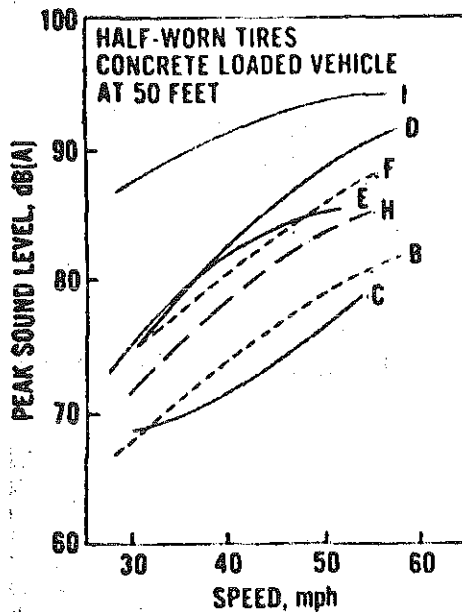


Fig. 8 - Sound level as a function of speed for half-worn truck tires

stant speed of 55 mph. This figure shows the increase in sound level which results from axle loading. At the low end is the empty truck, and at the high end a typical legal 17,000-18,000 lb load on the rear axle is represented.

ROAD SURFACE - One of the other questions is how much road surface affects the tire sound. The answer, in some cases, is quite a bit. Effort has been made to find the critical variable in this case: the thing that could be used to describe the road surface and which would account for the interaction of the tire and road and show some sort of correlation with the noise output.

The principle argument today revolves around the crossbar tires. From present data it can be said that they are generally unaffected by the road surface. At least they are not as susceptible to change in sound level as a function of road surface as the other tread types. Hence, for crossbar tires, there appears to be no major predictable effect of road surface that is going to really get in the way of setting regulations.

INTERPRETATION OF DATA

Fig. 8 is representative of the kind of data that manufacturers are going to have to generate to try to determine where they stand regarding government regulations and the kind of data that users are going to need to find out where they will stand in the future as to the products they buy and use. SAE has just established a test procedure (5) which searches for the maximum wear point and qualifies the sound level of the tire in much the same way as they were tested here, that is, a truck coast-by on a concrete surface, with the vehicle fully loaded. Fifty miles per hour was picked as the standard speed for the SAE J57 test procedure, and this chart, illustrating half-worn points, gives the sort of numbers that one can expect from such tests. The rib tires run in the 75-78 dB(A) range, and the crossbars go from 82 to 87 dB at 50 mph. All of the data presented here have been acquired with fast meter response. The

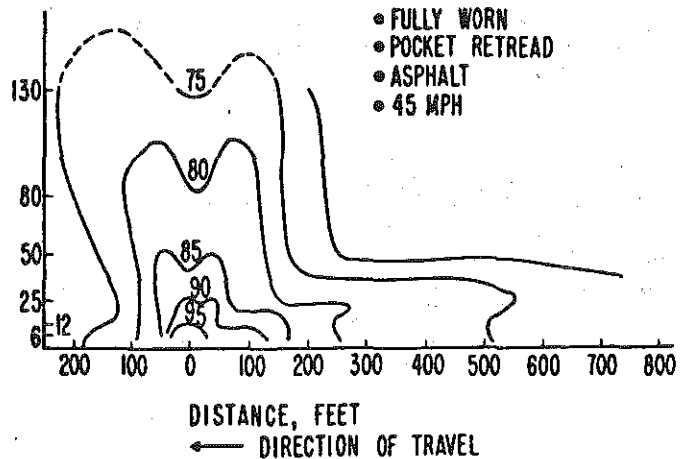


Fig. 9 - Typical tire sound map

comparable SAE J57 ratings would be at least 1 dB lower than the data presented here because of the different meter response settings.

The proposition before us now is to try to analyze those tire data to produce a meaningful strategy for reducing community noise. One of the things we decided to do in most of our tests was to acquire the data using an array of microphones perpendicular to the path of the vehicle so that by a retarded time analysis one could actually map out contours of the sound level for the coasting truck. Fig. 9, for example, is the sound contour plot for the pocket retread "Singing Sam" running on an asphalt surface, a fairly rough surface, at 45 mph. The test tires are at the origin of the spatial grid. One can see how these contours spread out, and surprisingly enough, a very strong lobe exists to the front of the truck. The front and rear side lobes were much the same for the tires tested. Each tire also exhibited a lobe of noise back along the highway, but the pocket retread had by far the largest (or strongest) rear lobe along the roadway.

The effort was made to try to put all of these data together

Table 1 - Effects of Tire Noise Certification Levels at 50 Ft
on Passby Sound Levels at 50 Ft

Truck Configuration	4 X 2 Straight	6 X 4 Straight	4 X 2 Single Axle Trailer	4 X 2 Double Axle Trailer	4 X 2 Double Bottom	6 X 4 Double Axle Trailer	6 X 4 Double Bottom
Gross weight, lb	27,000	45,000	45,000	59,000	73,000	73,000	73,000
Certification Limit, dB(A)	50 ft Passby Sound Level, dB(A)						
78	88.0	89.0	88.5	88.8	89.0	89.4	89.4
80	87.5	88.4	88.2	88.5	88.9	88.9	89.1
82	88.8	90.3	89.3	89.6	89.5	90.1	89.1
84	90.8	93.0	91.1	91.3	90.8	92.2	90.2
86	89.9	91.7	92.1	91.8	91.5	92.4	91.4
90	94.8	96.7	95.4	95.0	94.3	96.4	94.0
95	98.3	101.2	98.6	100.4	101.8	100.5	101.7

to postulate the values and ranges of sound levels that would be generated using the myriad of possible tire combinations on an 18 wheel tractor-semitrailer, a 24 wheel double bottom, etc., that are running on the highways today. Actual time history data like those shown in Fig. 10 were used for one set of test tires and superimposed upon similar time histories for other tires which were offset in time to appropriately represent the spacing of axles on the various vehicles of interest. The time histories and an omnidirectional 86 dB(A) engine noise source were added to arrive at predicted sound levels for the variety of trucks and truck combinations shown in Table 1.

The first truck configuration, called a 4 X 2 straight truck, has four axle ends, two of which were driven. There is, in this case, a steering axle with two tires in the front, a drive axle that is powered in the rear with four tires on that axle. A 6 X 4 is a tandem drive axle truck. The 4 X 2 single axle trailer is a single-drive axle tractor with a single axle trailer, and so on. A double bottom is a combination of two trailers hooked behind the tractor and incorporates a dolly with a single axle between the two trailers. The total vehicle combination weight is shown on the table. The respective axle loads have been adjusted to represent stable configurations within the typical state axle load limits. The maximum sound levels anticipated to be measured 50 ft to the side of these configurations if they were running on the highway at 60 mph are shown in the column below the respective truck configurations. The variations in sound level down each column are caused by the assumptions made regarding the tire types used on the drive axles and in some cases, the trailer axles of these vehicles. Simply stated, these assumptions are represented by the far left-hand column in terms of the A-weighted (fast response) sound level that would be produced by these drive axle tires at 50 mph on the rear axle of a 4 X 2 straight truck loaded to the rated tire load and running on a semipolished concrete surface. In the first line across the columns, the quietest rib tires, that is, 78 dB(A) certification level, are being used all the way around on each of the configurations. One can see that

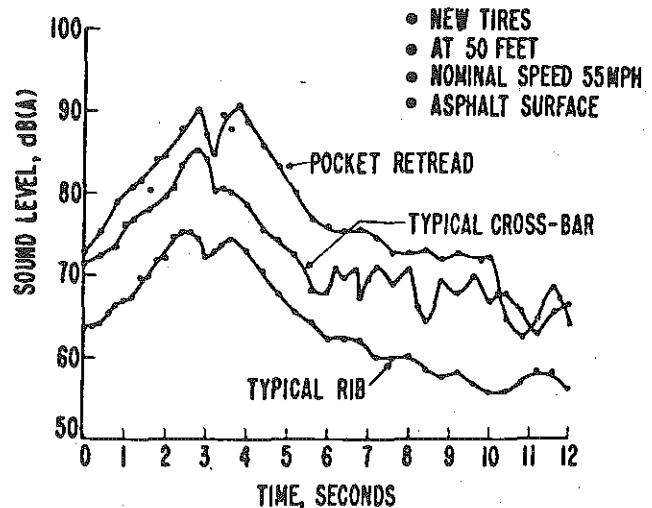


Fig. 10 - Representative sound level time histories of truck tire noise

the coasting tire sound coupled with an assumed 86 dB(A) engine noise contribution gives from 88 to 89.4 dB(A) anticipated passby sound levels.

As we go down through the noisier ribs, the sound levels go up a little bit, but not a great deal. As we get into the 82 dB(A) certification level, which is the very bottom of the crossbars or maybe a little bit below the bottom of the crossbars, we can see that we are up right on the 90 dB(A) total vehicle line which happens to be the proposed federal maximum for high-speed operation of interstate motor carrier vehicles. (6) With 84 or 86 dB(A) certification levels, which are typical of a number of present crossbar tires, we are over the 90 dB(A) level. If we are going to try to keep truck combinations at a 90 dB(A) maximum noise level measured on the side of the road, the 50 mph, 4 test tire coast-by has to be maintained at about 82 dB(A). Conversely, if we allow tires such as "Singing Sam" to be used (that is, 95 dB(A) certification level), there will be a range of very high sound levels that are very easily measured alongside of the freeway.

CONCLUSIONS

The future need for tire noise research and control is going to be even greater than it is today because research by DOT and the industry is rapidly progressing toward technically and economically feasible low engine noise trucks. Thus, if we refer back to Fig. 2 and consider future rigs which will not make 86-88 dB(A) engine noise but perhaps 72-78 dB(A) engine noise, it is evident that our present alternative of using rib tires is going to make tire noise dominant now at about 40 mph. Therefore, I think it is safe to say that regardless of how tire noise is regulated in the near term, it is just going to be the first step in the process, and much more will need to follow. At a September 1973 meeting in Williamsburg of the SAE Vehicle Research Institute (7), a commercial vehicle panel concluded that until commercial vehicle noise is reduced to levels near that of the noise generated by the other vehicles on the highway, that is automobiles, the public and publicly appointed administrators are going to continue to pay very special attention to the heavy commercial vehicle and pay very special attention to increasingly stringent regulations to reduce the noise of these vehicles. This situation will continue to have significant implications for tire users and tire manufacturers alike.

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We wish to make specific information available at this time which pertains to points contained in the Notice of Proposed Rule Making and to provide some other information which we believe is pertinent.

In the preamble of the notice, the discussion of cooling system noise is not consistent with the findings of our programs; for example, thermostatically-controlled radiator shutters are reported as noise reduction components, when in fact such shutters have repeatedly been shown to increase fan noise by 2dB or more when closed. We would suggest the elimination, not the installation of such shutters as the proper course to follow in reducing the noise of commercial vehicles.

In the same section, we suggest that many cooling systems generate noise levels in excess of 80dB(A) at 50 feet when tested in accordance with J366b procedures. As an example, every one of our Quiet Truck baseline vehicles exhibited cooling system noise levels in excess of 80dB(A). Based on tests of many different fans during the Quiet Truck program, we also take exception to the contention that fan noise can be reduced by using a slightly different fan model. These tests clearly indicated that when radiator air flow (or cooling) is held constant, a wide variety of test fans, including smoothly-molded, aerodynamically-contoured fans, all produce essentially the same noise level. Reduction of cooling system noise to 75dB(A) will require extensive modifications to the fan shroud, radiator-to-fan-to-engine spacing, etc. Reduction of cooling system noise to 65dB(A) at 50' under full engine speed conditions may be feasible only with uniquely large radiators applicable to some cab-over-

engine trucks (not practical for conventional truck installations due to visibility considerations) with flow-thru engine enclosures. One of the quiet trucks with such a unique combination came close to, but did not reach the 65dB(A) fan level.

The use of thermostatically-controlled fan clutches is alluded to in this section as a means to reduce fan noise to 65dB(A). Such fan clutches can eliminate fan noise for some 97% of the engine operating time (i.e., fan is not driven) and from 0 to 65dB another 2% of the time (i.e., fan driven at less than 1600 rpm). Thus, with thermostatically-controlled fans, this source of noise can be virtually eliminated 99% of the time. This fact is borne out by the results of DOT-sponsored tests of three fan clutch types in 24 different trucks. We believe these data to be a compelling argument in favor of a test procedure for these standards such that fan clutches are permitted to operate normally (i.e., disengaged) during testing and that normal cool-down procedures be permitted between tests. We feel that our program results fully justify the fan clutch from a noise standpoint and that the pay back in fuel economy resulting from such fan clutch usage helps to ease the cost burden of the proposed standards and to assist the national fuel conservation goals. In the DOT/EPA report on truck and bus fuel economy improvement, fan clutches are credited with up to 10% improvement in fuel economy and are highly recommended for use in future production trucks and buses.

The discussion of exhaust systems (FR Page 38340, Col 2, d) also is not in keeping with our research experience. The statement that very few trucks need modification of shell noise to reach 83dB(A) overall noise

TESTIMONY OF

W. H. CLOSE
ACTING DIRECTOR
OFFICE OF NOISE ABATEMENT
U.S. DEPARTMENT OF TRANSPORTATION

AT
PUBLIC HEARINGS

OF THE

U. S. ENVIRONMENTAL PROTECTION AGENCY

ON

PROPOSED NOISE EMISSION STANDARDS
FOR NEW PRODUCTS

NEW MEDIUM AND HEAVY DUTY TRUCKS

Washington, D. C.

February 20, 1975

It is a pleasure to appear before the hearing panel today to discuss the technology, cost and other aspects of the standards proposed by the Environmental Protection Agency for noise emission limits applicable to new medium and heavy duty trucks distributed in commerce.

In 1968 the then newly-created Department of Transportation realized the need to develop technological solutions to the problem of highway noise generated by trucks and began a deliberate program to satisfy that need. Since our initial pilot programs in tire noise research, the base of DOT research has expanded greatly. Tire noise research has expanded, research into the effectiveness of commercial mufflers has been completed, retrofit studies have been undertaken involving some 20 different vehicles, and the so-called Quiet Truck program is now nearing completion. These programs have produced an impressive array of new knowledge and have documented much information heretofore known but not demonstrated in practical vehicles.

During this period, the industry has also mounted significant efforts which have resulted in the availability of new product lines which aid the achievement of lower noise levels for trucks. The Department of Transportation is optimistic that lower truck noise levels can be achieved based upon the technology now in hand. We endorse the thrust of the EPA proposed rulemaking and, as always, stand ready to provide assistance to the EPA in achieving quieter communities adjacent to our highways.

is not in keeping with the results obtained by International Harvester in its quiet truck program effort. "Truck Noise, IV-D" is the most recent publication on this subject and it illustrates the dominance of shell noise (pipe shell 82dB(A), muffler shell 74dB(A)) as compared to gas discharge noise (discharge 76dB(A) and leaks 72dB(A)) in a typical 1972 production vehicle. It is not likely that this vehicle or others using such 2-stroke engines could comply with an 83dB(A) limit without some modifications.

Mufflers are available to reduce exhaust noise of all popular truck diesel engines to 75dB(A), including the 2-stroke engines, even 12-cylinder versions. In many cases this does not require dual mufflers, and in all cases can be achieved without use of series muffling according to at least one large supplier of diesel engine mufflers. Such exhaust system performance has not yet been demonstrated by horizontal or underframe systems, but the question of exhaust outlet height must always be raised in any discussion of highway noise control strategy. We believe the EPA should consider carefully the technology, cost and benefit factors for each type of exhaust system. We offer below some of the considerations as we presently see them:

1. Lower exhaust noise levels are achievable more easily with vertical systems than with horizontal due to apparent image source enhancement of the horizontal underframe systems;
2. Technology is more advanced for the vertical systems; thus significantly lower exhaust noise levels have been demonstrated with

vertical components (consistently 75dB(A) or lower), offering real incentives to "overkill" exhaust noise in meeting near term standards;

3. Underframe exhausts discharge products of combustion into the air at levels aggravating occupants of the vehicle and others adjacent, particularly in urban traffic conditions;

4. Underframe exhaust discharges also aggravate splash and spray visibility problems which are already severe under wet road passing conditions;

5. Underframe exhaust systems with inherent low source height enhance the effectiveness of roadside barriers in reducing community noise levels. Roadside barrier costs savings over the next 8 years have been estimated to be \$1/2 billion if barrier heights could be lowered due to universal use of horizontal muffler and tail pipe systems. Moreover, additional sites would likely receive roadside barriers as a result of more favorable highway department and citizen response to lower height barriers or berms paralleling the highways;

6. Underframe exhaust systems present difficult packaging problems for many heavy duty trucks;

7. Test results indicate approximately 2dB higher noise radiated vertically by vertical systems which would impact highrise residents adjacent to highways.

The Department of Transportation strongly urges the EPA to establish truck tire noise standards. We suggest that 50 mph coast-by tests of fully loaded, two-axle (six-tire) trucks, similar to SAE J57, but using fast meter response, can be prescribed and that limiting noise values of 83dB(A) and 80dB(A) might well be established for tires manufactured

during the time periods in which trucks will be required to comply with those levels. The Department has made available data and analyses supporting the above position. A full report is in preparation to address the matter more thoroughly. This will be forwarded to the EPA at the earliest possible date to facilitate its efforts in tire noise regulation. Clearly, regulations are needed to force usage of tires which are half as noisy, just as safe, and as economically acceptable as many that are in widespread use today. This effort should not be delayed, or relegated to a mere labelling exercise as suggested at the end of the tire noise discussion.

On page 38341, item 5 Summary, the 75dB(A) level is purported to have been demonstrated by more than one truck. EPA should be more specific as to what trucks have demonstrated such low levels. In our Quiet Truck program, three contractors attempted to reach 75dB(A) but only one vehicle achieved such a level. We fully believe that 75dB(A) can be achieved, but we must caution that the means and costs developed to date apply only to a very limited segment of the nation's truck production.

There is a typographical error in paragraph "a" under the Summary. "68"dB(A) should read "86"dB(A).

The discussion that follows in the Summary gives very little flavor of the difficulties that will be encountered by manufacturers in meeting the prescribed levels and tends to minimize the extent of engineering changes needed throughout a manufacturer's product line.

The statement that all trucks may reach 75dB(A) is without basis.

While we believe that such a level may be achievable and by our research have substantiated avenues leading to that end, we do not feel that sufficient information exists to make such confident predictions for all vehicles.

Section V pertains to Applicability and specifically excludes buses from consideration because EPA feels that they are not major noise sources. Other vehicle subcategories which EPA has included, such as motor homes, could in no way impact as many citizens as buses. The Department of Transportation takes the position that the approximately 44,000 school buses, 3,000 transit coaches, and 4,000 intercity coaches newly registered each year should be subject to the proposed standards. We see no fundamental difference in technology between trucks and buses, and can therefore see no reason to treat them separately simply because the packaging of the engine is different in some cases. We further question the basis upon which the EPA contends that buses are not a major noise source and the basis for the assumed typical transit coach noise level of 73dB(A) at 50 feet. Considering the fact that transit coaches are typically accelerating past any point on their route, considering the fact that the 2-stroke engines referred to in the preamble are almost exclusively used in such coaches, and considering the fact that transit coaches operate where population densities support such public transportation, it appears that such coaches should be included within the scope of these standards. Our retrofit studies with General Motors and Rohr Corporation (Flexible) indicate 83-86dB(A) sound levels for current

production transit coaches. Kits to reduce GM 8V-71 powered coaches to 82dB(A) are tentatively priced at \$555. Rohr has developed kits to lower the sound level of a 6V-71 powered coach to 77-80dB(A). Prices are not yet available on this kit. Both kits use demand fan drives.

Similarly, we question the exclusion of auxiliary or special purpose equipment such as refrigeration equipment. It would appear appropriate under the definitions of "truck" and "manufacturer" to define special purpose equipment in the same fashion as it is prescribed in the Interstate Motor Carrier Noise Standards, just issued by EPA. Specifically, we endorse the logic put forth by EPA that separates regulated from unregulated special purpose or auxiliary equipment depending upon whether or not it is normally operated at speeds in excess of 5 mph. Such a definition includes refrigerator units, air conditioners and the like as regulated equipment. We endorse the inclusion of such equipment within the bounds of the proposed standards.

We are also concerned with the methods which EPA has used to estimate potential benefits which should result from these proposed standards. We have had the advantage of reviewing the Transportation Research Board Design Guide (HRBDG) cited by EPA as its source for much of the input data for its benefit predictions. Most of those concerned with this proposed standard have not had access to these privileged data. During earlier reviews of the EPA Background Document for this proposed standard, we advised EPA that the HRBDG data appeared to be in error, or was based on unspecified assumptions which appeared to be in error. As a matter of fact, those data have been revised by the Highway Research Board, but

have not been released for unlimited use. In general, the nominal truck noise levels used in the EPA analysis were based upon engine exhaust and fan noise levels for highway operation which were higher than the J366 test levels. Since the J366 test procedure is designed to maximize engine-related noise levels, and "nominal" highway operating conditions would not entail full throttle or governed-speed operation, our data indicate that engine-related highway noise levels should be at least 2 dB lower than J366 levels, rather than higher. The EPA-assumed noise levels appear, therefore, to be about 5 dB high compared with our information. More importantly, in assessing the potential benefits for the EPA Background Document, a noise level of 77dB(A) at 50 feet is assumed for tire noise at highway speeds. Such a level is not attainable for any tires known today, or currently foreseen for "nominal" speed, load, road surface, or wear conditions.

We have attempted to reconstruct the EPA's benefit analysis, in order to understand the logic being applied by EPA in its decision-making on this proposed standard. We were sufficiently successful in duplicating the EPA benefit results, using the HRBDG data as cited by EPA, that we can make several points regarding the potential benefits obtainable from these standards. First, the claimed benefits in the EPA Background Document are actually derived from the following four separate actions:

1. Implementation of the new Interstate Motor Carrier Noise Emission Standards;
2. Progressively lower new automobile noise emission standards, effectively and uniformly enforced by state and local governments;

c. Passenger automobiles and light-duty vehicles

currently @ 55 MPH @ 50'	77.4 dB(A)
@ 27 MPH	75.8
by 1985 @ 55 MPH @ 50'	73.5
@ 27 MPH	67.5

Figure 1 displays our duplication of the results indicated in the EPA Background Document for the freeway model, using the EPA assumption, insofar as we could find them. The assumed implementation of the Interstate Motor Carrier Noise Emission Standards and the assumed 4 dB reduction in automobile noise levels should produce a mean-energy community noise reduction of 1.1 dB by the year 2000. Assumption of the very low tire noise level of 77 dB(A) @55 MPH @ 50', and regulation of medium and heavy duty truck noise levels to 83 dB(A) @ 50' should provide an additional 3.5 dB reduction; truck noise level of 80 dB(A) should reduce noise levels by 4.5 dB, and truck noise level regulations of 75 dB(A) should reduce noise levels by 5.5 dB according to the input assumptions made by the EPA.

Figure 2 presents a comparable plot of our calculations of potential benefit, using the assumptions defined above. If conventional crossbar tires are permitted, community noise level reductions of 0.2, 0.5, and 0.7 dB should be achieved from regulated new product truck noise levels of 83, 80, and 75dB(A), respectively. If, however, regulations are promulgated which limit sales to new tires which possess noise characteristics similar to present rib tires, the reductions in freeway community noise

levels deriving from the proposed truck standards are 3.5, 4.1, and 4.6 dB, respectively. Similar data are displayed in Figure 3 for the urban model, as defined in the EPA Background Document, using our assumptions defined above. Here, the influence of quieter rib tires is not as dramatic as in the freeway model, but tire regulation is still an important factor in the potential benefits to be derived from any truck noise regulation.

We point to the essential nature of each part of the noise reduction strategy discussed by the EPA rather than diminishing the value of these proposed standards in the overall scheme of things. We feel very strongly that those elements of the strategy not yet in place must be vigorously pursued. We are concerned, however, lest the benefits of these future actions be erroneously assigned to the present proposal hence diminishing the incentive to complete the regulatory strategy.

The estimated costs per vehicle for heavy duty diesel trucks appear to be somewhat lower than our Quiet Truck Program contractor estimates for noise levels not so low. Specifically, our contractors have submitted information on costs and levels as follows:

<u>Contractor</u>	<u>J366 Level</u>	<u>Est. Cost</u>
Freightliner Corp.	72-74dB(A)	\$1400
International Harvester	78dB(A) 80dB(A)	\$1390 \$ 516
White Motors	77-79dB(A) 79-81dB(A)	\$1307 \$ 260

It should be evident that a manufacturer would have to design to a level at least 2dB lower than the Standard to ensure that

production vehicles will comply with the standard. The total cost impact of the proposed regulations can not be established by this documentation since the spread of production is not known and the adjustment for cost versus design level thus cannot be made.

The cost estimates put forward in the NPRM and the background document therefore appear to be quite low or are based on some undisclosed source which differs from the above.

We would suggest that it is premature to set a level of 75dB(A) when so little information exists upon which impacts can be estimated. As previously stated, only one of three attempts to meet 75dB(A) was successful in our Quiet Truck Program. Since evidence is not available as to other successful efforts to build a heavy duty diesel truck at 75dB(A), with necessary production and test tolerances, we suggest that EPA reconsider setting this stringent level requirement until more data are acquired at the intermediate levels and other vehicular noise sources are brought under control e.g. buses, tires, and auxiliary equipment.

The enforcement procedures set forth are causing extreme concern to the manufacturers of commercial vehicles. While procedures of the type proposed may be appropriate for enforcement of exhaust emission standards directed at large manufacturers of standardized products, e.g. passenger cars or production runs of basic diesel engines; they appear inappropriate for small manufacturers of highly individualistic products such as heavy trucks.

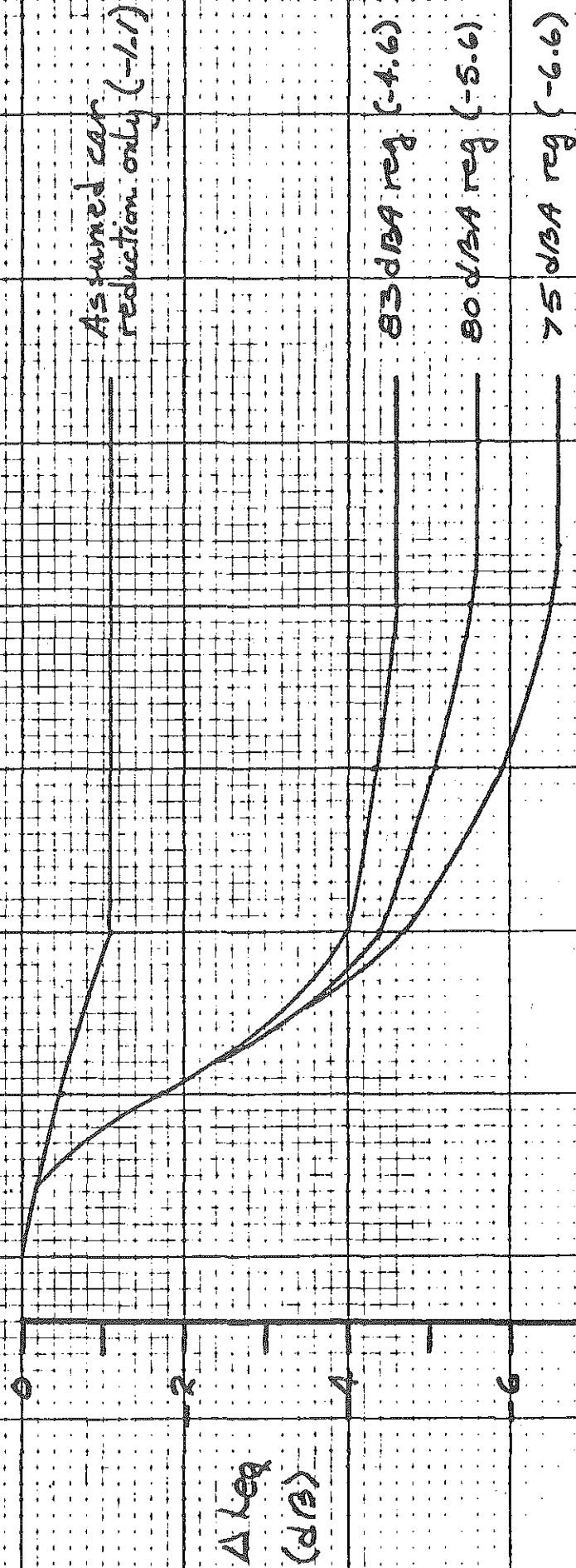
We suggest that EPA consider enforcement provisions similar to those followed by the National Highway Traffic Safety Administration. Such procedures place the responsibility for assuring compliance of all products squarely on the manufacturers. Spot checks by EPA which detect non-compliance would be followed by appropriate recall or other penalty provisions.

Finally, we would suggest that the EPA place manufacturers and users on notice that rulemaking will be pursued which would require trucks and buses subject to these regulations to comply with stationary run up test levels of no more than 3 or 4dB higher than the new product regulated level.

Such regulations should be promulgated under authority of Section 18 of the Noise Control Act amending the Interstate Motor Carrier Noise Emission Standards. This, of course, would assure proper maintenance of the noise abatement devices placed on new trucks subject to these regulations.

COMPARATIVE EFFECTIVENESS OF NEW TRUCK NOISE REGULATIONS

EPA Freeway Model



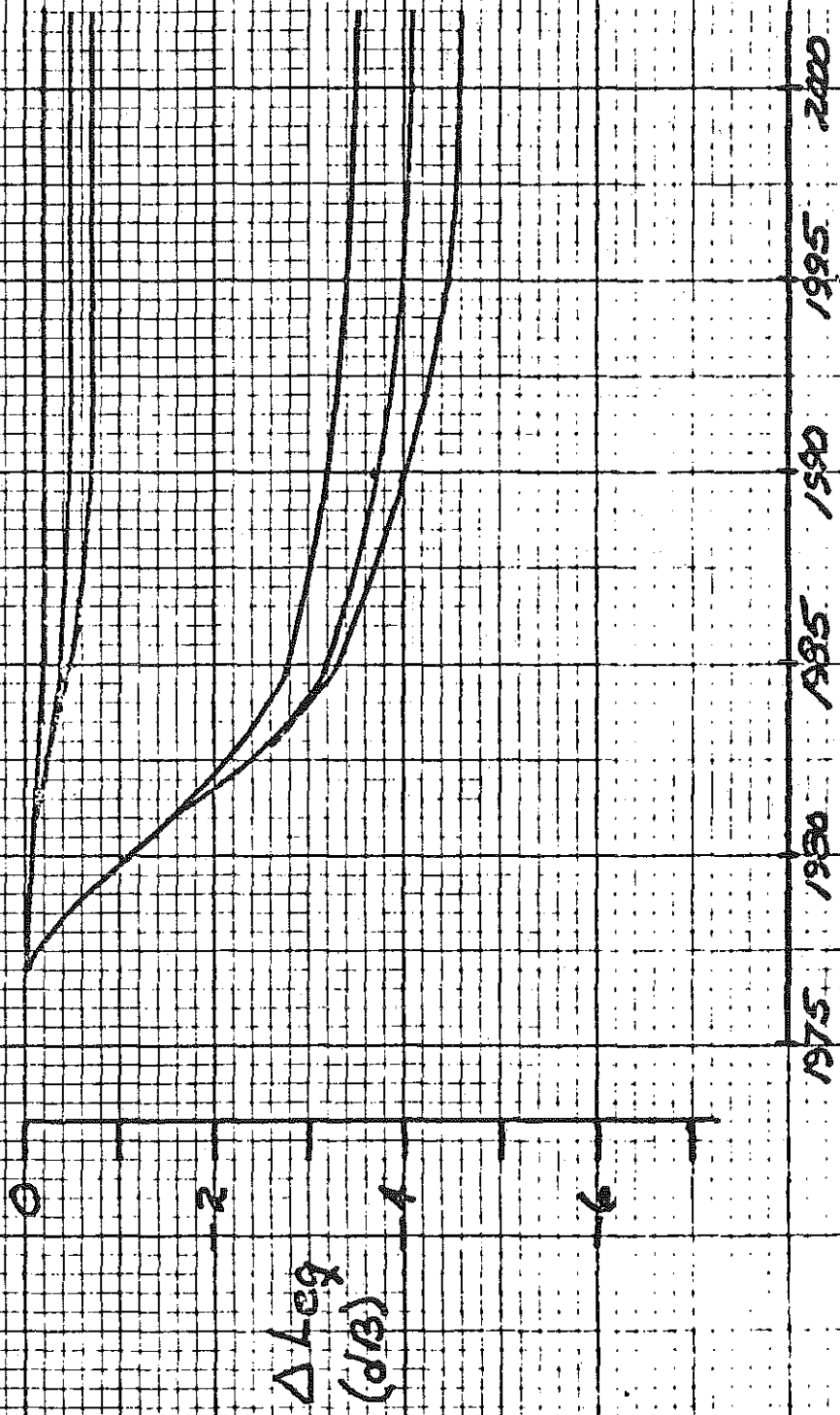
A_w Leq
(dBA)

1975 1980 1985 1990 1995 2000
YEAR

COMPARATIVE EFFECTIVENESS
 OF NEW TRUCK NOISE RESOLUTIONS ONLY
 DOT Freeway Model

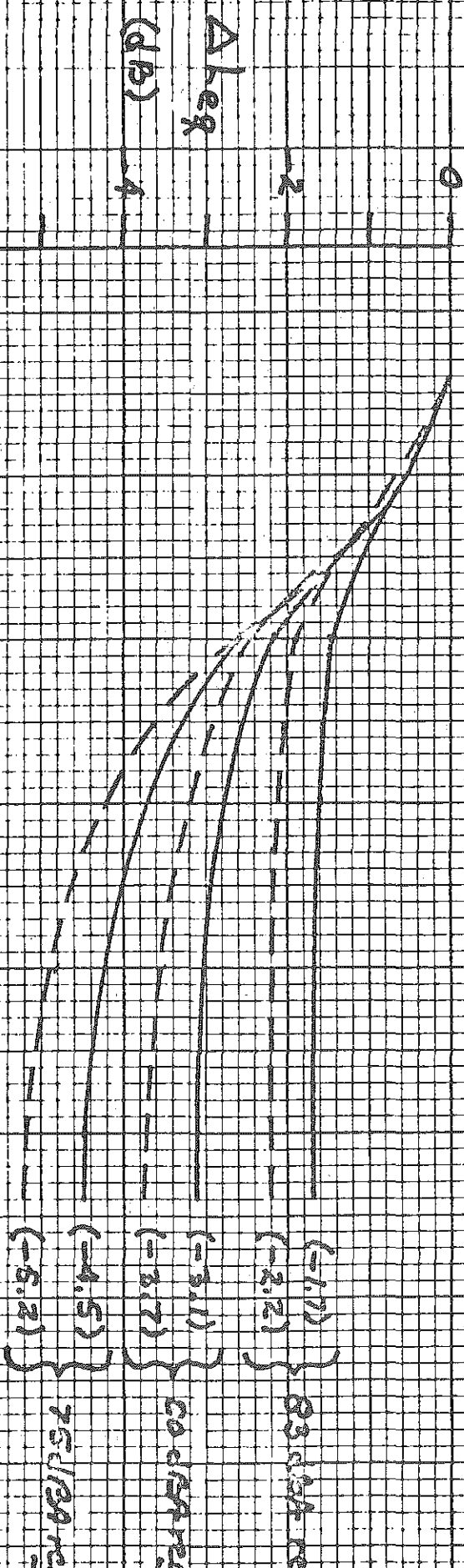
Crossbar Tires
 83 dBA req (-0.2)
 80 dBA req (-0.5)
 75 dBA req (-0.7)

All-rib Tires
 83 NFA req (-3.5)
 80 dBA req (-4.1)
 75 dBA req (-4.6)



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 JKW

COMPARATIVE EFFECTIVENESS OF NEW TOWER NOISE MITIGATION DUES DST DEMO MODEL



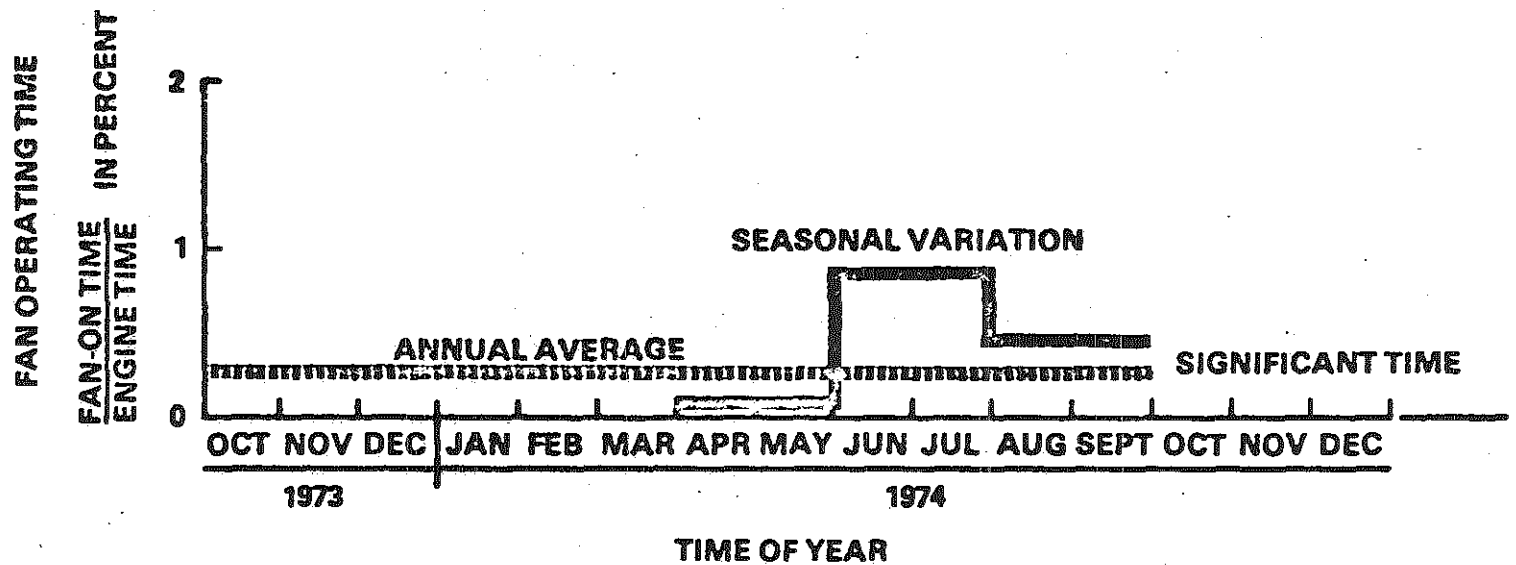
Crosbar Tires
All-rib Tires

1975 1980 1985 1990 1995 2000

2-19-76
QRM

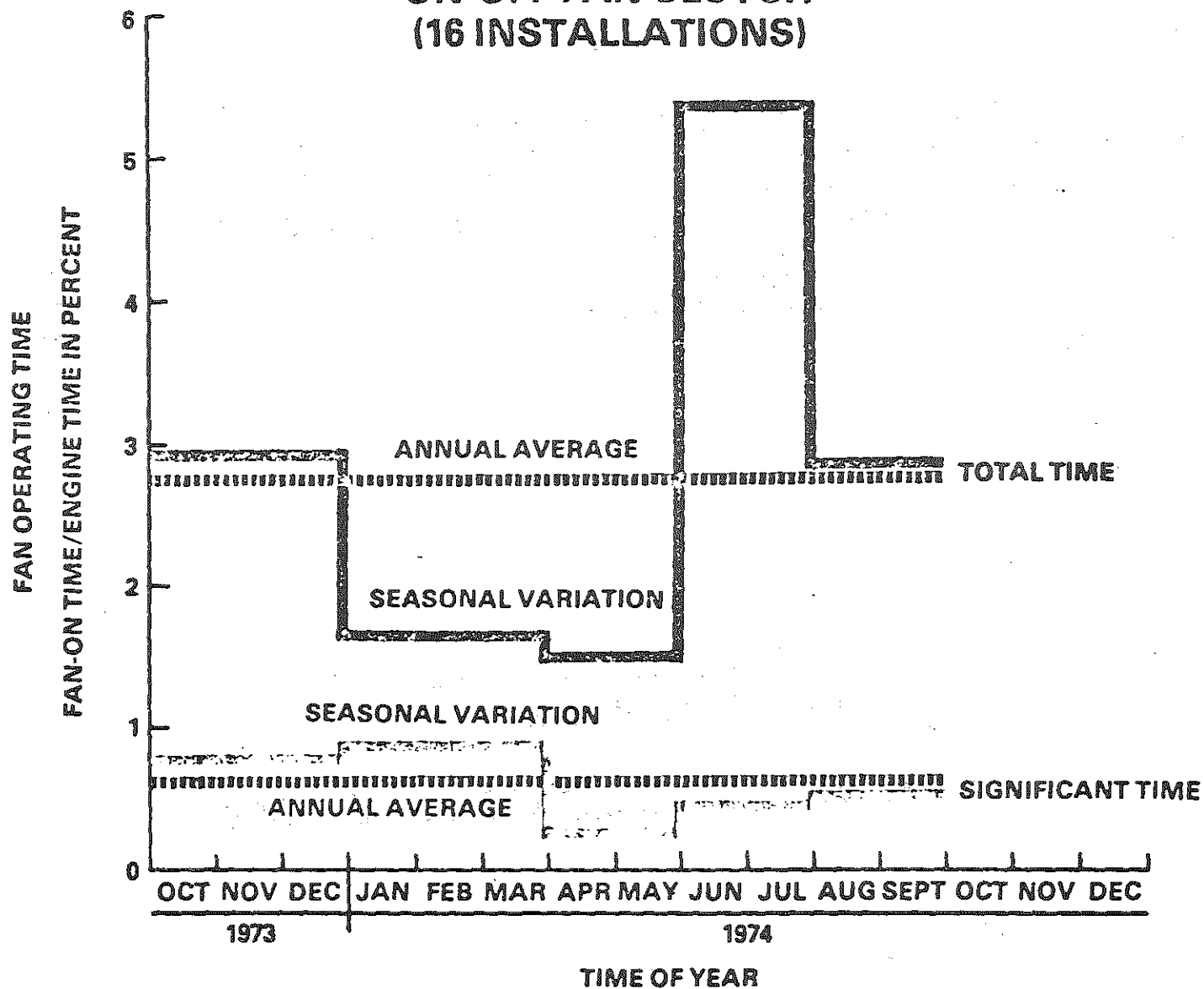
FAN CLUTCH OPERATING TIME

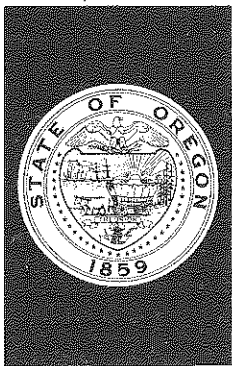
MODULATED FAN CLUTCH (7 INSTALLATIONS)



FAN CLUTCH OPERATING TIME

ON-OFF FAN CLUTCH (16 INSTALLATIONS)





ENVIRONMENTAL QUALITY COMMISSION

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TO: Environmental Quality Commission

FROM: Director

SUBJECT: Agenda Item No. E 1, August 22, 1975, EQC Meeting

Proposed Adoption of Temporary Rule - Prevention of
Significant Air Quality Deterioration

Background

Prevention of significant deterioration (PSD) of the Nation's air quality has been and still is a highly contested issue since passage of the Federal Clean Air Act of 1970. The major issue has centered on defining the requirements of the Act in relation to PSD. On June 11, 1973, U. S. Supreme Court action affirmed a lower court judgement that required the Environmental Protection Agency (EPA) to disapprove all state Clean Air Act Implementation Plans (IP) which did not contain measures which would effectively prevent significant deterioration of existing air quality. The affirmed lower court judgement also required EPA to promulgate regulations to prevent significant deterioration in cases where state IP's were found deficient.

EPA has, subsequently, disapproved Oregon's Clean Air Act IP with respect to PSD and this disapproval is still in effect.

The EPA first proposed rules for PSD on July 16, 1974. Revised proposed rules were published by EPA on August 27, 1974.

On October 28, 1974, the Oregon Student Public Interest Research Group (OSPIRG) and the Northwest Environmental Defense Center (NEDC) filed a petition requesting the Oregon Environmental Quality Commission (EQC) to adopt rules for PSD. A proposed PSD Rule was submitted by OSPIRG and NEDC as part of the petition.



Contains
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The EQC heard the petition at its November 22, 1974 meeting. At this meeting the Department presented an up-to-date history of state and federal action on the PSD issue. After considering extensive written and oral testimony presented at the November 22, 1974 meeting, the EQC denied the petition and directed the Department to initiate the rule-making process.

On December 5, 1975, EPA promulgated a PSD regulation (see attachmant A) which in essence:

1. Provided for designation of areas in the Nation into three classes.
2. Established allowable increases in particulate and sulfur dioxide ambient air quality after January 1, 1975 for each of the three classes with:
 - a. Class I area increments allowing essentially no increase.
 - b. Class II area increments allowing moderate increases.
 - c. Class III area increases being allowed up to National Ambient Air Quality Standards.
3. Designated the entire Nation Class II with provisions for reclassing any area to any other class at any time.
4. Established a preconstruction review and approval program for eighteen major air contaminant emission source categories. Any applicable source which proposed to commence construction or modification after June 1, 1975 would be subject to review for conformance with the applicable air quality increments and application of Best Available Control Technology.
5. Provided for delegation of authority to states to administer the preconstruction review program.

The Department reviewed the EPA PSD regulation and concluded it was generally an adequate regulation to prevent deterioration of air quality while also providing a mechanism to adjust the stringency of the requirements to satisfy local and state land use goals and guidelines.

On March 20, 1975, Governor Straub requested EPA to delegate authority to administer the EPA PSD regulation to the State of Oregon. On April 10, 1975, the Administrator of EPA Region X notified Governor Straub that delegation could not be accomplished until EPA had developed procedural guidelines for delegation.

On July 16, 1975, EPA Region X transmitted delegation guidelines to the Department. These guidelines provide two options the Department might pursue as follows:

1. Provides for EPA deferral of implementation of the EPA PSD preconstruction review program provided a state would adopt a similar adequate state rule. EPA would still maintain concurrent authority and responsibility to insure proper implementation of the program.
2. Provides delegation to the state for primary responsibility to administer the EPA PSD preconstruction review program by adoption of an adequate state rule and modification to the state's IP.

Discussion

EPA is presently responsible for administering PSD regulations in Oregon. EPA is presently processing the proposed Alumax Aluminum Plant at Umatilla application since it has apparently been determined that construction, according to the EPA definition, had not commenced prior to June 1, 1975.

Other proposed construction projects in Oregon which appear subject to EPA's PSD rule include three proposed oil refineries which were issued Department Air Contaminant Discharge Permits during March 1975, but which appear not to have commenced construction prior to June 1, 1975, and the Reynolds Metals Company in Troutdale which, by modifying their particulate and fluoride pollution control system, will cause a large increase in sulfur dioxide emissions.

The Department has, as a matter of practice, reviewed all of the above proposed construction projects with respect to compliance with EPA PSD regulations. Subjecting them to further EPA review requirements will prove time-consuming to the source, EPA and the Department if EPA must essentially duplicate the process already completed by the Department. EPA review procedures include in addition to a preliminary finding of compliance or non-compliance with the PSD requirement a public notice and 30 day opportunity for public comment and a possible additional 30 days for final action. The Department would have to go through the time sequence of 30 day notice again if delegation is accomplished; however, since the Department has completed its PSD review, and solicited and considered public comment through its permit hearings, it is apparent that Department administration of the EPA PSD regulation requirements would minimize time and effort expended by all parties concerned.

Since a delegation of authority mechanism is now specified by EPA, it appears in the best interest of all parties concerned for the Department to actively pursue delegation. Obtaining delegation from EPA would also allow, and only then allow, EPA to approve area reclassification requests from the state.

The most expedient means of obtaining delegation is Option 1 mentioned above, as Option 2 requiring modification to the state IP would take several months allowing for public notices and public hearings.

The Department has drafted a proposed temporary rule for PSD (Attachment B) which in essence duplicates the EPA PSD rule. Adoption of this rule followed by a request to EPA for delegation of authority to implement the PSD preconstruction review program should allow almost immediate delegation of authority to the State.

Upon adoption of the proposed temporary rule, it would be the Department's intent to pursue necessary public hearings for adoption of the temporary rule as a permanent rule and then request a modification to the state IP. After completion of this course of action, the Department would have primary responsibility for carrying out the EPA PSD program in the state and the state IP could then be fully approved.

In proposing a PSD rule for adoption as a permanent rule at public hearings, the Department would propose to modify the EPA PSD rule to eliminate what is considered several weaknesses. These modifications would be as follows:

1. Eliminate 38-005(9)(a)(C). This section, as written, would allow further increases in particulate and/or sulfur dioxide to occur at a facility due to changes in raw material or fuel which could exceed the applicable air quality increments. Allowing this to occur would appear in direct conflict with intent of the PSD rule.
2. Eliminate in 38-020(1), the phrase, "or is modified to utilize an alternative fuel or higher sulfur content fuel." As in 1 above, this phrase appears to be in direct conflict with the intent of PSD.
3. Add a new part in 38-020 which would allow the Department to review, approve, approve with conditions, or disapprove all proposed construction requiring Department permits including the eighteen facilities listed in the EPA PSD rule which appear a threat to causing violations of applicable area air quality increments. EPA has indicated its intent that states review more than the eighteen source categories, and in fact, EPA has indicated intent of adding further sources to their list.

Conclusions

1. The EPA PSD regulations are applicable to the State of Oregon and are, in fact, now being enforced by EPA in the State.
2. The PSD rule which has been drafted by the Department in essence is identical to the existing EPA PSD rule.

3. Adoption by the EQC of the PSD rule proposed by the Department is a necessary first step in obtaining delegation of authority to the Department for administering the EPA PSD program in this state.
4. It is considered in the best interest of EPA, the Department, and at least four sources proposing construction in the state for the Department to obtain delegation of authority to administer EPA's PSD pre-construction review program applicable to these facilities in order to save processing time and staff work.
5. It is considered in the best interests of the state for the Department to obtain delegation of authority to administer the EPA PSD pre-construction review program in order to allow EPA to approve any area classifications under PSD regulations that the state may wish to propose.

Director's Recommendation

In light of the need for adoption of a PSD rule, as a condition for allowing delegation of authority from EPA to the Department to administer EPA's PSD regulation requirements in this state, it is recommended that the Commission act as follows:

1. Find that failure to act promptly will result in serious prejudice to the public interest or to the interest of parties concerned for the specific reason that without adoption of such rule, administration of EPA's PSD pre-construction review program by EPA for sources proposing construction or modification in Oregon will be more time-consuming and costly to EPA, the Department and affected facilities, and that the ability to reclass areas in the state as provided by the EPA PSD regulation will be prevented.
2. Adopt Attachment B as a temporary rule to become effective immediately upon filing with the Secretary of State.
3. Authorize the Director to seek delegation of authority from EPA for administration of the EPA PSD preconstruction review program in the shortest time possible.
4. Authorize the Director to conduct necessary public hearings within the 120 day time limit of the temporary rule to establish the rule, with corrections to weaknesses noted in this report (items 1, 2 and 3 on page 4), as a permanent rule of the Department.



LOREN KRAMER
Director

JFK:cs
8/11/75
Attachments A & B.

federal register

THURSDAY, DECEMBER 5, 1974

WASHINGTON, D.C.

As Modified June 12, 1975

Volume 39 ■ Number 235



PART III

ENVIRONMENTAL PROTECTION AGENCY

■

AIR QUALITY IMPLEMENTATION PLANS

Prevention of Significant Air
Quality Deterioration

Title 40—Protection of Environment

CHAPTER I—ENVIRONMENTAL
PROTECTION AGENCY

SUBCHAPTER C—AIR PROGRAMS

[FRL 302-4]

PART 52—APPROVAL AND PROMULGA-
TION OF IMPLEMENTATION PLANSPrevention 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 23836), 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, 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. A series of public hearings were held and over 300 written comments were submitted in response to this proposal. The hearing records and the written comments are available for inspection at the EPA Freedom of Information Office, 401 M Street, SW., Washington, D.C.

Due to the lack of precise direction either in the Clean Air Act or in the Court order, the initial proposals focused 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, on August 27, 1974 (39 FR 31000), the Administrator issued re-proposed regulations in order to properly explore all aspects of this issue and to focus more clearly on procedural and technical issues.

The Administration has submitted for consideration an amendment to the Act which would eliminate the requirement for preventing significant deterioration of air quality. This amendment is pending before the Congress. Although EPA does not endorse this amendment, EPA seeks full public debate on the significant deterioration issue and in issuing these regulations does not intend to delay or influence consideration of this amendment. The regulations issued herein are 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.

The regulations proposed on August 27, 1974, called for the establishment of "classes" of different allowable incremental increases in total suspended particulates (TSP) and sulfur dioxide (SO₂). Class I applied to areas in which practically any change in air quality would be considered significant; Class II applied to areas in which deterioration normally accompanying moderate well-controlled growth would be considered insignificant; and Class III applied to those areas in which deterioration up to the national standards would be considered insignificant. Under the proposed regulation, all areas of the country would be designated Class II initially, with provisions for allowing States to reclassify any area to accommodate the social, economic, and environmental needs and desires of the public.

The plan would be implemented through a preconstruction review of specified source categories to determine whether these sources would cause a violation of the appropriate increments. The new source review also included a provision requiring the use of best available control technology on sources covered by the regulation. Finally, the proposal provided procedures for public comment on each application for permission to construct and for delegating the responsibility for implementing the new source review procedures to States or local governmental units.

DISCUSSION OF PUBLIC COMMENTS

The August 27 proposal was criticized by environmental groups as being unresponsive to the District Court's order in that it permits the deterioration of air quality up to the national standards in Class III regions. Although this result could also occur in Class I or Class II regions where the difference between existing air quality and the national standard is less than the prescribed air quality increment, all such comments focused on the provision for Class III areas. Unless "significant deterioration" is defined as a percentage of the "unused" air resource, any air quality increment plan, regardless of how small the increment is, could allow deterioration up to the national standard in some instances. As discussed in the preamble to the proposals of July 16, 1973, and August 27, 1974, air quality monitoring is presently concentrated in heavily polluted areas, with only scattered monitoring in relatively clean areas. Vast numbers of additional monitors will be necessary to precisely define existing air quality, making a plan that is dependent on a knowledge of existing air quality virtually unworkable. Therefore, the fact that air quality could, in some instances, increase to the national standard, does not, in the Administrator's opinion, make the August 27 proposal inconsistent with the Court's ruling.

Additional comments involving Class III areas indicated that economic and social factors should have no bearing on the definition of significant deterioration. These comments stated that EPA must consider only air quality factors and that a single nationwide definition of significant deterioration must be established. Such comments did not take issue with Agency statements made on July 16, 1973, and August 27, 1974 that the definition of significant deterioration is basically a subjective decision. None of the comments suggesting changes to the increments proposed by the Administrator, or proposing alternate plans, offered any justification for the numbers which were selected. Since the consideration of "air quality factors" alone essentially leads to an arbitrary definition of what is "significant," this term only has meaning when the economic and social implications are analyzed and considered. Therefore, the Administrator believes that it is most important to recognize and consider these implications, since the consideration of air quality factors alone provides no basis for selecting one deterioration increment over another.

Even in the subjective terms that are required when considering only the environmental aspects, the contention that there must be a single definition of significant deterioration applicable nationwide does not appear to address the wide range of environmental needs which exist. Most of the comments implicitly recognized that there is a need to develop resources in presently clean areas of the country, and that significant deterioration regulations should not preclude all growth, but should ensure that growth occurs in an environmentally acceptable manner. However, there are some areas, such as national parks, where any deterioration would probably be viewed as significant. A single nationwide deterioration increment would not be able to accommodate these two situations.

Along these lines, comments were specifically requested in the proposal as to whether the Class II increment should be doubled. Power companies generally supported such a change, while other comments from the industrial sector indicated that the increments were adequate for well-controlled growth. Power companies indicated that many new plants would be much larger than those which would be allowed in a Class II area (approximately 1000 megawatts), and that the Class II increment ought to accommodate such development. None of the comments presented any reasons for permitting such development in a Class II rather than a Class III area, except that the initial designation of all areas will be Class II. The Administrator continues to feel that a Class II increment should be compatible with moderate, well-controlled development in a nationwide context, and that large-scale development should be permitted only in conjunction with a conscious decision to redesignate the area as Class III.

Many comments also criticized the omission of carbon monoxide (CO), nitrogen oxides (NOx), hydrocarbons (HC), and photochemical oxidants (Ox) from the regulations. As indicated on July 16, 1973, and August 27, 1974, and in previous actions involving indirect source review (38 FR 29893 at 29894, 39 FR 7270 at 7272, and 39 FR 25292 at 25295), existing analytical procedures are not adequate to determine the impact of individual sources on air quality concentrations of reactive pollutants (NOx and HC/Ox). The only presently available technique for relating emissions to air quality for these pollutants is the areawide proportional model used for demonstrating the adequacy of control strategies. The proportional model requires that measured air quality data be available; however, as indicated above, such data are very limited in presently clean areas (even more so than for TSP and SO₂). In contrast, the air quality concentration of stable pollutants can reasonably be estimated using a diffusion model and therefore measured air quality data are not necessary to determine the incremental air quality impact of an individual source. In addition, since the proportional model assumes that air quality is proportional to emissions, the key to analyzing the impact of an individual source focuses on the definition of baseline emissions. If the source would be located in a very clean area with virtually no baseline emissions, then the predicted air quality increase would be very large (when in fact it probably would not). If the source would be located in a large metropolitan area and the baseline emissions are those of the entire metropolitan area, then the predicted impact of a single additional source would be very small. Therefore, the proportional model is adequate for control strategy development in urban areas where measured air quality data are available and the aggregate impact of controlling many sources is being analyzed. However, it is inappropriate for analyzing the incremental impact of individual new sources.

At this time, the only practical approach for dealing with these pollutants appears to be to minimize emissions as much as possible. The Federal Motor Vehicle Control Program accomplishes this for individual motor vehicles. New source performance standards (NSPS) have already been established under Part 60 of this chapter for many of the source categories subject to the regulation. Where practicable, emission limitations for CO, NOx, and HC have been promulgated for those sources presently subject to Part 60. Although some of the source categories are not yet included in Part 60, either (1) those that are not covered are not significant emitters of CO, NOx, or HC, or (2) control technology for these pollutants is unavailable or an emission limitation is impractical (e.g. HC emissions from coke ovens).

One additional step which could be taken to minimize emission of CO, NOx, and HC appears to be in the area of

minimizing vehicle miles of travel (VMT). Plans for reducing VMT and minimizing future VMT growth have been developed as part of the Transportation Control Plans (TCP) promulgated elsewhere in this chapter. Since the TCP's focus on major metropolitan areas, the flexibility available in designing these plans would be more limited when applied to rural and outlying areas. It is clear, however, that comprehensive transportation planning offers an appropriate mechanism for minimizing VMT growth in such areas. It is not clear, however, how EPA might become involved in comprehensive transportation planning throughout the country under these regulations, although States may wish to consider such an approach when developing their own plans to prevent significant deterioration. States of course, are not precluded from including other more comprehensive measures for dealing with HC, CO, and NOx in their own plans.

Some difficult additional questions arise as to how this concept of VMT minimization could be incorporated into these significant deterioration regulations. Would the addition of a VMT increment, similar to the air quality increment approach used in these regulations, be appropriate? Would a new source review of specific indirect sources be practical, or should the review apply to larger scale projects such as a new town or a large new development? The Administrator solicits additional comments on this issue and may modify the regulation at a later date if workable procedures in this area can be developed.

The August 27 proposal specified that all areas of the country, including those areas above the national standards, would be subject to the significant deterioration regulations, even though the District Court order only required the prevention of significant deterioration in areas presently below the national standards. This was done because it was not possible to specify in these regulations all areas of the country which exceed the national ambient air quality standards. In addition, there would be no practical impact of these significant deterioration regulations in areas above the standards, since emissions in such areas are being reduced under the state implementation plans, while these regulations provide for limited allowable increases in emissions.

Nonetheless, there were a number of comments requesting that these regulations specifically exempt all areas presently above the national standards. The regulations promulgated below provide for this exemption only with respect to the area classification requirements. The preconstruction review is still applicable in all areas of the country, in order to ensure that new sources be examined for their impact in presently clean areas which may be adjacent to areas that are above the national standards. In addition, the requirements for applying best available control technology are also applicable to all sources subject to review

in order to minimize the deterioration caused by individual sources. This requirement is particularly important where a source in one State would use up a significant portion of the air quality increment in a neighboring State.

The exemption of areas from the classification requirements will be done on a county basis (or functionally equivalent area) and will be based on a determination by the State that the air quality in the county is pervasively above the national standard. No attempt has been made to define these counties in these regulations. Instead, States must notify the Administrator by June 1, 1975, of those areas which are exempt from the classification requirements.

There were a number of comments requesting clarification of the relationship of these regulations to other portions of the existing implementation plans, particularly the air quality maintenance plans (AQMP's) to be submitted by June, 1975. An air quality maintenance area (AQMA) is an area designated by the Administrator that may have the potential for exceeding any national standard within the next 10-year period as a consequence of current air quality and/or the projected growth rate of the area. The States are required to submit an analysis of the impact on air quality of projected growth in each designated potential problem area. Where maintenance problems are identified by this analysis, the states must also submit plans containing measures to ensure maintenance of national standards during the ensuing 10-year period. AQMA's have been proposed for specific pollutants and final designations will be published shortly. Where an AQMA has been designated because of projected problems in maintaining the NAAQS for either TSP or SO₂, the significant deterioration increment is applicable only to those portions of the AQMA which are cleaner than either standard. By design AQMA boundaries have been designated to include substantial areas which are relatively clean. This has been done to insure that the planning area corresponds to the entire area where projected new growth in emissions is likely to occur and where regional planning for public services, housing and employment is focused.

Although there seemed to be a general assumption that AQMA's should be designated as Class III, there are several situations where a State may wish to leave the clean air portions of an AQMA as Class II or even to redesignate the area to a Class I. This would limit peripheral growth so as to complement the goals of the AQMP and in this context, the significant deterioration would actually be a mechanism for partially implementing the AQMP. In addition, there are several clean air areas which have been proposed as AQMA's due to anticipated large-scale development of natural resources. A Class I or Class II designation for such areas would probably eliminate the need for an AQMP for TSP or SO₂, since the air quality constraint would be the Class I or Class II increment. Therefore, a "de-designation" of the AQMA for TSP or

SO₂ may be appropriate. In any case, the Administrator recommends that any proposed significant deterioration redesignation have boundaries consistent with AQMA boundaries to facilitate the development of the AQMA plan.

A Class III designation does not necessarily mean that an AQMP would be required. For example, a clean air area might be designated Class III on the basis of a marginal anticipated deterioration in air quality which exceeds the Class II increments. However, the anticipated resulting air quality would still be well below the national standards. If little additional development were anticipated over the subsequent 10-year period so as to threaten the national standards, no AQMP would be required.

Furthermore, it is important to recognize that area classifications do not necessarily imply current air quality or current land use patterns. Instead, classifications should reflect the desired degree of change from current levels and patterns.

A number of public comments indicated concern that these regulations would create a duplication of new source review procedures, which would require a source owner to apply to several different governmental agencies before he could commence construction.

Where the State assumes responsibility for carrying out the new source review procedure under these regulations, most of the concerns expressed above should be eliminated. Procedurally and administratively, the significant deterioration review is virtually identical to existing new source review procedures included in the implementation plan and, in fact, application could probably be made on the same forms. No additional sources would be covered by the significant deterioration review. The only difference between the two new source reviews is in the tests which must be met before approval will be granted. Instead of meeting only the emission limitations which are part of the applicable plan, sources covered by the significant deterioration review must also meet an emission limitation which is consistent with the application of best available control technology. The most restrictive emission limitation supersedes all others. In addition to not causing a violation of any national standard, sources covered by the significant deterioration review must not cause an applicable air quality increment to be exceeded. Technically, the calculations needed to determine if these additional tests will be met are very similar to those already being done. Therefore, where a State administers these regulations, integration with the existing plan should be relatively easy, resulting in only minor additional resource demands. If States do not assume responsibility for implementing these regulations, EPA, through its Regional Offices, will carry out the new source review as required by the Act. Since this may cause duplication of effort on the part of EPA and the States, as well as additional requirements for source

owners, the Administrator strongly urges States to accept delegation of these regulations or to develop their own regulations pursuant to the guidance to be issued shortly pursuant to Part 51 of this chapter.

In response to public comments, the Administrator is considering the addition of other source categories, such as asphalt concrete plants and ferro-alloy plants, to these regulations. One possibility is to add those sources for which new source performance standards for particulate matter and sulfur dioxide have been proposed or promulgated under Part 60 of this chapter. A proposal to add other source categories will be issued shortly.

One comment indicated confusion as to what functions the Administrator intended to delegate to States under these regulations. The confusion apparently related to the definition of "Administrator" under paragraph (b) (3) as including the Administrator's "designated representative." Although the term "Administrator" is used in paragraph (c), relating to the approval of State redesignation, the Administrator does not intend to designate to a representative outside the Agency the review and approval functions under this paragraph. As indicated in paragraph (f), the only functions which will be delegated to States will be the preconstruction review under paragraphs (d) and (e).

A question was raised as to whether an area could have one classification for SO₂ and another for TSP. Different classifications for SO₂ and TSP may make sense in certain situations, and the Administrator does not intend to preclude this option.

Several public comments requested that the technical procedures for determining the air quality impact of a new source be specified by EPA. The techniques the Agency intends to use in most cases are set forth in "Guidelines for Air Quality Maintenance Planning and Analysis," Vols. 10 and 12. Volume 10, "Reviewing New Stationary Sources," pertains to the air quality impact of individual sources, while Vol. 12, "Applying Atmospheric Simulation Models to Air Quality Maintenance Areas," will be used to determine the impact of other growth and development in the area affected by the source. These documents are available for inspection at EPA's Regional Offices and the EPA Freedom of Information Center, 401 M Street, SW., Washington, D.C. 20460, and will be available shortly for general distribution through the National Technical Information Service, 5258 Port Royal Road, Springfield, Virginia 22151. The Administrator, or States which will be implementing the preconstruction review as EPA's agent, is not required to use the techniques in these documents if other techniques are more appropriate in certain circumstances.

There was considerable divergence of opinion over the initial classification of all areas. Industrial groups generally supported an initial designation of Class

III so as to minimize disruption of projects scheduled to commence construction in the near future. Environmental groups supported an initial designation of Class I, fearing that a Class II or III designation would permit air quality deterioration of some clean areas before States could act to redesignate areas to a more restrictive classification. The Administrator continues to feel that an initial Class II designation represents the most reasonable compromise between these widely differing positions. Also, since the regulations apply only to sources which commence construction after June 1, 1975, the Administrator feels that this deferral should reduce disruption to the industrial sector while permitting States sufficient time to consider reclassifying any area either to Class I or III before requests for approval must be acted upon.

There were several questions raised concerning the appropriate size of an area which should be considered for redesignation. Calculations have shown that because of the small air quality increments specified for Class I areas, these levels can be violated by a source located many miles inside an adjacent Class II or III area. For example, a power plant which just meets the Class II increment for SO₂ could under some conditions violate the Class I increment for SO₂ 60 or more miles away. Under the regulations promulgated below, a source could not be allowed to construct if it would violate an air quality increment either in the area where the source is to be located or in any neighboring area in the State. Therefore, wherever a Class I area adjoins a Class II or III area, the potential growth restrictions, especially for power plant development, extends well beyond the Class I boundaries into the adjacent areas. A similar situation exists, to a greater or lesser degree, wherever areas of different classification adjoin each other. Therefore, the area with the less restrictive classification should include an additional area at the periphery where it is clearly recognized that development will be somewhat restricted due to the adjacent "cleaner" area. As a result, a Class I redesignation could be fairly limited in size, yet the adjoining Class II or Class III areas would need to cover a substantial area in order to fully utilize the Class II or III increment. Again, it should be clear that the Class II or III increment could only be fully utilized toward the center of the area and that at the periphery, allowable deterioration will be dictated by the adjoining Class I area rather than the Class II or III increment.

The distance a large source would need to be located away from a Class I boundary is more dependent on the meteorological conditions in the area rather than the size of the source. Where very long pollutant travel times from the source to the receptor are involved, the assumptions concerning the persistence of wind direction and atmospheric stability are critical. At some point, it can be assumed that a receptor will be virtually

unaffected by a source, regardless of the source strength, since the critical meteorological conditions would not be expected to persist long enough to move the pollutants from source to receptor for any significant period of time. This distance is, of course, dependent on local meteorological conditions, but for most areas the maximum distance would be 60 to 100 miles.

CHANGES TO THE REGULATIONS

1. *Definition of Modified Source.* The term "expanded source" was used in the proposal in place of the more commonly used term "modified source" in order to specifically exclude from the preconstruction review sources which increase emissions solely due to switching from a low sulfur to a higher sulfur content fuel. The proposed definition of expanded source was related to whether a source increased emissions through a "major capital expenditure." This phrase was criticized by many as being too vague. Therefore, the general term "modified source" has been reinstated, along with a specific exemption for fuel conversion, which exemption is applicable only to the significant deterioration review procedures. The general definition of modified source in Part 52 is changed slightly to be more specific and to be consistent with the definition used in Part 60. Changes to the definition of modification in Part 60 were proposed on October 15, 1974 (39 FR 36946) and comments on this proposal are presently being analyzed. It is the Administrator's intent to change the definition of modification under Part 52 to be consistent with the final definition of this term under Part 60.

These changes are not intended to modify the applicability of either the proposed significant deterioration regulations or other new source review procedures promulgated elsewhere in Part 52.

2. *Definition of best available control technology.* Since this term may be used elsewhere in Part 52 in the future, it has been defined in the general definitions section of Part 52. The definition is consistent with the wording used in the August 27 proposal. It should be noted that new source performance standards (NSPS) may only apply to certain affected facilities within a large source. For example, only basic oxygen process furnaces in a steel mill are presently covered by NSPS, while blast furnaces, scarping operations and other significant sources within the mill are not presently covered. BACT must be determined for these facilities on a case-by-case basis until such time as NSPS are issued for these other facilities.

3. *Definition of baseline air quality concentration.* The proposal intended to establish the baseline air quality as that air quality existing as of the effective date of regulation, adjusted to include air resource commitments resulting from approval of other air pollution sources pursuant to existing new source review procedures in the plan. The definition of baseline air quality has been clarified to

reflect this intent and the calculation has been simplified by specifying the use of 1974 air quality data rather than 1973 data. No substantive change is intended by this revision.

4. *Conditions for applying for redesignation of areas.* In order that the Administrator have an adequate basis for determining whether an application to redesignate an area should be approved or disapproved, a provision has been added to paragraph (c) (3) (ii) to require that the necessary information be a part of the hearing record on the proposed designation. Specifically, the hearing record must show that the social, environmental, and economic effects of the proposed redesignation have been evaluated for the area being reclassified as well as for adjacent areas and that regional and national interests have been considered. The Administrator will provide additional guidance to assist States in developing their redesignation proposals and analyzing the impact of such redesignations.

5. *State reclassification of Federal and Indian Lands.* Various public comments indicate that Federal lands should be subject to State jurisdiction. EPA did not intend to preclude State redesignations provided that the Federal Land Manager can elect to keep the air quality over Federal lands in a more pristine condition than the State might designate. Therefore, the regulations have been revised to subject Federal lands to State redesignations but reserve to the Federal Land Manager the authority to subject such lands to a more stringent designation. This approach is consistent with section 118 of the Clean Air Act (42 U.S.C. 1857f) which requires that Federal agencies having jurisdiction over any property or facility meet substantive State air pollution control standards and limitations. There is nothing in the Clean Air Act or the legislative history of that Act that indicates the Congress intended to preclude the Federal Government from meeting more restrictive standards than are imposed by the States. This provision also ensures that national forests and parks can be protected by the Federal Government from deterioration of air quality. The different treatment accorded lands of exclusive Federal jurisdiction has been eliminated since the revised regulations make it clear that the Federal Government can protect air quality over all Federal lands. In accordance with Executive Order 11752, these regulations do not require Federal facilities to comply with State or local administrative procedures with respect to pollution abatement and control. Review of new sources on Federal lands is reserved to EPA, except as State review is permitted by a Federal Land Manager with respect to activities conducted under Federal leases.

The State of New Mexico commented that the proposed regulations appeared to take authority away from the States to regulate air pollution over Indian lands. These regulations were not intended to alter the present legal rela-

tionships between the States and Indian Reservations within the States. As these relationships vary from State to State, EPA has not attempted to define such relationships but has modified the proposed regulations to clarify that there is no intent to alter these relationships. Where States have not assumed jurisdiction over Indian lands, the regulations provide that the Indian governing body may propose redesignations to the Administrator. Boundary problems between Indian and State lands are dealt with in the same way that boundary problems between two States are dealt with, as discussed below. This is consistent with the independent status of Indian lands not subject to State laws.

6. *Public comment on proposed redesignations.* In order to permit the public an opportunity to comment on whether a proposed redesignation should be approved or disapproved, the Administrator will publish all proposed redesignations in the FEDERAL REGISTER as proposed rulemaking and provide a least 30 days for submission of public comments.

7. *Preconstruction review and BACT in Class III areas.* Several public comments criticized the proposed regulations for exempting sources in Class III areas from preconstruction review. It was pointed out that there would be no procedure to prevent construction of a source in a Class III area which would violate an increment in an adjacent Class I or II area. Therefore, the regulations promulgated below require that new sources, wherever they are located, must be reviewed to determine the impact on air quality in adjacent regions.

In order to minimize the deterioration caused by individual sources, the proposal has been modified to make the BACT requirements applicable wherever the source is located, not just in Class I or II areas. Since a source located many miles away from a Class I area could easily use up the entire Class I increment, as discussed below, the necessity to minimize emissions as much as possible in all areas is particularly important.

8. *Determination of allowable air quality increment.* The provisions of paragraph (d) (2) (i) have been modified to be more specific and to specify that reduction of emissions from existing sources which contributed to the baseline air quality concentration should be accounted for in determining the unused portion of the allowed air quality increment.

9. *EPA review of state redesignations.* The proposed regulations did not adequately cover problems created when a State or Indian Governing Body wishes to designate one or more of its areas in such a way that it will have a negative impact on other States or Indian Reservations. These regulations provide that a State or Indian Governing Body must take into account the effect of proposed redesignations on other States, Indian Reservations, and regional and national

interests. Where no State or Indian Governing Body protests the redesignation of another State or Indian Reservation, the Administrator will only review the redesignation to determine whether it is arbitrary and capricious. However, where a State or Indian Governing Body protests a redesignation to the State proposing the redesignation and to the Administrator, the Administrator will take an expanded role of review in which he will balance the competing interests involved.

10. *Specification of emission limitation.* In order to ensure that the requirement for applying BACT is properly implemented, the provisions of paragraph (d) (2) (ii) have been modified to require that an emission limitation be established as a condition to approval. This places the emphasis on emissions rather than the presence of any particular control equipment. This change also makes the BACT requirement for sources not covered by NSPS more consistent with the NSPS requirements. However, if the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, he may instead prescribe a design or equipment standard requiring the application of best available control technology. Such standard shall to the degree possible set forth the emission reductions achievable by implementation of such design or equipment, and shall provide for compliance by means which achieve equivalent results.

11. *Responsibility for performing air quality impact analysis.* A number of public comments suggested that the reviewing agency analyze the air quality impact of additional growth that has occurred in the vicinity of the proposed source since the reviewing agency is more likely to have the necessary data which is needed. The Administrator has concluded that it would be more appropriate for the reviewing agency to perform the air quality impact analysis based on information submitted by the applicant. This change will eliminate the uncertainty which was expressed concerning the requirement that the applicant analyze the air quality impact of general growth and development "in the area affected by the proposed source," since the reviewing agency will define this area and perform the calculations required. Also the provisions of paragraph (d) (3) do not require the applicant to submit growth data with each application. However, the reviewing agency may request such data from the applicant in cases where it does not have the necessary information and will specify the area over which such information is required.

12. *Procedures for public participation.* The procedures specified in paragraph (e) for public comment on an application to construct have been modified to be consistent with the procedures contained in EPA's regulations for indirect source review (39 FR 25292). The changes allow the reviewing agency to require ad-

ditional information, where necessary, and permit the applicant to respond to public comments involving his application to construct.

13. *Sources subject to review.* As proposed on August 27, several of the 19 source categories subject to the preconstruction review appeared to be restricted to an individual process (e.g. Kraft pulp mill recovery furnaces) rather than all emission points on the premises. The wording has been changed to be consistent with the listing of the other source categories and to make clear that all emission points associated with a stationary source must be considered in determining whether the source will violate an applicable air quality increment. This change allows sintering plants to be dropped from the list, since sintering operations will be covered under the primary metals industries which are subject to review under these regulations.

A detailed explanation of the technical and policy considerations which form the basis for these regulations is being prepared. Upon completion, the Administrator will publish a notice in the FEDERAL REGISTER announcing the availability of this information for public inspection.

These regulations will be effective January 6, 1975 and will be applicable to sources commencing construction on or after June 1, 1975.

(Secs. 110(e) and 301(a) of the Clean Air Act as amended [42 U.S.C. 1857 c-5(c) and 1857 g(a)])

Dated: November 27, 1974.

RUSSELL E. TRAIN,
Administrator.

Subpart A, Part 52, Chapter I, Title 40, Code of Federal Regulations, is amended as follows:

1. In § 52.01, paragraph (d) is revised and paragraph (f) is added. As amended § 52.01 reads as follows:

§ 52.01 Definitions.

(d) The phrases "modification" or "modified source" mean any physical change in, or change in the method of operation of, a stationary source which increases the emission rate of any pollutant for which a national standard has been promulgated under Part 50 of this chapter or which results in the emission of any such pollutant not previously emitted, except that:

(1) Routine maintenance, repair, and replacement shall not be considered a physical change, and

(2) The following shall not be considered a change in the method of operation:

(i) An increase in the production rate, if such increase does not exceed the operating design capacity of the source;

(ii) An increase in the hours of operation;

(iii) Use of an alternative fuel or raw material, if prior to the effective date of a paragraph in this Part which im-

poses conditions on or limits modifications, the source is designed to accommodate such alternative use.

(f) The term "best available control technology," as applied to any affected facility subject to Part 60 of this chapter, means any emission control device or technique which is capable of limiting emissions to the levels proposed or promulgated pursuant to Part 60 of this chapter. Where no standard of performance has been proposed or promulgated for a source or portion thereof under Part 60, best available control technology shall be determined on a case-by-case basis considering the following:

(1) The process, fuels, and raw material available and to be employed in the facility involved,

(2) The engineering aspects of the application of various types of control techniques which have been adequately demonstrated,

(3) Process and fuel changes,

(4) The respective costs of the application of all such control techniques, process changes, alternative fuels, etc.,

(5) Any applicable State and local emission limitations, and

(6) Locational and siting considerations.

2. 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. Specific disapprovals are listed, where applicable, in Subparts B through DDD of this part. No disapproval with respect to a State's failure to prevent significant deterioration of air quality shall invalidate or otherwise affect the obligations of States, emission sources, or other persons with respect to all portion of plans approved or promulgated under this part.

(b) *Definitions.* For the purposes of this section:

(1) "Facility" means an identifiable piece of process equipment. A stationary

(2) The phrase "Administrator" means a Administrator of the Environmental Protection Agency or his designated representative.

(3) 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.

(4) The phrase "Indian Reservation" means any federally-recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.

(5) 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.

(6) "Construction" means fabrication, erection or installation of a stationary source.

(7) "Commenced" means that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

(c) **Area designation and deterioration increment.** (1) The provisions of this paragraph have been incorporated by reference into the applicable implementation plans for various States, as provided in Subparts B through DDD of its part. Where this paragraph is so incorporated, the provisions shall also be applicable to all lands owned by the Federal Government and Indian Reservations located in such State. The provisions of this paragraph do not apply in those counties or other functionally equivalent areas that pervasively exceeded any national ambient air quality standards during 1974 for sulfur dioxide or particulate matter and then only with respect to such pollutants. States may notify the Administrator at any time of those areas which exceeded the national standards during 1974 and therefore are exempt from the requirements of this paragraph.

(2) (i) For purposes of this paragraph, areas designated as Class I or II shall be limited to the following increases in pollutant concentration occurring since January 1, 1975:

Pollutant	Area designations	
	Class I (g/m ³)	Class II (g/m ³)
Particulate matter:		
	Annual geometric mean	5
24-hr maximum	10	50
Sulfur dioxide:		
	Annual arithmetic mean	2
24-hr maximum	5	100
3-hr 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.

(iii) The air quality impact of sources granted approval to construct or modify prior to January 1, 1975 (pursuant to the approved new source review procedures in the plan) but not yet operating prior to January 1, 1975, shall not be counted against the air quality increments specified in paragraph (c) (2) (i).

(3) (i) All areas are designated Class II as of the effective date of this paragraph. Redesignation may be proposed 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) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation are notified at least 30 days prior to the public hearing, and

(c) A discussion of the reasons for the proposed redesignation is available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contains appropriate notification of the availability of such discussion, and

(d) The proposed redesignation is based on the record of the State's hearing, which must reflect the basis for the proposed redesignation, including consideration of (1) growth anticipated in the area, (2) the social, environmental, and economic effects of such redesignation upon the area being proposed for redesignation and upon other areas and States, and (3) any impacts of such proposed redesignation upon regional or national interests.

(e) The redesignation is proposed after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

(iii) Except as provided in subdivision (iv) of this subparagraph, a State in which lands owned by the Federal Government are located may submit to the Administrator a proposal to redesignate such lands Class I, Class II, or Class III in accordance with subdivision (ii) of the subparagraph provided that:

(a) The redesignation is consistent with adjacent State and privately owned land, and

(b) Such redesignation is proposed after consultation with the Federal Land Manager.

(iv) Notwithstanding subdivision (iii) of this subparagraph, the Federal Land Manager may submit to the Administrator a proposal to redesignate any Federal lands to a more restrictive designation than would otherwise be applicable provided that:

(a) The Federal Land Manager follows procedures equivalent to those required of States under paragraph (c) (3) (i) and,

(b) Such redesignation is proposed after consultation with the State(s) in which the Federal Land is located or which border the Federal land.

(v) Nothing in this section is intended to convey authority to the States over Indian Reservations where States have not assumed such authority under other laws nor is it intended to deny jurisdiction which States have assumed under

other laws. Where a State has not assumed jurisdiction over an Indian Reservation 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) The Indian Governing Body follows procedures equivalent to those required of States under paragraph (c) (3) (i) and,

(b) Such redesignation is proposed after consultation with the State(s) in which the Indian Reservation is located or which border the Indian Reservation and, for those lands held in trust, with the approval of the Secretary of the Interior.

(vi) The Administrator shall approve, within 90 days, any redesignation proposed pursuant to this subparagraph as follows:

(a) Any redesignation proposed pursuant to subdivisions (ii) and (iii) of this subparagraph shall be approved unless the Administrator determines (1) that the requirements of subdivisions (ii) and (iii) of this subparagraph have not been complied with, (2) that the state has arbitrarily and capriciously disregarded relevant considerations set forth in subparagraph (3) (i) (d) of this paragraph, (3) that the State has not requested delegation of responsibility for carrying out the new source review requirements of paragraphs (d) and (e) of this section.

(b) Any redesignation proposed pursuant to subdivision (iv) of this subparagraph shall be approved unless he determines (1) that the requirements of subdivision (iv) of this subparagraph have not been complied with, or (2) that the Federal Land Manager has arbitrarily and capriciously disregarded relevant considerations set forth in subparagraph (3) (ii) (d) of this paragraph.

(c) Any redesignation submitted pursuant to subdivision (v) of this subparagraph shall be approved unless he determines (1) that the requirements of subdivision (v) of this subparagraph have not been complied with, or (2) that the Indian Governing Body has arbitrarily and capriciously disregarded relevant considerations set forth in subparagraph (3) (ii) (d) of this paragraph.

(d) Any redesignation proposed pursuant to this paragraph shall be approved only after the Administrator has solicited written comments from affected Federal agencies and Indian Governing Bodies and from the public on the proposal.

(e) Any proposed redesignation protested to the proposing State, Indian Governing Body, or Federal Land Manager and to the Administrator by another State or Indian Governing Body because of the effects upon such protesting State or Indian Reservation shall be approved by the Administrator only if he determines that in his judgment the redesignation appropriately balances considerations of growth anticipated in the area proposed to be redesignated; the social, environmental and economic effects of such redesignation upon the

area being redesignated and upon other areas and States; and any impacts upon regional or national interests.

(f) The requirements of paragraph (c) (3) (vi) (a) (3) that a State request and receive delegation of the new source review requirements of this section as a condition to approval of a proposed redesignation; shall include as a minimum receiving the administrative and technical functions of the new source review. The Administrator will carry out any required enforcement action in cases where the State does not have adequate legal authority to initiate such actions. The Administrator may waive the requirements of paragraph (c) (3) (vi) (a) (3) if the State Attorney-General has determined that the State cannot accept delegation of the administrative/technical functions.

(vi) 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) The provisions of this paragraph have been incorporated by reference into the applicable implementation plans for various States, as provided in Subparts B through DDD of this part. Where this paragraph is so incorporated, the requirements of this paragraph apply to any new or modified stationary source of the type identified below which has not commenced construction or modification prior to June 1, 1975. A source which is modified, but does not increase the amount of sulfur oxides or particulate matter emitted, or is modified to utilize an alternative fuel, or higher sulfur content fuel, shall not be subject to this paragraph.

(i) Fossil-Fuel Steam Electric Plants of more than 1000 million B.T.U. per hour heat input.

(ii) Coal Cleaning Plants.

(iii) Kraft Pulp Mills.

(iv) Portland Cement Plants.

(v) Primary Zinc Smelters.

(vi) Iron and Steel Mills.

(vii) Primary Aluminum Ore Reduction Plants.

(viii) Primary Copper Smelters.

(ix) Municipal Incinerators capable of charging more than 250 tons of refuse per 24 hour 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.

(2) No owner or operator shall commence construction or modification 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 concentration of the source or modified source, in conjunction with the effects of growth and reduction in emissions after January 1, 1975, of other sources in the area affected by the proposed source, will not violate the air quality increments applicable in any other areas. The analysis of emissions growth and reduction after January 1, 1975, or other sources in the

areas affected by the proposed source shall include all new and modified sources granted approval to construct pursuant to this paragraph; reduction in emissions from existing sources which contributed to air quality during all or part of 1974; and general commercial, residential, industrial, and other sources of emissions growth not exempted by paragraph (c) (2) (iii) of this section which has occurred since January 1, 1975.

(ii) The new or modified source will meet an emission limit, to be specified by the Administrator as a condition to approval, which represents that level of emission reduction which would be achieved by the application of best available control technology, as defined in § 52.01(f), for particulate matter and sulfur dioxide. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, he may instead prescribe a design or equipment standard requiring the application of best available control technology. Such standard shall to the degree possible set forth the emission reductions achievable by implementation of such design or equipment, and shall provide for compliance by means which achieve equivalent results.

(iii) With respect to modified sources, the requirements of subparagraph (2) (ii) of this paragraph shall be applicable only to the facility or facilities from which emissions are increased.

(3) In making the determinations required by paragraph (d) (2) of this section, the Administrator shall, as a minimum, require the owner or operator of the source subject to this paragraph to submit: site information; plans, description, specifications, and drawings showing the design of the source; information necessary to determine the impact that the construction or modification will have on sulfur dioxide and particulate matter air quality levels; and any other information necessary to determine that best available control technology will be applied. Upon request of the Administrator, the owner or operator of the source shall also 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 (such area to be specified by the Administrator) since January 1, 1975.

(4) (i) Where a new or modified 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 modified 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 with respect to lands over which the State has not assumed jurisdiction under other laws.

(iii) Whenever any new or modified 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. 4331), 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.

(5) Where an owner or operator has applied for permission to construct or modify pursuant to this paragraph and the proposed source would be located in an area which has been proposed for redesignation to a more stringent class (or the State, Indian Governing Body, or Federal Land Manager has announced such consideration), approval shall not be granted until the Administrator has acted on the proposed redesignation.

(e) *Procedures for public participation.* (1) (i) Within 20 days after receipt of an application to construct, or any addition to such application, the Administrator shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of paragraph (e) (1) (ii) of this section shall be the date on which all required information is received by the Administrator.

(ii) Within 30 days after receipt of a complete application, the Administrator shall:

(a) Make a preliminary determination whether the source should be approved, approved with conditions, or disapproved.

(b) Make available in at least one location in each region in which the proposed source would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and

(c) Notify the public, by prominent advertisement in newspaper of general circulation in each region in which the proposed source would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the source.

(ii) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance over the locations where the source will be situated as follows: State and local air pollution control agencies, the chief executive of the city and county; any comprehensive regional land use planning agency; and any State, Federal Land Manager or Indian Governing Body whose lands will be significantly affected by the source's emissions.

(iv) 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. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the source would be located.

(v) 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 conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the source would be located.

(vi) The Administrator may extend each of the time periods specified in paragraph (e) (1) (ii), (iv), or (v) of this section by no more than 30 days or such other period as agreed to by the applicant and the Administrator.

(vii) Any owner or operator who constructs, modifies, 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 modification after June 1, 1975, without applying for and receiving approval hereunder, shall be subject to enforcement action under section 113 of the Act.

(3) Approval to construct or modify 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 modify 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), in accordance with subparagraphs (2), (3), and (4) of this paragraph.

(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 and 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 managing land use, such agency shall consult with the appropriate State and local agency which is primarily responsible for managing land use prior to making any determination required by paragraph (d) of this section.

(ii) A copy of the notice pursuant to paragraph (e) (1) (ii) (c) of this section shall be sent to the Administrator through the appropriate regional office.

(3) In accordance with Executive Order 11752, 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 modified sources which are owned or operated by the Federal government or for new or modified sources located on Federal lands; except that, with respect to the latter category, where new or modified 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 modified sources which are located on Indian reservations except where the State has assumed jurisdiction over such land under other laws, in which case the Administrator may delegate his authority to the States in accordance with subparagraphs (2), (3), and (4) of this paragraph.

[FR Doc. 74-28353 Filed 12-4-74; 8:45 am]

Division 3
Subdivision 5

PREVENTION OF SIGNIFICANT AIR QUALITY DETERIORATION

38-001 PURPOSE. The purpose of this subdivision is to provide rules which will prevent significant deterioration of Oregon's air quality, and provide rules at least as stringent as the Environmental Protection Agency's (EPA) significant deterioration rules, thereby allowing the Department to obtain delegation of authority from EPA to administer EPA's required pre-construction review program for certain new or modified sources.

38-005 DEFINITIONS. As used in this subdivision, unless otherwise required by context:

(1) "Administrator" means the Administrator of the Environmental Protection Agency or his designated representative.

(2) "Best Available Control Technology" means at a minimum, any emission control device or technique which is capable of limiting emissions to the levels proposed or promulgated pursuant to 40 CFR, Part 60. Where no standard of performance has been proposed or promulgated for a source or portion thereof under 40 CFR, Part 60, best available control technology shall be determined on a case-by-case basis considering the following:

- (a) The process, fuels, and raw material available and to be employed in the facility involved,
- (b) The engineering aspects of the application of various types of control techniques which have been adequately demonstrated.
- (c) Process and fuel changes,
- (d) The respective costs of the application of all such control techniques, process changes, alternative fuels, etc.
- (e) Any applicable state and local emission limitations, and
- (f) Locational and siting considerations.

(3) "Construction" means fabrication, erection or installation of a stationary source.

(4) "Commenced" means that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

(5) "Director" means the Director of the Department of Environmental Quality.

(6) "Facility" means an identifiable piece of process equipment.

(7) "40 CFR 52.21" means section 52.21 of Part 52 in Title 40 of the Code of Federal Regulations relating to significant deterioration of air quality.

(8) "40 CFR, Part 60" means Part 60 in Title 40 of the Code of Federal Regulations relating to standards of performance for new stationary sources.

(9) "Modification" or "Modified Source" means any physical change in, or change in the method of operation of, a stationary source which increases the emission rate of particulate or sulfur dioxide, except that:

- (a) Routine maintenance, repair and replacement shall not be considered a physical change, and
- (b) The following shall not be considered a change in the method of operation:
 - (A) An increase in the production rate, if such increase does not exceed the operating design capacity of the source;
 - (B) An increase in the hours of operation;
 - (C) Use of an alternative fuel or raw material, if prior to June 1, 1975, the source is designed to accommodate such alternative use.

(10) "Stationary Source" means any building, structure, facility or installation which emits or may emit particulate or sulfur dioxide.

38.010 DETERIORATION INCREMENTS. (1) Areas designated as Class I or Class II shall be limited to the following increases in air pollutant concentrations occurring since January 1, 1975:

Area Designations

Pollutant	Class I (ug/m ³)	Class II (ug/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	700

(2) Areas designated as Class III shall be limited to concentrations of particulate and sulfur dioxide no greater than state ambient air quality standards (OAR Chapter 340, Division 3, Subdivision 1).

(3) The air quality impact of sources granted approval to construct or modify prior to January 1, 1975, but not yet operational prior to January 1, 1975, shall not be counted against the air quality increments specified in (1).

38.015 AREA DESIGNATION. (1) All areas of the State are hereby designated Class II.

(2) The State, Federal Land Managers, or Indian Governing Bodies may propose redesignation of areas to different classes. Redesignation is subject to approval of the Administrator of the Environmental Protection Agency (EPA) and procedures in 40 CFR 52.21.

(3) Designation of areas in (1) or redesignation provided in (2) shall not exempt any area of the State from State ambient air quality standards nor exempt the Department from imposing requirements on new or existing sources necessary to maintain compliance with State ambient air quality standards.

38.020 REVIEW OF NEW OR MODIFIED SOURCES. (1) The provisions of this section shall apply to all new or modified stationary sources of the type identified below which have not commenced construction or modification prior to June 1, 1975. A source which is modified, but does not increase the amount of sulfur dioxide or particulate emitted, or is modified to utilize an alternative fuel, or higher sulfur content fuel, shall not be subject to this rule.

- (a) Fossil-Fuel Steam Electric Plants of more than 1000 million BTU per hour heat input.
- (b) Coal Cleaning Plants.
- (c) Kraft Pulp Mills.
- (d) Portland Cement Plants.
- (e) Primary Zinc Smelters.
- (f) Iron and Steel Mills.
- (g) Primary Aluminum Ore Reduction Plants.
- (h) Primary Copper Smelters.

- (i) Municipal Incinerators capable of charging more than 250 tons of refuse per 24 hour 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).
- (q) Primary Lead Smelters.
- (r) Fuel Conversion Plants.

(2) The Department shall deny issuance of a permit, or impose special permit conditions as necessary if construction or modification of any source subject to this rule will probably cause applicable air quality increments established in Section 38-010 to be exceeded in the near future.

(3) No owner or operator shall commence construction or modification of a source identified in (1) unless the Director determines that, on the basis of information submitted pursuant to subsection 4 of this section:

- (a) The effect on air quality concentration of the source or modified source, in conjunction with the effects of growth and reduction in emissions after January 1, 1975, of other sources in the area affected by the proposed source, will not violate the air quality increments applicable in the area where the source will be located or any other areas. The analysis of emissions growth and reduction after January 1, 1975, of other sources in the areas affected by the proposed source shall include all new and modified sources granted approval to construct pursuant to this rule; reduction in emissions from existing sources which contributed to air quality during all or part of 1974; and general commercial, residential, industrial, and other sources of emissions growth not exempted by (3) of section 38.010 which has occurred since January 1, 1975.
- (b) The new or modified source will meet an emission limit, to be specified by the Director as a condition to approval, which represents that level of emission reduction which would be achieved by the application of best available control technology as defined in Section 38.005 for particulate matter and sulfur

Dioxide. If the Director determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, he may instead prescribe a design or equipment standard requiring the application of best available control technology. Such standard shall, to the degree possible, set forth the emission reductions achievable by the implementation of such design or equipment, and shall provide for compliance by means which achieve equivalent results.

- (c) With respect to modified sources, the requirements of (b) shall be applicable only to the facility or facilities from which emissions are increased.

(4) In making the determinations required by (3), the Director shall, as a minimum, require the owner or operator of the source subject to this section to submit: site information; plans, description, specifications, and drawings showing the design of the source; information necessary to determine the impact that the construction or modification will have on sulfur dioxide and particulate matter air quality levels; and any other information necessary to determine that best available control technology will be applied. Upon request of the Director, the owner or operator of the source shall also 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 (such area to be specified by the Director) since January 1, 1975.

(5) Where an owner or operator has applied for permission to construct or modify pursuant to this section and the proposed source would be located in an area which has been proposed for redesignation to a more stringent class (or the State, Indian Governing Body, or Federal Land Manager has announced such consideration), approval shall not be granted until the Administrator has acted on the proposed redesignation.

38.025 PROCEDURES FOR PUBLIC PARTICIPATION. (1) (a) Within 20 days after receipt of an application to construct, or any addition to such application, the Director shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of (1)(b) of this section shall be the date on which all required information is received by the Director.

- (b) Within 30 days after receipt of a complete application, the Director shall:
 - (A) Make a preliminary determination whether the source should be approved, approved with conditions, or disapproved.

- (B) Make available in at least one location in each region in which the proposed source would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Director's preliminary determination and a copy or summary of other materials, if any, considered by the Director in making his preliminary determination; and
 - (C) Notify the public, by prominent advertisement in newspaper of general circulation in each region in which the proposed source would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Director's preliminary determination on the approvability of the source.
- (c) A copy of the notice required pursuant to this section shall be sent to the applicant and to officials and agencies having cognizance over the locations where the source will be situated as follows: local air pollution control agencies, the chief executive 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.
 - (d) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Director in making his final decision on the application. No later than ten (10) days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Director shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the source would be located.
 - (e) The Director shall take final action on an application within 30 days after the close of the public comment period. The Director shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the source would be located.
 - (f) The Director may extend each of the time periods specified in parts (1)(b), (d) or (e) of this section by no more than 30 days and for such longer period as agreed to by the applicant and the Director.
- (2) Any owner or operator who constructs, modifies, or operates a stationary source not in accordance with the application as approved and conditioned by the Director, or any owner or operator of a stationary source subject to this section who commences construction or modification after June 1, 1975, without applying for and receiving approval hereunder, shall be subject to enforcement action under ORS 468.090 through 468.140 and 468.990 through 468.997.

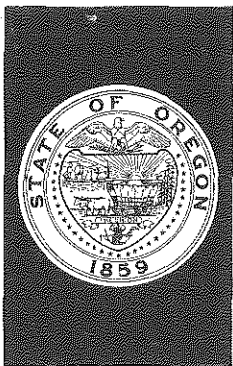
(3) Approval to construct or modify shall become invalid if construction or expansion is not commenced within 18 months after receipt of such approval or if construction is discontinued for a period of 18 months or more. The Director may extend such time period upon a satisfactory showing that an extension is justified.

(4) Approval to construct or modify 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 State Implementation Plan.

(5) The Department shall consult with the appropriate state and local agency primarily responsible for managing land use prior to making any determination required by this Section.

(6) A copy of the notice pursuant to part (1)(b)(C) of this section shall be sent to the Administrator of the Environmental Protection Agency through the appropriate regional office.

38.030 EXCEPTIONS. Any stationary source which has applied to the Administrator prior to EPA delegation of authority to the Department to administer EPA's preconstruction review program required by 40 CFR 52.21, shall be exempted from all or part of this rule as specified by EPA.



ENVIRONMENTAL QUALITY COMMISSION

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

ROBERT W. STRAUB
GOVERNOR

To: Environmental Quality Commission

Joe B. Richards
Chairman, Eugene

From: Director

GRACE S. PHINNEY
Corvallis

Subject: Agenda Item No. E², August 22, 1975, EQC Meeting

JACKLYN L. HALLOCK
Portland

Proposed Adoption of Rule - New Standards of Performance
for Air Contaminant Sources

MORRIS K. CROTHERS
Salem

RONALD M. SOMERS
The Dalles

Background

The Environmental Protection Agency (EPA) adopted five new source performance standards (NSPS) relating to allowable air contaminant emissions on December 23, 1971 and seven others on March 8, 1974. EPA presently retains authority for enforcing NSPS in Oregon.

EPA allows, encourages and is considering delegation of authority to administer NSPS to the State of Oregon. EPA will delegate administrative authority for NSPS, however, only if the Department has adopted rules which are consistent with Federal regulations.

As requested in the Department's staff report dated May 23, 1975 to the EQC, and as authorized by the EQC at the May 23, 1975 meeting, the Department held a public hearing on July 7, 1975 on a proposed Department rule relating to NSPS. At this hearing, oral testimony was presented by two persons and letters with comments were submitted by EPA, the Mid-Willamette Valley Air Pollution Authority and the Asphalt Pavement Association of Oregon.

Discussion

EPA comments (see Attachment 1) include requiring one mandatory change in the Department's proposed rule and nine other suggested changes. The Department has made the one mandatory change in the proposed rule deleting reference to negotiation of compliance schedules. This was done in response to the EPA's position that compliance schedules should not be negotiated, but be handled through state enforcement orders or other routine enforcement proceedings.



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The Department has taken affirmative action on three of the nine suggested changes by EPA. The six other suggested changes have been considered by the Department as not necessary. One of these suggested changes which the Department considers inappropriate would have required new sources to continue submitting all "applications, requests, submissions and reports" to EPA Region X as well as to the Department. This is considered unnecessary as it would be in conflict with one of the primary objectives of delegation, namely, that new sources in Oregon should have one environmental authority to respond to. If EPA were to receive and use all the requested data, then EPA would not really be delegating but merely adding a second regulatory agency to do the same work. Of course, the Department intends to supply EPA data necessary for an audit of Department work, and any other information of importance. The Department's complete files, as always, would remain open to EPA for inspection.

The comments of the Mid-Willamette Valley Air Pollution Authority (Attachment 2) primarily were oriented toward including reference to regional authority in applicable portions of the proposed rule. The Department has incorporated Mid-Willamette's suggested changes where appropriate.

The Asphalt Pavement Association of Oregon, by letter (Attachment 3), requested that the Department not adopt NSPS for asphalt concrete plants since they are the subject of a suit against EPA filed by the National Asphalt Pavement Association.

The National Asphalt Pavement Association has not won injunctive relief against enforcement of the existing NSPS for asphalt concrete plants, thus, EPA is bound to enforce and applicable plants are bound to comply with the existing standard, even if the Department does not adopt NSPS for asphalt concrete plants.

Further, the Oregon Asphalt Pavement Association indicates that EPA's NSPS emission standard of 0.04 grains per dscf, which is the major subject of litigation, cannot be attained at all with currently available equipment. In Oregon, some existing asphalt concrete plants, modified plants and new plants have demonstrated compliance with the aforementioned emission limits.

Also, the State of Washington, which has adopted NSPS and has been delegated authority to administer the program by EPA, did not exempt asphalt concrete plants from their regulations.

It is therefore the Department's conclusion that asphalt concrete plants should not be exempt from the Department's proposed rule. If for some reason a court ruling and EPA action changes the NSPS emission limits for asphalt paving plants, then applicable limits would be changed in the Department's rule.

Mr. Tom Guilbert, a Portland attorney, testified at the public hearing that the Department did not have to adopt rules to receive delegation and to administer NSPS and that the numerical limits of NSPS would prevent application of latest emission control technology.

EPA has indicated that the Department must have state regulations which are consistent with Federal Regulations before delegation of responsibility of administering federal NSPS can be made (see attached EPA letter). Without Department rules relating to NSPS, there is serious concern of the legality of the State enforcing the Federal NSPS regulation, therefore, the Department believes that adoption of the proposed rule is mandatory for the State to effectively administer Federal NSPS.

The Department shares Mr. Guilbert's concern about application of "highest and best control technology," irregardless of numerical limits. The Department believes Section 25-000.30, Statement of Policy, in the proposed rule adequately addresses this subject.

The Department has made modification to the proposed NSPS rule taking into account all relevant testimony received at the July 7, 1975 public hearing. A copy of the modified rule is attached (Attachment 4).

Conclusions

1. The proposed Department rule relating to new source performance standards has been modified within practical limits to take into account testimony received at the July 7, 1975 public hearing.
2. Adoption of the proposed rule as modified should allow EPA to delegate responsibility of administering Federal New Source Performance Standards to the State of Oregon.

Recommendation

It is the Director's recommendation that the attached proposed rule (Attachment 4) entitled, "Standards of Performance for New Stationary Sources" be adopted.



LOREN KRAMER
Director

JFK:cs
7/21/75
Attachments - 4
Hearings Officer's Report

Attachment 1



U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION X

1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

JUL 8 1975

RECEIVED
JUL 7 1975

REPLY TO
ATTN OF: M/S 625

AIR QUALITY CONTROL

Mr. H. M. Patterson
Assistant Director
Air Quality Control Division
Department of Environmental Quality
1234 SW Morrison Street
Portland, Oregon 97205

Dear Mr. Patterson:

Region X EPA staff has reviewed the proposed June 6, 1975 Department of Environmental Quality rules relating to "Standards of Performance for New Stationary Sources" and "Emission Standards for Hazardous Air Contaminants". We appreciate the Department's willingness to develop the regulatory framework for implementing these programs. Before EPA can delegate the responsibility for these federal programs, we must ensure that the state regulations are consistent with Federal regulations to provide for equivalent standards on a national basis. We have therefore reviewed these proposed regulations to assure that such consistency exists. Based on that review, we believe a few modifications to the proposed regulations are necessary before we can delegate the implementation and enforcement of these two federal programs to the Department.

First, with respect to "Standards of Performance for New Stationary Sources (NSPS)", OAR Section 25-000.80 entitled COMPLIANCE, contains a provision whereby compliance schedules could be negotiated in the event a source fails to demonstrate or maintain compliance. It is EPA's position that in this situation formal compliance schedules should not be negotiated. Extensions of compliance dates could be handled through state enforcement orders and other routine enforcement proceedings. Concerning other suggested changes to the regulation please refer to Attachment 1. These changes were discussed with Mr. Bosserman of your staff on June 30, 1975.

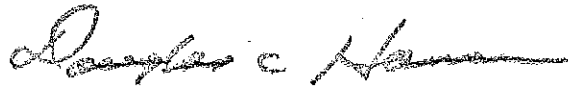
Second, the Department's "Proposed Rules Relating to Emission Standards for Hazardous Air Contaminants" permit the issuance by the Department of written approval for a source to operate in violation of these proposed rules for a period of up to two years. However, the

(2)

April 6, 1973 federal promulgation of National Emission Standards for Hazardous Air Pollutants (NESHAPS) allows for EPA to grant waivers of compliance for periods ending no later than April 6, 1975. Thus, all NESHAPS sources are to be in compliance at this time and there is no authority to administratively grant further extensions. Therefore, all language authorizing sources to operate in violation of the applicable standards should be deleted. Any extensions to compliance dates must then be granted through a state enforcement proceeding as opposed to an administrative process. Additional suggested changes for the sake of clarity, accuracy, and equivalent stringency with the Federally promulgated NESHAPS regulations are provided in Attachment 2. For your information, these deficiencies, as well as the above problem permitting compliance date extensions, were discussed with Mr. Johnson of your staff on June 19, 1975.

With the above noted modifications to the proposed regulations, EPA believes that following submittal by the Department, these new requirements can be approved and delegation of authority of these Federal programs can be made to the Department.

Sincerely yours,



Douglas C. Hansen
Director

Air and Hazardous Materials Division

cc: F. Bolton
N. Edmisten

Other Suggested Changes to the Proposed Rules Relating to NSPS

25-000.50
APPLICABILITY

The definition of "commenced" should be included in the reference to federal regulations i.e. "(40 CFR 60.2 (g), (h) and (i))",

ok

25-000.60

In item (1), pertinent material must be submitted to EPA, "Seattle, Washington" in lieu of "Washington, D.C." as specified in the proposed rule. Furthermore, after delegation to the Department, applications, requests, submissions and reports shall continue to be forwarded to EPA. The proposed rule implies that such information would no longer be sent to EPA. To rectify this, the rule should read "... reports shall also be submitted to the Department or applicable Regional Authority". This language is currently stated in 40 CFR 60.4(b) and will apply to the Department when delegation occurs.

not appropriate

25-000.70(1)

The visible emission standards contained in this section are more stringent than those contained in Section 21-015. It is suggested that permits for other new fossil fuel-fired steam generators which contain provisions pursuant to Section 21-015 be revised to meet the requirements of Section 25-000.70(1). This situation is applicable to the Boardman thermal power plant.

not necessary

25-000.70(1)(a)(i)

The term "fossil fuel" should be defined since steam generators could be fired by other fuels such as wood and/or municipal wastes.

not necessary

25-000.70(6)

- . This section should be clarified to show that the standards apply to each "... asphalt concrete plant, either portable or stationary." This would be consistent with the language contained in Section 25-110.
- . Sections 25-105 through 25-125 should be revised to show that new or modified asphalt concrete plants must comply with the requirements contained in Section 25-000.70(6).
- . Section 25-120 should be revised to exclude its applicability to new or modified plants.

not necessary

not necessary

not necessary

25-000.70(7)(a)(iii)

The third line is improperly referenced and should read (in part) "... that permitted by subparagraph (i) of this section..."

ok

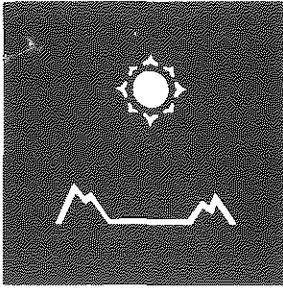
25-000.80

The third sentence appears to have a word or phrase omitted after the word "... maintain". It is assumed the phrase should state "... or maintain compliance, the compliance provision of..."

ok

attached 2

MICHAEL D. ROACH
Director



MID WILLAMETTE VALLEY AIR POLLUTION AUTHORITY

2585 STATE STREET / SALEM, OREGON 97301 / TELEPHONE AC 503 / 581-1715

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
JUN 24 1975
[initials]

June 24, 1975

Mr. H.M. Patterson
Department of Environmental Quality
1234 S.W. Morrison
Portland, Oregon 97205

Dear Mr. Patterson:

The Mid-Willamette Valley Air Pollution Authority has reviewed the draft submitted June 6, 1975 of the "Proposed Standards of Performance For New Stationary Sources" and offers the following changes and additions:

25-000.10 Statement of Purpose. The U.S. Environmental Protection Agency has adopted in Title 40, Code of Federal Regulations, Part 60, Standards of Performance For Certain New Stationary Sources. It is the intent of [this rule] these rules to specify requirements and procedures necessary for the Department to implement and enforce the aforementioned federal regulation.

25-000.30 Statement of Policy. It is hereby declared the policy of the Department to consider the performance standards for new stationary sources contained herein to be minimum standards and, as technology advances, conditions warrant, and Department or regional authority rules or permit conditions require, more stringent standards shall be applied.

25-000.50 Applicability. [This rule] These rules shall be applicable to new stationary sources identified in Section 25-000.7 for which construction or modification has been commenced [()], as defined in Title 40, CFR 60.2 (g) and Ch) [)] , after the effective date of [this rule] these rules.

25-000.70 Performance Standards --- (3) Standards of Performance For Portland Cement Plant. The following emission standards shall apply to each Portland Cement Plant [.] :

(ii) Exhibit greater than [20] 10 percent opacity,---

25-000.90 More Restrictive Regulations. If at any time there is a conflict between Department or regional authority rules and the

DEQ Response

not necessary

OK

not necessary

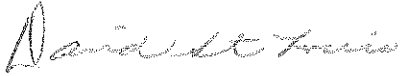
2090 is
New EPA
Rule

OK

Page 2
H.M. Patterson
June 24, 1975

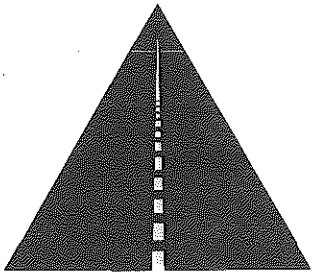
federal regulation (40 CFR, Part 60) the more stringent standard shall apply.

Sincerely,

A handwritten signature in cursive script that reads "David St. Louis".

David St. Louis
Interim Director

DSL/taa



Attachment 3

MIKE HUDDLESTON
Manager
STATE OFFICERS:
JOHN LOOSLEY
President
HOWARD STINSON
Vice President
PETE IDLEWINE
Secretary-Treasurer

ASPHALT PAVEMENT
ASSOCIATION OF OREGON

3421 25th Street S.E. • P.O. Box 2228
Salem, Oregon 97308 • (503) 363-3858

July 2, 1975

Air Pollution Division
Department of Environmental Quality
1234 S.W. Morrison
Portland, Oregon 97205

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED
JUL 7 1975

AIR QUALITY CONTROL

Gentlemen:

I will be unable to attend the Public Hearing on July 7, 1975, regarding the adoption of the Proposed Standards of Performance for New Stationary Sources. Therefore, by this letter I wish to register an objection to the inclusion of Asphalt Concrete Plants in your new proposed regulations. My reasons are as follows:

The National Asphalt Pavement Association has filed suit against the Environmental Protection Agency to upset the regulation. The basis of the suit is as follows:

1. the proposed concentration standard of 0.04 gr/dscf cannot be attained either consistently or at all with currently available equipment;
2. the standard should be 0.06 gr/dscf;
3. the standard should allow higher emissions when heavy fuel oil is burned;
4. the type of aggregate used by a plant changes and affects the emissions;
5. EPA failed to consider the impact of the standard on mobile plants, continuous-mix plants, and drum-mixing plants; and
6. the EPA control cost estimates are too low.

In my past six years with the Asphalt Association and my personal visit to all the plants in Oregon many times, I am sure the National Association is correct and if justice prevails the EPA will lose the suit and EPA will have to revise the regulations.

PAVING THE WAY WITH SMOOTH, SAFE, DURABLE SURFACE

BOARD OF DIRECTORS: Ivan Wickersham, Bernie Hayes, Jon Morse, Cecil Johnson, Wally Hector and Gary Wildish

Air Pollution Division
July 2, 1975
Page 2

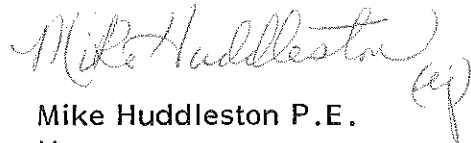
Let me remind you the Portland Cement Association filed and won a suit against the EPA over New Source Standards and their case was not as good as ours.

Our request is to delay the adoption of the New Source Regulations for Asphalt Plants until the suit is finished. It has been filed for over two years and should be concluded this year.

In closing may I also request that when you do adopt the EPA regulations as Oregon's new standard that you adopt the EPA testing methods as well. Oregon tests different than EPA and it would be a real mess for the manufacturers thru out USA to meet variable test methods in various states.

I certainly do not think either of these requests are out of line and respectfully request your consideration.

Sincerely yours,

 (ej)
Mike Huddleston P.E.
Manager

MH/eaj

CC: Harold Patterson
Fred Skirvin
Peter Bosserman
DEQ Director

PROPOSED

STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

25.000.10 STATEMENT OF PURPOSE. The U. S. Environmental Protection Agency has adopted in Title 40, Code of Federal Regulations, Part 60, Standards of Performance for certain new stationary sources. It is the intent of this rule to specify requirements and procedures necessary for the Department to implement and enforce the aforementioned Federal Regulation.

25-000.20 DEFINITIONS.

(1) "Administrator" herein and in Title 40, Code of Federal Regulations, Part 60, means the Director of the Department or appropriate Regional Authority.

(2) "Federal Regulation" means Title 40, Code of Federal Regulations, Part 60, as promulgated prior to June 1, 1975.

(3) "CFR" means Code of Federal Regulations.

(4) "Regional Authority" means a regional air quality control authority established under provisions of ORS 468.505.

25-000.30 STATEMENT OF POLICY is hereby declared the policy of the Department to consider the performance standards for new stationary sources contained herein to be minimum standards; and, as technology advances, conditions warrant, and Department or regional authority rules require or permit, more stringent standards shall be applied.

25-000.40 DELEGATION. The Commission may, when any Regional Authority requests and provides evidence demonstrating its capability to carry out the provisions of these rules, 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.

7/29/75

25-000.50 APPLICABILITY. This Rule shall be applicable to new stationary sources identified in Section 25-000.70 for which construction or modification has been commenced, as defined in Title 40, CFR 60.2(g), (h) and (i), after the effective date of these rules. New stationary sources which are subject to Federal enforcement of Standards of Performance for New Stationary Sources prior to the effective date of these rules shall be subject to this Rule only after the U. S. EPA has certified to the Department that compliance with the Federal Regulation has been achieved.

25-000.60 GENERAL PROVISIONS. Title 40, CFR, Part 60, Subpart A, as promulgated prior to June 1, 1975, is by this reference adopted and incorporated herein with the exception of Section 60.4 (address), 60.5 (determination of construction or modification) and 60.6 (review of plans).

(1) Section 60.4 of Title 40 CFR, Part 60 requiring submission of pertinent material to EPA, Washington D.C. is not incorporated herein because all applications, requests, submissions and reports shall be submitted to the Department or applicable Regional Authority.

(2) Section 60.5 and 60.6 of Title 40 CFR, Part 60, are not incorporated herein because they provide for pre-construction review of new stationary sources only on request. By virtue of OAR Chapter 340, Sections 20-020 through 20-030 and Sections 20-033.02 through 20-033.20 such review by the Department is mandatory and a notice of approval and permit is required before the construction, installation or establishment of a new stationary source may commence.

25-000.70 PERFORMANCE STANDARDS. Title 40 CFR, Part 60, except Subpart A which is adopted by reference in Section 25-000.60, as promulgated prior to June 1, 1975, is by this reference adopted and incorporated herein. As of June 1, 1975, the Federal Regulation adopted by reference hereby sets the following emission standards for the following new stationary source categories.

(1) Standards of Performance for Fossil Fuel-Fired Steam Generators. The following emission standards apply to each fossil fuel-fired steam generating unit of more than 63 million Kilogram-calories per hour (250 million BTU/hr) heat input.

(a) Standard for Particulate Matter. No owner or operator subject to the provision of this Rule shall cause to be discharged into the atmosphere from any affected facility any gases which:

(i) Contain particulate matter in excess of 0.18 g per million cal heat input (0.10 lb per million BTU) derived from fossil fuel.

(ii) Exhibit greater than 20 percent opacity except that a maximum of 40 percent opacity shall be permissible for not more than 2.0 minutes in any hour. Where the presence of uncombined water is the only reason for failure to meet the requirements of this paragraph, such failure will not be a violation of this section.

(b) Standard for Sulfur Dioxide. No owner or operator subject to the provisions of this Rule shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of:

(i) 1.4 g per million cal. heat input (0.80 lb per million BTU) derived from liquid fossil fuel.

(ii) 2.2 g per million cal. heat input (1.2 lb per million BTU) derived from solid fossil fuel.

(iii) Where different fossil fuels are burned simultaneously in any combination, the applicable standard shall be determined by proration using the following formula:

$$\frac{y(1.4)+z(2.2)}{y+z}$$

where:

Y is the percentage of total heat input derived from liquid fossil fuel, and z is the percentage of total heat input derived from solid fossil fuel.

(iv) Compliance shall be based on the total heat input from all fossil fuel burned, including gaseous fuels.

(c) Standard for Nitrogen Oxides. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO₂ in excess of:

(i) 0.36 g per million cal. heat input (0.20 lb per million BTU) derived from gaseous fossil fuel.

(ii) 0.54 g per million cal. heat input (0.30 lb per million BTU) derived from liquid fossil fuel.

(iii) 1.26 g per million cal. heat input (0.70 lb per million BTU) derived from solid fossil fuel (except lignite or a solid fossil fuel containing 25 percent, by weight, or more of coal refuse).

(iv) When different fossil fuels are burned simultaneously in any combination the applicable standard shall be determined by proration using the following formula:

$$\frac{x(0.36)+y(0.54)+z(1.26)}{x+y+z}$$

where:

x is the percentage of total heat input derived from gaseous fossil fuel,

y is the percentage of total heat input derived from liquid fossil fuel, and

z is the percentage of total heat input derived from solid fossil fuel (except lignite or a solid fossil fuel containing 25 percent, by weight, or more of coal refuse.)

When lignite or a solid fossil fuel containing 25 percent by weight, or more of coal refuse is burned in combination with gaseous, liquid or other solid fossil fuel, the standard for nitrogen oxides does not apply.

(2) Standards of Performance for Incinerators. The following emission standards apply to each incinerator whose charging rate is more than 45.36 metric tons (50 tons) per day.

(a) Standard for Particulate Matter. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere any gases which contain particulate matter in excess of 0.18 g/dscm (0.080 gr/dscf) corrected to 12 percent CO₂.

(3) Standards of Performance for Portland Cement Plants. The following emission standards shall apply to each Portland cement plant.

(1) Standard for Particulate Matter from Kiln. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any kiln any gases which:

(i) Contain particulate matter in excess of 0.15 Kg. per metric ton (0.30 lb per ton) of feed (dry basis) to the kiln.

(ii) Exhibit greater than 20 percent opacity, except that where the presence of uncombined water is the only reason for failure to meet the requirements for this standard, such failure shall not be a violation of this standard.

(b) Standard for Particulate Matter from Clinker Cooler. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any clinker cooler any gases which:

(i) Contain particulate matter in excess of 0.050 Kg per metric ton (0.10 lb per ton) of feed (dry basis) to the kiln.

(ii) Exhibit 10 percent opacity or greater.

(c) Standard for Particulate Matter for Other Facilities. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility other than the kiln and clinker cooler any gases which exhibit 10 percent opacity or greater.

(4) Standards of Performance for Nitric Acid Plants. The following emission standards apply to each nitric acid plant which produces "weak nitric acid," which is 30 to 70 percent in strength, by either the pressure or atmospheric pressure process.

(a) Standard for Nitrogen Oxides. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which:

(i) Contain nitrogen oxides, expressed as NO_2 in excess of 1.5 Kg per metric ton of acid produced (3.0 lb per ton), the production being expressed as 100 percent nitric acid.

(ii) Exhibit 10 percent opacity or greater. Where the presence of uncombined water is the only reason for failure to meet the requirements of this paragraph, such failure will not be a violation of this section.

(5) Standards of Performance for Sulfuric Acid Plants. The following emission standards apply to each sulfuric acid production unit but does not include facilities where conversion to sulfuric acid is utilized primarily as a means of preventing emissions to the atmosphere of sulfur dioxide or other sulfur compounds.

(a) Standards for Sulfur Dioxide. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of 2.0 Kg per metric ton of acid produced (4.0 lb per ton), the production being expressed as 100 percent H_2SO_4 .

(b) Standard for Acid Mist. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which:

(i) Contain acid mist, expressed as H_2SO_4 , in excess of 0.075 Kg per metric ton of acid produced (0.15 lb per ton), the production being expressed as 100 percent H_2SO_4 .

(ii) Exhibit 10 percent opacity, or greater. Where the presence of uncombined water is the only reason for failure to meet the requirements of this paragraph, such failure will not be a violation of this section.

(6) Standards of Performance for Asphalt Concrete Plants. The following emission standards apply to each asphalt concrete plant.

(a) Standard for Particulate Matter. No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from any affected facility any gases which:

(i) Contain particulate matter in excess of 90 mg/dscm (0.040 gr/dscf).

(ii) Exhibit 20 percent opacity or greater. Where the presence of uncombined water is the only reason for failure to meet the requirements of this paragraph, such failure shall not be a violation of this section.

(7) Standards of Performance for Petroleum Refineries. The following emission standards apply to the following affected facilities in petroleum refineries: Fluid catalytic cracking unit catalyst regenerators, fluid catalytic cracking unit incinerator-waste heat boilers, and fuel gas combustion devices.

(a) Standard for Particulate Matter. No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from any fluid catalytic cracking unit catalyst regenerator or from any fluid catalytic cracking unit incinerator-waste heat boiler:

(i) Particulate matter in excess of 1.0 Kg/1000 kg (1.0 lb/1000 lb) of coke burn-off in the catalyst regenerator.

(ii) Gases exhibiting 30 percent opacity or greater, except for 3.0 minutes in any one hour. Where the presence of uncombined water is the only reason for failure to meet the requirements of this subparagraph, such failure shall not be a violation of this section.

(iii) In those instances in which auxiliary liquid or solid fossil fuels are burned in the fluid catalytic cracking unit incinerator-waste boiler, particulate matter in excess of that permitted by subparagraph (7)(a)(i) of this section may be emitted to the atmosphere, except that the incremental rate of particulate emissions shall not exceed 0.18 g/million cal. (0.10 lb/million BTU) of heat input attributable to such liquid or solid fuel.

(b) Standard for Carbon Monoxide. No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from the fluid catalytic cracking unit catalyst regenerator any gases which contain carbon monoxide in excess of 0.050 percent by volume.

(c) Standard for Sulfur Dioxide. No owner or operator subject to the provisions of this rule shall burn in any fuel gas combustion device any fuel gas which contains H_2S in excess of 230 mg/dscm (0.10 gr/dscf), except as provided in this section. The combustion of process upset gas in a flare, or the combustion in a flare of process gas or fuel gas which is released to the flare as a result of relief valve leakage, is exempt from this paragraph. The owner or operator may elect to treat the gases resulting from the combustion of fuel gas in a manner which limits the release of SO_2 to the atmosphere if it is shown to the satisfaction of the Administrator that this prevents SO_2 emissions as effectively as compliance with the requirements of this section.

(8) Standards of Performance for Storage Vessels for Petroleum Liquids. The following requirements apply to each storage vessel for petroleum liquids which has a storage capacity greater than 151,412 liters (40,000 gallons). These requirements do not apply to storage vessels for petroleum or condensate stored, processed, and/or treated at a drilling and production facility prior to custody transfer. "Petroleum liquids" means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery but does not mean Number 2 through Number 6 fuel oils as specified in ASTM-D-396-69, gas turbine fuel oils Number 2-GT through 4-GT as specified in ASTM-D-2880-71, or diesel fuel oils Numbers 2-D and 4-D as specified in ASTM-D-975-68.

(a) Standard for Hydrocarbons. The owner or operator of any storage vessel to which this subpart applies shall store petroleum liquids as follows:

(i) If the true vapor pressure of the petroleum liquid, as stored, is equal to or greater than 78 mm Hg (1.5 psia), the storage vessel shall be equipped with a floating roof, a vapor recovery system, or an equivalent.

(ii) If the true vapor pressure of the petroleum liquid as stored is greater than 570 mm Hg (11.1 psia), the storage vessel shall be equipped with a vapor recovery system or its equivalent.

(9) Standard of Performance for Secondary Lead Smelters. The following emission standards apply to the following facilities subject to this rule in secondary lead smelters: Pot furnaces of more than 250 Kg (550 lbs) charging capacity, blast (cupola) furnaces, and reverberatory furnaces.

(a) Standard for Particulate Matter. No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from a blast (cupola) or reverberatory furnace any gases which:

(i) Contain particulate matter in excess of 50 mg/dscm (0.022 gr/dscf).

(ii) Exhibit 20 percent opacity or greater.

(iii) No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from any pot furnace any gases which exhibit 10 percent opacity or greater.

(iiii) Where the presence of uncombined water is the only reason for failure to meet the requirements of this section, such failure shall not be a violation of this section.

(10) Standards of Performance for Secondary Brass and Bronze Ingot Production Plants. The following emission standards apply to the following affected facilities in secondary brass or bronze ingot production plants subject to this rule: Reverberatory and electric furnaces of 1000 Kg (2205 lb) or greater production capacity and blast (cupola) furnaces of 250 Kg/hr (550 lb/hr) or greater production capacity.

(a) Standard for Particulate Matter. No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from a reverberatory furnace any gases which:

(i) Contain particulate matter in excess of 50 mg/dscm (0.022 gr/dscf).

(ii) Exhibit 20 percent opacity or greater.

(iii) No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from any blast (cupola) or electric furnace any gases which exhibit 10 percent opacity or greater.

(iiii) Where the presence of uncombined water is the only reason for failure to meet the requirements of this section, such failure shall not be a violation of this section.

(11) Standards of Performance for Iron and Steel Plants. The following emission standards apply to each basic oxygen process furnace in iron and steel plants subject to this rule.

(a) Standard for Particulate Matter. No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from any affected facility any gases which contain particulate matter in excess of 50 mg/dscm (0.022 gr/dscf).

(12) Standards of Performance for Sewage Treatment Plants. The following emission standards apply to each incinerator which burns the sludge produced by municipal sewage treatment facilities.

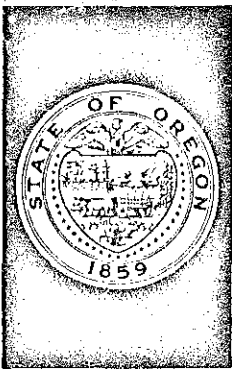
(a) Standard for Particulate Matter. No owner or operator of any sewage sludge incinerator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere of:

(i) Particulate matter at a rate in excess of 0.65 g/Kg (1.30 lb/ton) dry sludge input.

(ii) Any gases which exhibit 20 percent opacity or greater. Where the presence of uncombined water is the only reason for failure to meet the requirements of this paragraph, such failure shall not be a violation of this section.

25-000.80 COMPLIANCE. Compliance with standards set forth in this Rule shall be determined by performance tests and monitoring methods as set forth in the Federal Regulation adopted by reference herein.

25-000.90 MORE RESTRICTIVE REGULATIONS. If at any time there is a conflict between Department or regional authority rules and the Federal Regulation (40 CFR, Part 60) the more stringent shall apply.



ENVIRONMENTAL QUALITY COMMISSION

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

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The Dalles

To: Environmental Quality Commission

From: Hearing Officer

Subject: Hearing Officer's Report in the matter of two public hearings on the proposed adoption of (a) Emission Standards for Hazardous Air Contaminants and (b) Standards of Performance for New Stationary Sources (NSPS).

Summary

The hearings were conducted at 1:30 p.m. and 3:30 p.m. respectively on June 7, 1975 in the Department's Portland offices.

Despite requisite public notice as to the time and place of hearing, and as was expected, public testimony was sparse. It is felt that the presence of federal enforcement in the subject areas left open only the main issue of whether the State should seek delegation of enforcement powers. Written testimony was received of the Environmental Protection Agency (EPA), Mr. Mike Huddleston of the Asphalt Association, and Mr. Thomas Guilbert. All three writings are attached. Oral testimony was offered by Mr. Thomas Guilbert and the Department's Mr. Peter Bosserman.

In brief, EPA urged that the rules be altered so as to afford no compliance procedures for sources in violation of NSPS. Compliance extensions should be granted, it was suggested, only through routine enforcement procedures. Secondly, the EPA noted that permission to operate in violation of the Emission Standards for Hazardous Air Contaminants would render the State regulations less stringent than their federal counterparts (NESHAPS) which require compliance no later than April 6, 1975. This was found objectionable for purposes of delegation of authority to the State to enforce NESHAPS. Additional "housekeeping" suggestions were made.



Contains
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Mr. Mike Huddleston objected to the inclusion of Asphalt Concrete Plants in the proposed regulations. He urged that the regulation was too strict and noted that suit had been filed against the EPA to overturn their standard. His reasons are set forth in his letter (attached).

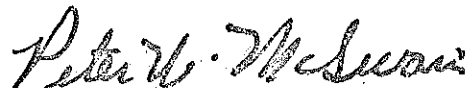
Mr. Peter Bosserman of the Department's Air Quality Program took issue with Mr. Huddleston's contention, noting that he had observed at least two "baghouse" operations wherein the proposed standard was met with some to spare.

Mr. Thomas Guilbert, through written and oral testimony, objected that the State could enforce the federal standard without adopting its own regulations with regard to numerical limitations. He further urged that the adoption of the same standards imposed federally was to espouse standards too lax and to encourage procrastination by sources which should be forced to employ Highest and Best Practicable Treatment Control. He added that he saw no problem in the idea of proposing a procedure for State enforcement of federal standards.

Issues

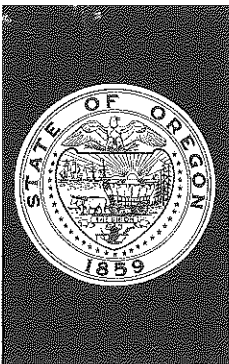
1. Whether adoption of State standards identical to or more stringent than EPA standards is necessary or desirable to:
 - (a) gain delegation of enforcement authority from EPA in the subject areas,
 - (b) gain standing to enforce the standards in court, and
 - (c) enable the State to impose and collect civil penalties for violations.
2. Whether the proposed concentration standard of .04 grams per dry standard cubic foot as applied to Asphalt Concrete Plants is too stringent.

Respectfully submitted,



Peter W. McSwain
Hearing Officer

Attached



ENVIRONMENTAL QUALITY COMMISSION

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

Robert W. Straub
GOVERNOR

Joe B. Richards
Chairman, Eugene

GRACE S. PHINNEY
Corvallis

JACKLYN L. HALLOCK
Portland

MORRIS K. CROTHERS
Salem

RONALD M. SOMERS
The Dalles

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item E³ August 22, 1975, EQC Meeting

Consideration of Adoption of Emission Standards for Hazardous
Air Contaminants (Asbestos, Beryllium and Mercury)

Background

On May 23, 1975, the Commission authorized the Director to schedule a public hearing for the purpose of receiving testimony relevant to the proposed adoption of Rules establishing emission limits for Asbestos, Beryllium and Mercury for sources within the state. Adoption of the proposed Rules would permit delegation of authority over those sources from EPA to the Department, and EPA has indicated that delegation would be granted following adoption of the Rules.

The public hearing for the proposed Rules was scheduled and held in the Fifth Floor Conference Room of the Department at 1:30 p.m. on July 7, 1975. Public notice was previously given as required and copies of the proposed Rules were made available for public inspection.

Discussion

Comments on the proposed Rules were received from EPA and from Mr. Thomas Guilbert, and are included as a part of the Hearing Officer's report (Attachment 1). The proposed Rules included as Attachment 2, have been amended to incorporate changes suggested by EPA. The Department considered the Hearing Officer's Report wherein Mr. Tom Guilbert saw no problem in adopting procedures for State enforcement of the federal regulation in lieu of adoption of the proposed emission standards. After conferring with legal counsel, the staff concluded that the current proposed Rules provide both procedure and a legal basis for enforcement of the Rules, and also a clear basis for delegation of authority from EPA.

All known sources in Oregon of contaminants affected by the proposed Rules are considered to be in compliance with the standards at this time, and no known health hazards exist in Oregon from emissions of these contaminants.



Contains
Recycled
Materials

Conclusions

The proposed Rules, Emission Standards for Hazardous Air Contaminants, OAR Chapter 340, Sections 25-450 through 25-480 will, if adopted, fulfill all requirements for delegation of authority over sources of these contaminants from EPA to the Department.

Director's Recommendation

It is the recommendation of the Director that the proposed Rules, Emission Standards for Hazardous Air Contaminants, be adopted by the Commission, to become a part of Oregon Administrative Rules, Chapter 340, Division 2, Subdivision 5, Sections 25-450 through 25-480.



LOREN KRAMER
Director

Attachment 1 - Hearings Officer's Report
Attachment 2 - Proposed Rules

7/10/75 RMJ



ATTACHMENT 1

ENVIRONMENTAL QUALITY COMMISSION

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The Dalles

To: Environmental Quality Commission

From: Hearing Officer

Subject: Hearing Officer's Report in the matter of two public hearings on the proposed adoption of (a) Emission Standards for Hazardous Air Contaminants and (b) Standards of Performance for New Stationary Sources (NSPS).

Summary

The hearings were conducted at 1:30 p.m. and 3:30 p.m. respectively on June 7, 1975 in the Department's Portland offices.

Despite requisite public notice as to the time and place of hearing, and as was expected, public testimony was sparse. It is felt that the presence of federal enforcement in the subject areas left open only the main issue of whether the State should seek delegation of enforcement powers. Written testimony was received of the Environmental Protection Agency (EPA), Mr. Mike Huddleston of the Asphalt Association, and Mr. Thomas Guilbert. All three writings are attached. Oral testimony was offered by Mr. Thomas Guilbert and the Department's Mr. Peter Bosserman.

In brief, EPA urged that the rules be altered so as to afford no compliance procedures for sources in violation of NSPS. Compliance extensions should be granted, it was suggested, only through routine enforcement procedures. Secondly, the EPA noted that permission to operate in violation of the Emission Standards for Hazardous Air Contaminants would render the State regulations less stringent than their federal counterparts (NESHAPS) which require compliance no later than April 6, 1975. This was found objectionable for purposes of delegation of authority to the State to enforce NESHAPS. Additional "housekeeping" suggestions were made.



Mr. Mike Huddleston objected to the inclusion of Asphalt Concrete Plants in the proposed regulations. He urged that the regulation was too strict and noted that suit had been filed against the EPA to overturn their standard. His reasons are set forth in his letter (attached).


Mr. Peter Bosserman of the Department's Air Quality Program took issue with Mr. Huddleston's contention, noting that he had observed at least two "baghouse" operations wherein the proposed standard was met with some to spare.

Mr. Thomas Guilbert, through written and oral testimony, objected that the State could enforce the federal standard without adopting its own regulations with regard to numerical limitations. He further urged that the adoption of the same standards imposed federally was to espouse standards too lax and to encourage procrastination by sources which should be forced to employ Highest and Best Practicable Treatment Control. He added that he saw no problem in the idea of proposing a procedure for State enforcement of federal standards.

Issues

1. Whether adoption of State standards identical to or more stringent than EPA standards is necessary or desirable to:
 - (a) gain delegation of enforcement authority from EPA in the subject areas,
 - (b) gain standing to enforce the standards in court, and
 - (c) enable the State to impose and collect civil penalties for violations.
2. Whether the proposed concentration standard of .04 grams per dry standard cubic foot as applied to Asphalt Concrete Plants is too stringent.

Respectfully submitted,



Peter W. McSwain
Hearing Officer

Attached

U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION X

1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

JUL 8 1975

RECEIVED
JUL 7 1975

AIR QUALITY CONTROL



REPLY TO
ATTN OF: M/S 625

Mr. H. M. Patterson
Assistant Director
Air Quality Control Division
Department of Environmental Quality
1234 SW Morrison Street
Portland, Oregon 97205

Dear Mr. Patterson:

Region X EPA staff has reviewed the proposed June 6, 1975 Department of Environmental Quality rules relating to "Standards of Performance for New Stationary Sources" and "Emission Standards for Hazardous Air Contaminants". We appreciate the Department's willingness to develop the regulatory framework for implementing these programs. Before EPA can delegate the responsibility for these federal programs, we must ensure that the state regulations are consistent with Federal regulations to provide for equivalent standards on a national basis. We have therefore reviewed these proposed regulations to assure that such consistency exists. Based on that review, we believe a few modifications to the proposed regulations are necessary before we can delegate the implementation and enforcement of these two federal programs to the Department.

First, with respect to "Standards of Performance for New Stationary Sources (NSPS)", OAR Section 25-000.80 entitled COMPLIANCE, contains a provision whereby compliance schedules could be negotiated in the event a source fails to demonstrate or maintain compliance. It is EPA's position that in this situation formal compliance schedules should not be negotiated. Extensions of compliance dates could be handled through state enforcement orders and other routine enforcement proceedings. Concerning other suggested changes to the regulation please refer to Attachment 1. These changes were discussed with Mr. Bosserman of your staff on June 30, 1975.

Second, the Department's "Proposed Rules Relating to Emission Standards for Hazardous Air Contaminants" permit the issuance by the Department of written approval for a source to operate in violation of these proposed rules for a period of up to two years. However, the

(2)

April 6, 1973 federal promulgation of National Emission Standards for Hazardous Air Pollutants (NESHAPS) allows for EPA to grant waivers of compliance for periods ending no later than April 6, 1975. Thus, all NESHAPS sources are to be in compliance at this time and there is no authority to administratively grant further extensions. Therefore, all language authorizing sources to operate in violation of the applicable standards should be deleted. Any extensions to compliance dates must then be granted through a state enforcement proceeding as opposed to an administrative process. Additional suggested changes for the sake of clarity, accuracy, and equivalent stringency with the Federally promulgated NESHAPS regulations are provided in Attachment 2. For your information, these deficiencies, as well as the above problem permitting compliance date extensions, were discussed with Mr. Johnson of your staff on June 19, 1975.

With the above noted modifications to the proposed regulations, EPA believes that following submittal by the Department, these new requirements can be approved and delegation of authority of these Federal programs can be made to the Department.

Sincerely yours,



Douglas C. Hansen
Director

Air and Hazardous Materials Division

cc: F. Bolton
N. Edmisten

Other Suggested Changes to the Proposed Rules Relating to NSPS

25-000.50
APPLICABILITY

The definition of "commenced" should be included in the reference to federal regulations i.e. "(40 CFR 60.2 (g), (h) and (i))".

25-000.60

In item (1), pertinent material must be submitted to EPA, "Seattle, Washington" in lieu of "Washington, D.C." as specified in the proposed rule. Furthermore, after delegation to the Department, applications, requests, submissions and reports shall continue to be forwarded to EPA. The proposed rule implies that such information would no longer be sent to EPA. To rectify this, the rule should read "... reports shall also be submitted to the Department or applicable Regional Authority". This language is currently stated in 40 CFR 60.4(b) and will apply to the Department when delegation occurs.

25-000.70(1)

The visible emission standards contained in this section are more stringent than those contained in Section 21-015. It is suggested that permits for other new fossil fuel-fired steam generators which contain provisions pursuant to Section 21-015 be revised to meet the requirements of Section 25-000.70(1). This situation is applicable to the Boardman thermal power plant.

25-000.70(1)(a)(i)

The term "fossil fuel" should be defined since steam generators could be fired by other fuels such as wood and/or municipal wastes.

25-000.70(6)

- This section should be clarified to show that the standards apply to each "... asphalt concrete plant, either portable or stationary." This would be consistent with the language contained in Section 25-110.
- Sections 25-105 through 25-125 should be revised to show that new or modified asphalt concrete plants must comply with the requirements contained in Section 25-000.70(6).
- Section 25-120 should be revised to exclude its applicability to new or modified plants.

25-000.70(7)(a)(iii)

The third line is improperly referenced and should read (in part) "... that permitted by subparagraph (i) of this section..."

25-000.80

The third sentence appears to have a word or phrase omitted after the word "... maintain". It is assumed the phrase should state "... or maintain compliance, the compliance provision of..."

ATTACHMENT 2: Other Suggested Changes to the "Proposed Rules Relating to Emission Standards for Hazardous Air Contaminants"

1. The provisions for emission testing mercury sources are identified by reference as those provisions applying to beryllium sources. The required schedule for testing emissions is stated as being applicable to "each person operating a source subject to the provisions of this [beryllium] standard..." Thus, sources subject to the mercury standards are exempt from their own source testing timetable since they are not subject to the beryllium standard. This confusion surrounding the reference for testing emissions from mercury sources should be eliminated by deleting the reference to Sections 25-270(2)(d)[1] through 25-470(2)(d)[4] and replacing it with a specific timetable and requirements.

2. A prohibition of burning beryllium and/or beryllium-containing wastes was omitted. This should be added for consistency with §61.32(c).

3. Page 3, line 22: Reference to OAR 20-050 is incorrect.

4. Page 12, line 13: Reference to ASTM Method D737-9 should be D737-69.

5. Page 13, line 21: Reference to Section C(5) is incorrect, and apparently should be 25-460(5)(a)[5].

6. Page 15, line 25: Reference to Section 25-465(6)(c) is incorrect, and apparently should be 25-460(6)(c).

7. Page 18, lines 8, 14 and 19: Same error in referencing Section 25-465(6)(c).

8. Page 18, line 20: The word "in" was omitted between the words "air forced."

9. Page 18, lines 23 and 24: References to Section B(1)(a) and B(2)(c) are incorrect and apparently should be b[1](a) and b[2](c) respectively.

10. In Section 25-455, include definitions of "Asbestos Mill" and "Modifications." Also, make all terms singular in the definition of "Person."

11. Integrate the May 3, 1974 NESHAPS amendments which were not incorporated in to the Department's proposed rules.

12. Utilize parallel wording when delineating which "other sources" are applicable to the beryllium emission standard and to the mercury emission standard. Presently, the "other sources" which are applicable to the beryllium emission standard are those "which may be determined to have... beryllium emissions in concentrations sufficient to be considered hazardous to public health." The "other sources" which are applicable to the mercury emission standard are sources, "the operation of which results in the emission of mercury to the ambient air."

(2)

13. On page 15, the description of sampling procedure required in subparagraph (b)[3][a] should include frequency of calibration, as contained in §6.32(b)(iii)(a).

14. Include in paragraph 25-470(2)[3] the requirement to submit those procedures used to design the air sampling network, as stipulated in §61.32(b)(iii)(h).

To: Members of the Environmental Quality Commission

Re: Agenda Item I, May 23, 1975, EQC Meeting

As Agenda Item I of the May 23, 1975 EQC meeting, the Director requests you to authorize public hearings on two empty and meaningless acts. Primarily as a taxpayer who wants his state tax dollar to be spent on other than superfluous endeavors, I respectfully urge you to cancel the proposed public hearings.

Sections 111 and 112 of the Clean Air Act, 42 USC §§1857c-6 and 1857c-7 (at pages 545-547 in the federal laws section of your blue looseleaf binders) are unequivocal about new source performance standards and emissions standards for hazardous air pollutants. Once the EPA administrator has promulgated such standards, every new source or source, new or old, emitting hazardous pollutants in the United States must, at a minimum, comply with the standards. The requirement to comply is not contingent upon any state's adoption of the standards. The national standards are now, with no action by you, the law of this state. You may enact more stringent standards under §116 of the Clean Air Act, 42 USC §1857d-1, but you may not abrogate or relax the federal standards. Thus, your adoption of the federal standards would be redundant.

Both the new source performance standards section and the hazardous air pollutants section of the Clean Air Act expressly provide that the administrator may delegate his

enforcement authority under the respective sections to the states, but there is no requirement, express or implied, that the states need go through the charade of adopting the federal standards to qualify for delegation. I know of no requirement of state law which would prohibit the DEQ from enforcing a "naked" federal standard, but, if the Commission believes that it is necessary to clothe the federal standards in state rules in order to enforce them, I suggest that OAR 340-20-001, "Highest and Best Practicable Treatment and Control," is ample authority.

Several of the federal new source performance standards are real "patsies," and could only undercut the EQC's historic commitment to highest and best practicable treatment and control. The proposed standard for primary aluminum plants, for example, though differing slightly in measurement techniques and averaging periods from the Oregon standard, allows double the amount of fluoride emissions per ton of ^{production} ~~emissions~~ that the Oregon standard allows. The federal standard for coal-fired thermal electric generating plants allows twenty times the sulfur emissions of the New Mexico standard (as, incidentally, does the permit for the PGE Boardman plant which NTEC has determined you must issue). Enactment of the federal standards would thus give credence to foot-draggers who don't want to apply highest and best practicable treatment and control.

Adoption of the federal standards could accomplish nothing. I respectfully urge you to direct the Department to cease wasting its time on this project.

Very truly yours,


Thomas Guilbert

ATTACHMENT 2

DEPARTMENT OF ENVIRONMENTAL QUALITY, AIR QUALITY CONTROL DIVISION
PROPOSED RULES RELATING TO EMISSION STANDARDS FOR HAZARDOUS AIR CONTAMINANTS

25-450 POLICY

The Commission finds and declares that certain air contaminants for which there is no ambient air standard may cause or contribute to an identifiable and significant increase in mortality or to an increase in serious irreversible or incapacitating reversible illness, and are therefore considered to be Hazardous Air Contaminants. Air contaminants currently considered to be in this category are Asbestos, Beryllium, and Mercury. Additional air contaminants may be added to this category provided that no ambient air standard exists for the contaminant, and evidence is presented which demonstrates that the particular contaminant may be considered as hazardous.

25-455 DEFINITIONS

As used in this rule, and unless otherwise required by context:

- (1) "Asbestos" means actinolite, amosite, anthophyllite, crysotile, crocidolite, or tremolite.
- (2) "Asbestos Manufacturing Operation" means the combining of commercial asbestos, or in the case of woven friction products, the combining of textiles containing commercial asbestos with any other material(s) including commercial asbestos, and the processing of this combination into a product as specified in 25-465.
- (3) "Asbestos Material" means Asbestos or any material containing at least 1% Asbestos by weight, including particulate asbestos material.
- (4) "Asbestos Mill" means any facility engaged in the conversion or any intermediate step in the conversion of asbestos ore into commercial asbestos.

7/22/75

II.

- (5) "Asbestos Tailings" means any solid waste product of Asbestos mining or milling operations which contains Asbestos.
- (6) "Beryllium" means the element Beryllium. Where weight or concentrations are specified in these Rules, such weights or concentrations apply to Beryllium only, excluding any associated elements.
- (7) "Beryllium Alloy" means any metal to which Beryllium has been added in order to increase its Beryllium content, and which contains more than 0.1 percent Beryllium by weight.
- (8) "Beryllium Containing Waste" means any material contaminated with Beryllium and/or Beryllium compounds used or generated during any process or operation performed by a source subject to these Rules.
- (9) "Beryllium Ore" means any naturally occurring material mined or gathered for its Beryllium content.
- (10) "Commercial Asbestos" means any variety of asbestos which is produced by extracting asbestos from asbestos ore.
- (11) "Commission" means the Environmental Quality Commission.
- (12) "Demolition" means the wrecking or removal of any boiler, pipe, or load supporting structural member insulated or fireproofed with asbestos material.
- (13) "Department" means the Department of Environmental Quality.
- (14) "Director" means the Director of the Department or Regional Authority and authorized deputies or officers.
- (15) "Friable Asbestos Material" means any asbestos material easily crumbled or pulverized by hand, resulting in the release of Particulate Asbestos material. This definition shall include any friable asbestos debris.
- (16) "Hazardous Air Contaminant" means any air contaminant considered by the Department or Commission to cause or contribute to an identifiable and significant increase in mortality or to an increase in serious irreversible or incapacitating reversible illness, and for which no ambient air standard exists.

III.

(17) "Mercury" means the element Mercury, excluding any associated elements and includes Mercury in particulates, vapors, aerosols, and compounds.

(18) "Mercury Ore" means any mineral mined specifically for its mercury content.

(19) "Mercury Ore Processing Facility" means a facility processing Mercury ore to obtain Mercury.

(20) "Mercury Chlor-Alkali Cell" means a device which is basically composed of an electrolyzer section and a denuder (decomposer) section, and utilizes Mercury to produce chlorine gas, hydrogen gas, and alkali metal hydroxide.

(21) "Particulate Asbestos Material" means any finely divided particles of Asbestos material.

(22) "Person" means any individual(s), corporation(s), association(s), firm(s), partnership(s), joint stock company(ies), public and municipal corporation(s), political subdivision(s), the State and any agency(ies) thereof, and the Federal Government and any agency(ies) thereof.

(23) "Propellant" means a fuel and oxidizer physically or chemically combined, containing Beryllium or Beryllium compounds, which undergoes combustion to provide rocket propulsion.

(24) "Propellant Plant" means any facility engaged in the mixing, casting, or machining of propellant.

(25) "Regional Authority" means any regional air quality control authority established under the provisions of ORS 468.505.

(26) "Startup" means commencement of operation of a new or modified source resulting in release of contaminants to the ambient air.

IV.

25-460 GENERAL PROVISIONS

(1) Applicability. The provisions of these Rules shall apply to any source which emits air contaminants for which a Hazardous Air Contaminant Standard is prescribed. Compliance with the provisions of these Rules shall not relieve the source from compliance with other applicable sections of the Oregon Administrative Rules, Chapter 340, or with applicable provisions of the Oregon Clean Air Act Implementation Plan.

(2) Prohibited Activities

(a) No person shall operate any source of emissions subject to these Rules without first registering such source with the Department following procedures established by ORS 468.320 and OAR 20-005 through 20-015. Such registration shall be accomplished within ninety (90) days following the effective date of these Rules.

(b) After the effective date of these Rules, no person shall construct a new source or modify any existing source so as to cause or increase emissions of contaminants subject to these Rules without first obtaining written approval from the Department.

(c) No person subject to the provisions of these emission standards shall fail to provide reports or report revisions as required in these Rules.

(3) Application for Approval of Construction or Modification. All applications for construction or modification shall comply with the requirements of OAR, Chapter 340, Sections 20-020 through 20-030 and the requirements of the standards set forth in these Rules.

(4) Notification of Startup. Notwithstanding the requirements of OAR, Chapter 340, Sections 20-020 through 20-030, any person owning or operating a new source of emissions subject to these emission standards shall furnish the Department written notification as follows:

(a) Notification of the anticipated date of Startup of the source not more than sixty (60) days nor less than thirty (30) days prior to the anticipated date.

(b) Notification of the actual Startup date of the source within fifteen (15) days after the actual date.

(5) Source Reporting and Approval Request

(a) Any person operating any existing source, or any new source for which a standard is prescribed in these Rules which had an initial Startup which preceded the effective date of these Rules shall provide the following information to the Department within ninety (90) days of the effective date of these Rules:

[1] Name and address of the owner or operator.

[2] Location of the Source.

[3] A brief description of the source, including nature, size, design, method of operations, design capacity, and identification of emission points of hazardous contaminants.

[4] The average weight per month of materials being processed by the source and percentage by weight of hazardous contaminants contained in the processed materials, including yearly information as available.

[5] A description of existing control equipment for each emission point, including primary and secondary control devices and estimated control efficiency of each control device.

VI.

(6) Source Emission Tests and Ambient Air Monitoring

(a) Emission tests and monitoring shall be conducted using methods set forth in 40 CFR, Part 61, Appendix B, as published in the Federal Register, Volume 38, No. 66, Friday, April 6, 1973. The methods described in 40 CFR, Part 61, Appendix B, are adopted by reference and made a part of these Rules. Copies of these methods are on file at the Department of Environmental Quality.

(b) At the request of the Department, any source subject to standards set forth in these Rules may be required to provide emission testing facilities as follows:

[1] Sampling ports, safe sampling platforms, and access to sampling platforms adequate for test methods applicable to such source.

[2] Utilities for sampling and testing equipment.

(c) Emission tests may be deferred if the Department determines that the source is meeting the standard as proposed in these Rules.

If such a deferral of emission tests is requested, information supporting the request shall be submitted with the request for written approval of operation. Approval of a deferral of emission tests shall not in any way prohibit the Department from cancelling the deferral if further information indicates that such testing may be necessary to insure compliance with these Rules.

VII.

(7) Delegation of Authority. The Commission may, when any Regional Authority requests and provides evidence demonstrating its capability to carry out the provisions of these Rules relating to Hazardous Contaminants, authorize and confer jurisdiction within its boundary until such authority and jurisdiction shall be withdrawn for cause by the Commission.

25-465 EMISSION STANDARD FOR ASBESTOS

(1) Emission Standard for Asbestos Mills. There shall be no visible emissions to the outside air from any asbestos milling operation except as provided under subsection (7) of this section. For purposes of these Rules, the presence of uncombined water in the emission plume shall not be cause for failure to meet the visible emission requirement. Outside storage of asbestos materials is not considered a part of an asbestos mill.

(2) Roadways. The surfacing of roadways with asbestos tailings is prohibited, except for temporary roadways on an area of asbestos ore deposits. For purposes of these Rules, the deposition of asbestos tailings on roadways covered by snow or ice is considered surfacing.

(3) Manufacturing. There shall be no visible emissions to the outside air, except as provided in subsection (7) of this section, from any building or structure in which manufacturing operations utilizing Asbestos are conducted, or directly from any such manufacturing operations if they are conducted outside buildings or structures. Visible emissions from boilers or other points not producing emissions directly from the manufacturing operation and having no possible asbestos material in the exhaust gases shall not be considered for purposes of this rule. The presence of uncombined water in the exhaust plume shall not be cause for failure to meet

VIII.

the visible emission requirements.

Manufacturing operations considered for purposes of these Rules are as follows:

- (a) The manufacture of cloth, cord, wicks, tubing, tape, twine, rope, thread, yarn, roving, lap, or other textile materials.
- (b) The manufacture of cement products.
- (c) The manufacture of fireproofing and insulating materials.
- (d) The manufacture of friction products.
- (e) The manufacture of paper, millboard, and felt.
- (f) The manufacture of floor tile.
- (g) The manufacture of paints, coatings, caulks, adhesives, or sealants.
- (h) The manufacture of plastics and rubber materials.
- (i) The manufacture of chlorine.
- (j) Any other manufacturing operation which results or may result in the release of asbestos material to the ambient air.

(4) Demolition. All persons intending to demolish any institutional commercial, or industrial building, including apartment buildings having four or more dwelling units, structure, facility, installation, or any vehicle or vessel including, but not limited to ships; or any portion thereof which contains any boiler; pipe, or load supporting structural member that is insulated or fireproofed with friable asbestos material shall comply with the requirements set forth in this section.

- (a) Notice of intention to demolish shall be provided to the Department at least ten (10) days prior to commencement of such demolition, or at any time prior to commencement of demolition covered under section (4)(c) of this section. Such notice shall include the following information:

IX.

- [1] Name and address of person intending to engage in demolition.
- [2] Description of building, structure, facility, installation, vehicle, or vessel to be demolished, including address or location where the demolition is to be accomplished.
- [3] Scheduled starting and completion dates of demolition.
- [4] Method of demolition to be employed.
- [5] Procedures to be employed to insure compliance with provisions of this section.

(b) The following procedures shall be employed to prevent emissions of particulate asbestos material into the ambient air:

- [1] Friable asbestos materials used to insulate or fireproof any boiler, pipe, or load supporting structural member shall be wetted and removed from any building, structure, facility, installation, or vehicle or vessel before demolition of load supporting structural members is commenced. Boilers, pipe, or load supporting structural members that are insulated or fireproofed with Friable Asbestos Materials may be removed as units or in sections without stripping or wetting, except that where the boiler, pipe or structural member is cut or disjointed the exposed friable asbestos material shall be wetted. Friable asbestos debris shall be wetted adequately to insure that such debris remains wet during all stages of demolition and related handling operations.
- [2] No pipe or load supporting structural member that is covered with asbestos material shall be dropped or thrown to the ground from any building structure, facility, installation, vehicle, or vessel subject to this section, but shall be carefully lowered or taken to ground level in such a manner as to insure that no particulate asbestos material is released to the ambient air.

X.

[3] No friable asbestos debris shall be dropped or thrown to the ground from any building structure, facility, installation, vehicle, or vessel subject to this section, or from any floor to any floor below. Any debris generated as a result of demolition occurring fifty (50) feet (15.24 meters) or greater above ground level shall be transported to the ground via dust-tight chutes or containers.

(c) Any person intending to demolish a building, structure, facility, or installation subject to the provisions of this section, but which has been declared by proper State or local authorities to be structurally unsound and which is in danger of imminent collapse is exempt from the requirements of this section, other than the reporting requirements specified in subsection 4(a) of this section, and the wetting of Friable Asbestos debris as specified in subsection 4(b)[1] of this section.

(d) Sources located in cities or other areas of local jurisdiction having demolition regulations or ordinances no less restrictive than those of this section may be exempted from the provisions of this section. Such local ordinance or regulation must be filed with and approved by the Department before an exemption from these Rules may be issued. Any authority having such local jurisdiction shall annually submit to the Department a list of all sources subject to this subsection operating within the local jurisdictional area and a list of those sources observed by the local authority during demolition operations.

(5) Spraying

(a) There shall be no visible emissions to the ambient air from any spray-on application of materials containing more than one (1) percent

XI.

asbestos on a dry weight basis used to insulate or fireproof equipment or machinery, except as provided in subsection (7) of this section.

Spray-on materials used to insulate or fireproof buildings, structures, pipes, and conduits shall contain less than one (1) percent asbestos on a dry weight basis. In the case of any city or area of local jurisdiction having ordinances or regulations for spray application materials more stringent than those in this subsection, the provisions of such ordinances or regulations shall apply.

(b) Any person intending to spray asbestos materials to insulate or fireproof buildings, structures, pipes, conduits, equipment, or machinery shall report such intention to the Department at least twenty (20) days prior to the commencement of the spraying operation. Such report shall contain the following information:

[1] Name and address of person intending to conduct the spraying operation.

[2] Address or location of the spraying operation.

(6) Options for Air Cleaning. Rather than meet the no visible emissions requirements of subsections 1, 2, and 4 of this section, owners and operators may elect to use methods specified in subsection (7) of this section.

(7) Air Cleaning. All persons electing to use air cleaning methods rather than comply with the no visible emission requirements must meet all provisions of this subsection.

(a) Fabric filter collection devices must be used, except as provided in subsections (b) and (c) of this section. Such devices must be operated at a pressure drop of no more than four (4) inches (10.16 cm) water gauge as measured across the filter fabric. The air flow permeability, as

XII.

determined by ASTM Method D737-69, must not exceed 30 ft.³/min./ft.² (9.144 m³/min./m²) for woven fabrics or 35 ft.³/min./ft.² (10.67 m³/min./m²) for felted fabrics with the exception that airflow permeability of 40 ft.³/min./ft.² (12.19 m³/min./m²) for woven and 45 ft.³/min./ft.² (13.72 m³/min./m²) for felted fabrics shall be allowed for filtering air emissions from asbestos ore dryers. Each square yard (square meter) of felted fabric must weigh at least 14 ounces (396.9 grams) and be at least one-sixteenth (1/16) inch (1.59 mm) thick throughout. Any synthetic fabrics used must not contain fill yarn other than that which is spun.

(b) If the use of fabric filters creates a fire or explosion hazard, the Department may authorize the use of wet collectors designed to operate with a unit contacting energy of at least forty (40) inches (101.6 cm) of water gauge pressure.

(c) The Department may authorize the use of filtering equipment other than that described in subsections (a) and (b) of this section if such filtering equipment is satisfactorily demonstrated to provide filtering of Asbestos Material equivalent to that of the described equipment.

(d) All air cleaning devices authorized by this section must be properly installed, operated, and maintained. Devices to bypass the air cleaning equipment may be used only during upset and emergency conditions, and then only for such time as is necessary to shut down the operation generating the Particulate Asbestos Material.

(e) All persons operating any existing source using air cleaning devices shall, within ninety (90) days of the effective date of these rules, provide the following information to the Department.

XIII.

- [1] A description of the emission control equipment used for each process.
- [2] If a fabric is utilized, the following information shall be reported:
 - [a] The pressure drop across the fabric filter in inches water gauge and the airflow permeability in $\text{ft.}^3/\text{min.}/\text{ft.}^2$ ($\text{m}^3/\text{min.}/\text{m}^2$).
 - [b] For woven fabrics, indicate whether the fill yarn is spun or not spun.
 - [c] For felted fabrics, the density in ounces/yard³(gms/m³) and the minimum thickness in inches (centimeters).
- [3] If a wet collector is used, the unit contact energy shall be reported in inches of pressure, water gauge.
- [4] All reported information shall accompany the information required in section 25-460(5)(a)[5] of these Rules.

25-470 EMISSION STANDARD FOR BERYLLIUM

- (1) Applicability. The provisions of this section are applicable to the following emission sources of Beryllium.
 - (a) Extraction plants, ceramic plants, foundries, incinerators, and propellant plants which process Beryllium, Beryllium ore, oxides, alloys, or Beryllium containing waste.
 - (b) Machine shops which process Beryllium, Beryllium oxides, or any alloy when such alloy contains more than five percent (5%) Beryllium by weight.
 - (c) Other sources, the operation of which results or may result in the emission of Beryllium to the outside air.

XIV.

(2) Emission Limit

(a) Emissions to the ambient air from any source shall not exceed 10 grams of Beryllium for any 24 hour period, except as provided in subsection (b) of this section.

(b) Rather than meet the requirements of subsection (a) of this section, persons operating sources of Beryllium emissions may request approval from the Department to comply with an ambient air concentration limit for Beryllium emissions in the vicinity of the source. The ambient concentration shall not exceed 0.01 micrograms per cubic meter as an average of all samples taken during any one month period. Approval of such requests may be granted by the Director provided that:

[1] At least three (3) years of ambient sampling data is available which demonstrates that the future ambient concentrations of Beryllium will not exceed this standard concentration in the vicinity of the source. Such three (3) year period shall be the three years ending thirty (30) days before the effective date of these Rules.

[2] The person requesting this approval makes such request in writing to the Department within thirty (30) days after the effective date of this standard.

[3] The person making such request shall submit a report to the Department within forty-five (45) days after the effective date of these Rules, including the following information:

[a] A description of the sampling procedures, including methods of sampling, method and frequency of calibration, and averaging technique for determining monthly concentrations.

[b] Identification of sampling sites, including number of stations, distance and heading from the source, ground elevations, and height above ground of sampling inlets.

[c] Plots of source and surrounding area, including emission points, sampling sites, and topographic features significantly affecting dispersion of contaminants.

[d] Information necessary for estimating dispersion, including stack height and inside diameter, exit gas temperature and velocity or flow rate, and Beryllium concentration in exit gases.

[e] Air sampling data as required in subsection (b) of this section, including data for individual samples and site locations used to develop the one month average concentrations; and a description of data and procedures (methods or models) used to design the air sampling network.

(c) Within sixty (60) days of receipt of such report, the Department will notify persons making the request of the decision to approve or deny the request. Prior to denying approval of provisions of subsection (b) of this section, the Department will consult with representatives of the source for which the report was submitted.

(d) The burning of Beryllium and/or Beryllium containing waste except propellants is prohibited except in incinerators, emissions from which must comply with the standard.

(e) Stack Sampling.

[1] Unless a deferral of emission testing is obtained under the provisions of section 25-460(6)(c), each person operating a source subject to the provisions of this standard shall test emissions from his source subject to the following schedule:

[a] Within ninety (90) days of the effective date of these Rules for existing sources or for new sources having startup dates prior to the effective date of this standard.

[b] Within ninety (90) days of startup in the case of a new source having a startup date after the effective date of this standard.

[2] The Department shall be notified at least thirty (30) days prior to an emission test so that they may, at their option, observe the test.

[3] Samples shall be taken over such periods and frequencies as necessary to determine the maximum emissions occurring during any 24 hour period. Calculations of maximum 24 hour emissions shall be based on that combination of process operating hours and any variation in capacities or processes that will result in maximum emissions. No changes in operation which may be expected to increase total emissions over those determined by the most recent stack test shall be made until estimates of the increased emissions have been calculated, and have been reported to and approved in writing by the Department.

[4] All samples shall be analyzed and Beryllium emissions shall be determined and reported to the Department within thirty (30) days following the stack test. Records of emission test results and other data needed to determine Beryllium emissions shall be retained at the source and made available for inspection by the Department for a minimum of two years following such determination.

(e) Ambient air sampling

[1] Sources subject to the provisions of this section shall locate and operate ambient air sampling sites in accordance with a plan submitted to and approved in writing by the Department. Such sites shall be located in such a manner as to detect maximum ambient air concentrations in the vicinity of the source.

[2] All monitoring sites shall be operated in such a manner as to provide continuous samples, except for a reasonable time allowed for instrument calibration and repair, or for replacement of equipment needing repair.

[3] Filters shall be analyzed and contaminant concentrations calculated within thirty (30) days of the date they are collected. Concentrations of contaminants at all sampling sites shall be reported to the Department each calendar month. Records of concentrations and other data necessary to determine concentrations shall be retained at the source and made available for inspection by the Department for a minimum of two (2) years after determinations have been made.

[4] The Department may require changes in the sampling network at any time in order to insure that the maximum ambient air concentrations of Beryllium in the area of the source are being measured.

25-475 EMISSION STANDARD FOR BERYLLIUM ROCKET MOTOR FIRING

(1) The emission standard for Beryllium Rocket Motor Firing, 40 CFR, Part 61, Section 61.40 through 61.44, adopted Friday, April 6, 1973, is adopted by reference and made a part of these Rules. A copy of this emission standard is on file at the Department of Environmental Quality.

25-480 EMISSION STANDARD FOR MERCURY

(1) Applicability. The provisions of this section are applicable to sources which process mercury ore to recover mercury, sources using mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and to any other source, the operation of which results or may result in the emission of mercury to the ambient air.

XVIII.

(2) Emission Standard. Emissions to the ambient air from any source shall not exceed 2,300 grams of mercury during any 24 hour period.

(3) Stack Sampling.

(a) Mercury ore processing facility

[1] Unless a deferral of emission testing is obtained under section 25-465(6)(c) of these Rules, each person operating a source processing Mercury Ore shall test emissions from his source, subject to the

[a] Within ninety (90) days of the effective date of these Rules for existing sources or for new sources having startup dates prior to the effective date of this standard.

[b] Within ninety (90) days of startup in the case of a new source having a startup date after the effective date of this standard.

[2] The Department shall be notified at least thirty (30) days prior to an emission test so that they may, at their option, observe the test.

[3] Samples shall be taken over such periods and frequencies as necessary to determine the maximum emissions occurring during any 24 hour period. Calculations of maximum 24 hour emissions shall be based on that combination of process operating hours and any variation in capacities or processes that will result in maximum emissions. No changes in operation which may be expected to increase total emissions over those determined by the most recent stack test shall be made until estimates of the increased emissions have been calculated, and have been reported to and approved in writing by the Department.

[4] All samples shall be analyzed and Mercury emissions shall be determined and reported to the Department within thirty (30) days following the stack

test. Records of emission test results and other data needed to determine Mercury emissions shall be retained at the source and made available for inspection by the Department for a minimum of two years following such determination.

(b) Mercury Chlor-Alkali Plant

[1] Hydrogen and end-box ventilation gas streams

[a] Unless a deferral of emission testing is obtained under section 25-460(6)(c) of these Rules, each person operating a source of this type shall test emissions from his source following the provisions of subsection 25-480(3)(a) of this section.

[2] Room Ventilation System

[a] Unless a deferral of emission testing is obtained under section 25-460(6)(c) of these Rules, all persons operating mercury chlor-alkali plants shall pass all cell room air in forced gas streams through stacks suitable for testing.

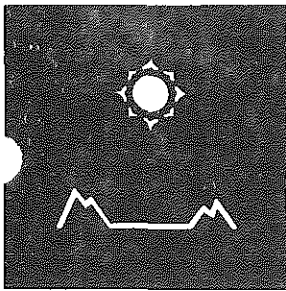
[b] Emissions from cell rooms may be tested in accordance with provisions of section b[1](a) of this section or may demonstrate compliance with section b[2](c) of this section and assume ventilation emissions of 1,300 grams/day of mercury.

[c] If no deferral of emission testing is requested, each person testing emissions shall follow the provisions of sub-section 25-480(3)(a) of this section.

(c) Any person operating a mercury chlor-alkali plant may elect to comply with room ventilation sampling requirements by carrying out approved design, maintenance, and housekeeping practices. A summary of these approved practices shall be available from the Department.

attachment 2

MICHAEL D. ROACH
Director



MID WILLAMETTE VALLEY AIR POLLUTION AUTHORITY

2585 STATE STREET / SALEM, OREGON 97301 / TELEPHONE AC 503 / 581-1715

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
JUN 27 9 13 AM '75

DEC Response

not necessary

OK

not necessary

2070 is
Now EPA
Rule

OK

June 24, 1975

Mr. H.M. Patterson
Department of Environmental Quality
1234 S.W. Morrison
Portland, Oregon 97205

Dear Mr. Patterson:

The Mid-Willamette Valley Air Pollution Authority has reviewed the draft submitted June 6, 1975 of the "Proposed Standards of Performance For New Stationary Sources" and offers the following changes and additions:

25-000.10 Statement of Purpose. The U.S. Environmental Protection Agency has adopted in Title 40, Code of Federal Regulations, Part 60, Standards of Performance For Certain New Stationary Sources. It is the intent of [this rule] these rules to specify requirements and procedures necessary for the Department to implement and enforce the aforementioned federal regulation.

25-000.30 Statement of Policy. It is hereby declared the policy of the Department to consider the performance standards for new stationary sources contained herein to be minimum standards and, as technology advances, conditions warrant, and Department or regional authority rules or permit conditions require, more stringent standards shall be applied.

25-000.50 Applicability. [This rule] These rules shall be applicable to new stationary sources identified in Section 25-000.7 for which construction or modification has been commenced [()], as defined in Title 40, CFR 60.2 (g) and Ch) [)], after the effective date of [this rule] these rules.

25-000.70 Performance Standards --- (3) Standards of Performance For Portland Cement Plant. The following emission standards shall apply to each Portland Cement Plant [.] :

(ii) Exhibit greater than [20] 10 percent opacity,---

25-000.90 More Restrictive Regulations. If at any time there is a conflict between Department or regional authority rules and the

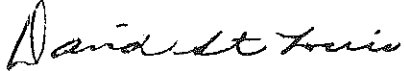
MEMBER COUNTIES: BENTON / LINN / MARION / POLK / YAMHILL

100% RECYCLED PAPER

Page 2
H.M. Patterson
June 24, 1975

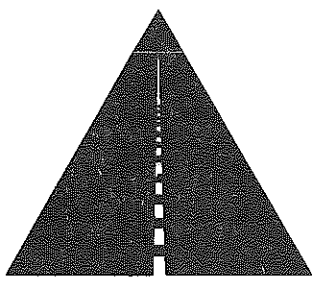
federal regulation (40 CFR, Part 60) the more stringent standard shall apply.

Sincerely,

A handwritten signature in cursive script that reads "David St. Louis".

David St. Louis
Interim Director

DSL/taa



Attachment 2

MIKE HUDDLESTON
Manager
STATE OFFICERS:
JOHN LOOSLEY
President
HOWARD STINSON
Vice President
PETE IDLEWINE
Secretary-Treasurer

ASPHALT PAVEMENT
ASSOCIATION OF OREGON

3421 25th Street S.E. • P. O. Box 2228
Salem, Oregon 97308 • (503) 363-3858

July 2, 1975

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED
JUL 7 1975

Air Pollution Division
Department of Environmental Quality
1234 S.W. Morrison
Portland, Oregon 97205

AIR QUALITY CONTROL

Gentlemen:

I will be unable to attend the Public Hearing on July 7, 1975, regarding the adoption of the Proposed Standards of Performance for New Stationary Sources. Therefore, by this letter I wish to register an objection to the inclusion of Asphalt Concrete Plants in your new proposed regulations. My reasons are as follows:

The National Asphalt Pavement Association has filed suit against the Environmental Protection Agency to upset the regulation. The basis of the suit is as follows:

1. the proposed concentration standard of 0.04 gr/dscf cannot be attained either consistently or at all with currently available equipment;
2. the standard should be 0.06 gr/dscf;
3. the standard should allow higher emissions when heavy fuel oil is burned;
4. the type of aggregate used by a plant changes and affects the emissions;
5. EPA failed to consider the impact of the standard on mobile plants, continuous-mix plants, and drum-mixing plants; and
6. the EPA control cost estimates are too low.

In my past six years with the Asphalt Association and my personal visit to all the plants in Oregon many times, I am sure the National Association is correct and if justice prevails the EPA will lose the suit and EPA will have to revise the regulations.

PAVING THE WAY WITH SMOOTH, SAFE, DURABLE SURFACE

BOARD OF DIRECTORS: Ivan Wickersham, Bernie Hayes, Jon Morse, Cecil Johnson, Wally Hector and Gary Wildish

Air Pollution Division
July 2, 1975
Page 2


Let me remind you the Portland Cement Association filed and won a suit against the EPA over New Source Standards and their case was not as good as ours.

Our request is to delay the adoption of the New Source Regulations for Asphalt Plants until the suit is finished. It has been filed for over two years and should be concluded this year.

In closing may I also request that when you do adopt the EPA regulations as Oregon's new standard that you adopt the EPA testing methods as well. Oregon tests different than EPA and it would be a real mess for the manufacturers thru out USA to meet variable test methods in various states.

I certainly do not think either of these requests are out of line and respectfully request your consideration.

Sincerely yours,


Mike Huddleston P.E.
Manager

MH/eaj
CC: Harold Patterson
Fred Skirvin
Peter Bosserman
DEQ Director



State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

To: R. Underwood

Date: 7/10/75

From: R. M. Johnson, AQCD *RMS*

Subject: Request for Opinion, DEQ Enforcement of Federal Regulations
(request approved by JPKowalczyk, HMPatterson, EJWeathersbee)

During a recent EQC meeting, and as a part of the testimony received at public hearings for the adoption of hazardous air contaminant emission standards and new source performance standards, Mr. Thomas Gilbert expressed the opinion that adoption of these standards would be meaningless and unnecessary. Basically, his position is that:

1. The Clean Air Act made compliance with Federal NESHAPS and NSPS Regulations mandatory for all sources in the U.S. Adoption of state standards would therefore be redundant.
2. The EPA Administrator is permitted to delegate enforcement authority to the states, but there is no requirement that states must adopt Federal regulations to qualify for this delegation.
3. There is no state law which would prohibit DEQ from enforcing a Federal Standard, and in any case, "OAR 340, 20-001, 'Highest and Best Practicable Treatment' would be ample authority."
4. Some of the NSPS standards are less stringent.

The Department is not convinced that the argument presented is correct, and envisions possible problems with enforcement of Federal Regulations, particularly in our status in court procedures or civil penalty procedures. We would therefore request opinions on the following issues:

Whether it is necessary or desirable for the State to adopt standards identical to, or more stringent than those of the EPA in order to:

1. Gain delegation of enforcement authority from EPA in areas currently enforced by the Federal Agency.
2. Gain standing to enforce the standards in court.
3. Enable the State to impose and collect civil penalties for violations of the standards.

It is presently planned to present the proposed rules for possible adoption by the EQC at their meeting on July 25, 1975. If possible, we would like to have this opinion prior to that presentation.

A copy of Mr. Gilbert's presentation is attached for your reference.

/cs
Attachment

To: Members of the Environmental Quality Commission

Re: Agenda Item I, May 23, 1975, EQC Meeting

As Agenda Item I of the May 23, 1975 EQC meeting, the Director requests you to authorize public hearings on two empty and meaningless acts. Primarily as a taxpayer who wants his state tax dollar to be spent on other than superfluous endeavors, I respectfully urge you to cancel the proposed public hearings.

Sections 111 and 112 of the Clean Air Act, 42 USC §§1857c-6 and 1857c-7 (at pages 545-547 in the federal laws section of your blue looseleaf binders) are unequivocal about new source performance standards and emissions standards for hazardous air pollutants. Once the EPA administrator has promulgated such standards, every new source or source, new or old, emitting hazardous pollutants in the United States must, at a minimum, comply with the standards. The requirement to comply is not contingent upon any state's adoption of the standards. The national standards are now, with no action by you, the law of this state. You may enact more stringent standards under §116 of the Clean Air Act, 42 USC §1857d-1, but you may not abrogate or relax the federal standards. Thus, your adoption of the federal standards would be redundant.

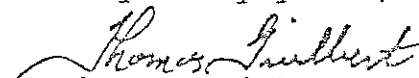
Both the new source performance standards section and the hazardous air pollutants section of the Clean Air Act expressly provide that the administrator may delegate his

enforcement authority under the respective sections to the states, but there is no requirement, express or implied, that the states need go through the charade of adopting the federal standards to qualify for delegation. I know of no requirement of state law which would prohibit the DEQ from enforcing a "naked" federal standard, but, if the Commission believes that it is necessary to clothe the federal standards in state rules in order to enforce them, I suggest that OAR 340-20-001, "Highest and Best Practicable Treatment and Control," is ample authority.

Several of the federal new source performance standards are real "patsies," and could only undercut the EQC's historic commitment to highest and best practicable treatment and control. The proposed standard for primary aluminum plants, for example, though differing slightly in measurement techniques and averaging periods from the Oregon standard, allows double the amount of fluoride emissions per ton of ~~emissions~~^{production} than the Oregon standard allows. The federal standard for coal-fired thermal electric generating plants allows twenty times the sulfur emissions of the New Mexico standard (as, incidentally, does the permit for the PGE Boardman plant which NTEC has determined you must issue). Enactment of the federal standards would thus give credence to foot-draggers who don't want to apply highest and best practicable treatment and control.

Adoption of the federal standards could accomplish nothing. I respectfully urge you to direct the Department to cease wasting its time on this project.

Very truly yours,


Thomas Guilbert

Ray W.
HMBP

RMJ Memo
January 10, 1980

New Source Performance Std. (attached)
NESHAPS (RMJ Memo)

Tom Gilbert Testimony

Tom Donaca is expected to provide similar testimony
relative to the need for adaptation

Up to now it has been an unwritten policy that where
practicable there should not duplicate authorities for
industry to respond to for compliance etc. "Federal"
& "State", and in each case Oregon has requested
delegation i.e. NPDES etc. to prevent dual
jurisdiction

Items

- (1) attached are portions of the CAA page 16-19
see page 17 & 19

CA procedure is required

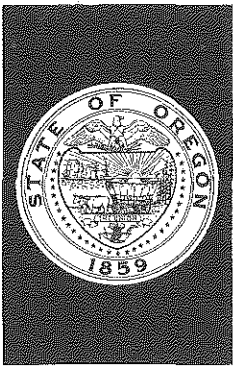
Our procedure was to adopt the rules
what other procedure would be used?

- (2) This answer is dependent upon (1)

- (3) Legal opinion requested!

It may or may not be legally sufficient from
a practical standpoint our staff - office &
field - need to know what they are enforcing.

- (4) H & B P Treatment can take care of this
on a case by case basis



ENVIRONMENTAL QUALITY COMMISSION

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The Dalles

TO: Environmental Quality Commission
FROM: Director
SUBJECT: Agenda Item F, August 22, 1975, EQC Meeting
Variance Extension Request - Union Oil of California

Background

On May 23, 1975, the Environmental Quality Commission considered the attached Department report entitled, "Variance Extension Request: Union Oil of California" (Attachment 1). Based on the information available in May 1975, the Department recommended and the EQC granted a 90 day extension of Union Oil's variance, which would have expired July 1, 1975, from the Department's residual fuel oil sulfur content limitation of 1.75%.

One of the bases for the Department's recommendation for a 90 day variance extension was to allow sufficient time for the Department to fully evaluate Union Oil's actual request for a one-year variance extension to July 1, 1976, with potential further extensions through 1978.

Subsequent to the May 1975 EQC meeting, the Department sent information request letters to local oil suppliers and their headquarters, Union Oil and its residual fuel oil customers within the State of Oregon, and the state and federal energy offices.

The Department has not received replies to all requests for information as of this date, however written and verbal response from Union Oil warrants action at this time.



Contains
Recycled
Materials

Discussion

In their June 26, 1975 letter to the Department (Attachment 2), Union Oil stated, "Due to the installation of new blending facilities and the freeing of additional blending stocks, we would like to amend our application for this variance from the 1.75% sulfur limitation to extend only to the date when inventory on hand December 31, 1975 by Union Oil and its customers is depleted. Any residual fuel oil shipped into Oregon after December 31, 1975 will meet the State of Oregon requirements."

In summary, what Union Oil Company of California is requesting is that their present 90 day extension of their variance, which expires October 1, 1975, be extended another 90 days until December 31, 1975 and after that date any residual fuel oil Union Oil Company ships into Oregon will meet the Department's sulfur content limitation of 1.75%. Compliance with the 1.75% sulfur limit before January 1, 1976 would appear unattainable.

An additional 90 day variance extension to Union Oil and its customers appears justified since the Environmental Quality Commission may grant specific variances which may be limited in time from the particular requirements of any rule, regulation or order under Oregon Revised Statutes (ORS) Chapter 468.345, if:

1. No alternative facility or method of handling is yet available.
2. Conditions exist that are beyond the control of the persons granted such variance.

Union Oil has also indicated in their letter their intent to meet Oregon's 0.5% sulfur content limit for residual fuel oils which will be effective January 1, 1979 in the Portland Metropolitan Area. Union Oil is presently in the design stage for new residual oil processing facilities at their Los Angeles refinery to meet this requirement. Expected installation of this equipment would be by December 1978.

The Department is pleased that conditions have changed which would allow Union Oil to meet current Department residual fuel oil regulations by the end of this year and that Union Oil is actively working towards complying with the Clean Fuels Policy for the Portland Metropolitan Area which will be effective in 1979.

Conclusions

1. Union Oil of California has now amended their original request for extension of their present variance from the 1.75% sulfur limitation to extend only to December 31, 1975 instead of July 1, 1976 as originally requested. The six-month reduction in Union Oil's request for extension is due to the installation of new blending facilities and the freeing of additional blending stocks.
2. It is unlikely that Union Oil customers could obtain residual fuel oil from other suppliers complying with the Department's sulfur content limitation sooner than January 1, 1976.

3. Union has initiated planning for refinery modifications which should allow them to supply residual fuel oil that will meet the 0.5% sulfur content limitation that becomes effective within the Portland Metropolitan Area by January 1, 1979.
4. The granting of this variance by the Environmental Quality Commission would be allowable in accordance with Oregon Revised Statutes (ORS) Chapter 468.345.

Director's Recommendation

It is the Director's recommendation that the Commission find that strict compliance with Oregon Administrative Rules (OAR) Chapter 340, Section 22-010(2) is presently not feasible and that the Commission grant Union Oil Company of California and its distributors and users of residual fuel oil an extension of their present variance from the Department Rules, OAR Chapter 340, Section 22-010(2) pertaining to sulfur content of residual fuel oil until December 31, 1975 subject to the following conditions:

1. The maximum sulfur content of the residual fuel oil to be sold distributed or used will not be more than 2.5% sulfur by weight.
2. Union Oil shall continue to submit to the Department a report containing sulfur analysis and quantity of each shipment of residual fuel oil sold or distributed in the state on a quarterly basis.
3. After January 1, 1976, all residual fuel oil delivered in the State of Oregon by Union Oil Company shall comply with OAR Chapter 340, Section 22-010.
4. Union Oil and its customers shall be exempted from the December 31, 1975 termination of this variance extension for the length of time necessary to use up their individual supplies of residual fuel oil contained within the State of Oregon and received from Union Oil prior to January 1, 1976.



LOREN KRAMER
Director

JAP:cs
7/10/75

Attachment



ENVIRONMENTAL QUALITY COMMISSION

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

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Portland

MORRIS K. CROTHERS
Salem

RONALD M. SOMERS
The Dalles

KESSLER R. CANNON
Director

TO: Environmental Quality Commission
FROM: Director
SUBJECT: Agenda Item No. H (3), May 23, 1975, EQC Meeting
Variance Extension Request: Union Oil of California

Background

On September 20, 1974, the Environmental Quality Commission considered the attached Department report entitled, "Variance Request: Union Oil of California" (Attachment 1). Based on the information available in September 1974, the Department recommended, and the EQC granted a variance effective until July 1, 1975 to Union Oil of California and its customers, from the Department's residual fuel oil requirement limiting sulfur content to a maximum 1.75%. Specific conditions imposed with the variance are contained in the aforementioned Department report.

On April 21, 1975, Union Oil of California submitted a request to the Department to extend their variance from July 1, 1975 to July 1, 1976, and as before requested that it be applicable to the fuel oil customers served by Union Oil Company. This request by Union Oil, which included a progress report toward achieving compliance with the Department's rules is also attached (Attachment 2).

Union Oil Company has complied with the conditions of their present variance by not distributing residual oil having a sulfur content greater than 2.5%, submitting quarterly reports on oil shipments and sulfur content, and submitting a report on progress toward achieving compliance with Department rules.

Discussion

At the time Union Oil Company was granted a variance, fuel oil supplies were extremely scarce and Federal allocation controls on oil product distributions were in effect. Had Union Oil not been granted a variance, it was very doubtful if any other oil company could have supplied Union Oil customers.

Union Oil Company's latest request for a one-year variance extension is accompanied by a rather generalized report that indicates compliance with the Department's residual fuel oil rule could not be expected before 1978 or 1979. The Department is concerned about the equity of granting continual extensions of the Union Oil variance, since it now appears that:

1. All other Oregon oil suppliers are complying and appear capable of continuing compliance with the Department's residual fuel oil rule.
2. Crude oil supplies and supplies of oil products appear to have significantly improved in the past year.
3. The Federal allocation requirements on oil product distribution appears to have become less restrictive in the past year.
4. Other Oregon fuel oil suppliers may now be able to supply Union Oil customers with oil meeting current Department rules.

The Department is equally concerned about setting a precedent in granting Union Oil a variance extension in light of the possibility of similar variance requests coming in 1979 from many other oil companies who can now meet the 1.75% sulfur limit, but who may not be able to meet the new 0.5% sulfur limit which is scheduled to become effective in 1979 in the Portland Metropolitan Area. This concern is justified since new local refining capacity should be able to supply the required 0.5% sulfur fuel in 1979.

Fully examining the justification for perpetuating Union Oil's variance will take many weeks since contacts and confirmation letters with local oil suppliers and their headquarter offices, and State and Federal energy offices will be necessary. Further detailed information will also be needed from Union Oil to more explicitly describe their program for achieving compliance with the Department's 1.75% sulfur content of residual fuel oil rule and more stringent requirement of 0.5% sulfur content in the Portland Area by 1979.

It is apparent that insufficient time is available for the Department to complete the necessarily thorough evaluation of Union Oil's variance extension request before Union Oil's present variance expires. A short-term extension of Union Oil's existing variance appears justified to allow the Department time to complete its evaluation and give Union Oil and its customer's sufficient time to adjust fuel supplies should the Department recommend, and the Commission approve modifications or termination of Union Oil's variance.

Conclusions

1. Union Oil of California was granted a one-year variance from the Department's sulfur content of residual fuel oil rule at a time when oil supplies were scarce and stringent Federal controls (allocations) on fuel oil products were in effect. In fact, it appeared at the time the variance was granted, in September 1974, that customers of Union Oil could not obtain oil supplies from other sources if Union Oil Company's variance request was denied.
2. Union Oil of California has now requested a one-year extension of their variance which expires July 1, 1975, and at the same time Union Oil has indicated essentially no possibility of complying with the Department's residual fuel oil rules until 1978 or 1979.
3. The Department is concerned with the equity of granting Union Oil further variance extensions in light of the fact that:
 - a. All other Oregon oil suppliers are complying with the Department's residual fuel oil rules and appear capable of continual compliance for some time into the future.
 - b. Oil supplies appear to have significantly improved in the past year.
 - c. Federal control (allocations) on oil product distribution may have become less restrictive in the past year.
 - d. Other Oregon fuel oil suppliers may now be able to supply Union Oil customers with oil meeting current Department rules.
 - e. A precedent may be set for similar variance requests coming in 1979 from many other oil companies who can meet the 1.75% sulfur limit now, but who may not be able to meet the new 0.5% sulfur limit in 1979 in the Portland Metropolitan Area.

4. Extension of Union Oil's variance will result in continued excessive air contaminant emissions from some facilities in the State, many of which are located in the already overloaded Portland Metropolitan Area airshed.
5. There is insufficient time for the Department to fully evaluate Union Oil Company's variance extension request prior to termination of Union Oil's existing variance, due to apparent recent changes in fuel oil supplies and Federal allocation regulations which need to be fully identified.

Director's Recommendation

As there is insufficient time for the Department to fully investigate Union Oil of California's request for a variance extension before their present variance expires, it is the Director's recommendation that Union Oil be granted a 90 day extension of their present variance subject to the following conditions:

1. The maximum sulfur content of residual fuel oil to be sold, distributed, or used shall not be more than 2.5% sulfur by weight.
2. Union Oil shall continue to submit to the Department a report containing the sulfur analysis and quantity of each shipment sold or distributed in the State on a quarterly basis.
3. Union Oil Company shall provide, to the extent possible, all information requested by the Department to fully evaluate Union Oil's variance extension request and that such information shall be supplied in the shortest time possible.
4. This variance extension shall terminate October 1, 1975.



KESSLER R. CANNON

JFK:cs
5/14/65
Attachment (2)

Union 76 Division: Western Region

Union Oil Company of California
2901 Western Avenue, Seattle, Washington 98111
Telephone: (206) 223-7646



State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
JUN 27 1975

D. J. Fogelquist
Division Sales Manager

June 26, 1975

OFFICE OF THE DIRECTOR

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

Re: Variance Extension Request
Sulfur Content of Residual Oil

Dear Mr. Cannon:

Attached is our response to your letter of June 13, 1975 with the list of 12 questions. We have answered the questions to the best degree possible. Residual fuel oil sulfur levels are tempered not just by the availability of particular crudes that can be batch processed through the refinery, but also to commitments to other customers and the total refinery operations. Also, as pointed out in our response to Question 11, weather is an important variable in residual fuel usage since residual fuels are generally used when natural gas supplies are curtailed.

Due to the installation of new blending facilities and the freeing of additional blending stocks, we would like to amend our application for this variance from the 1.75% sulfur limitation to extend only to the date when inventory on hand December 31, 1975 by Union Oil and its customers is depleted. Any residual fuel oil shipped into Oregon after December 31, 1975 will meet the State of Oregon requirement.

Answers to your specific questions follow:

1. Is Union's Los Angeles refinery your major, or sole supplier of residual oil to Oregon?

Yes.

2. Has Union's Los Angeles refinery produced residual oil during June 1974 through May 1975 period with a sulfur content of less than 1.75% for areas other than the State of Oregon?

Yes.

Kessler R. Cannon
Portland, Oregon
6/26/75

-2-

Variance Extension Request
Sulfur Content of Residual Oil

If yes, what was the quantity and sulfur content?

2,727 MB, 0.5% sulfur for California and Arizona utilities.

3. Does Union Oil have a firm commitment to receive Alaskan crude oil in quantities sufficient to produce residual oil for Oregon having a sulfur content less than 1.75%?

Only if Union Oil terminates previous commitments to low sulfur customers. Union Oil has production in the Cook Inlet that has peaked. The residual oil from this crude had been committed to utilities on a long term basis.

If not, when will this commitment likely be obtained?

Only when sufficient new fields are developed to increase West Coast supply. This would include North Slope Alaskan crude anticipated in 1978, but will also require future developments in the Gulf of Alaska, or diversion of the limited available low sulfur fuel stocks to provide a blended product meeting the State of Oregon requirements.

4. What quantity and sulfur content of residual oil could Union's presently equipped Los Angeles refinery make available to Oregon when Alaskan crude is available (in quantities for which Union has commitments, or is negotiating commitments)?

The current level of about 800 MB of 2.5% sulfur maximum with the prior commitments to utilities for low sulfur oil. However, the installation of new blending facilities and the freeing of additional blending stocks will provide fuel quantities so that 1.75% sulfur fuel can be supplied to Oregon customers starting January 1, 1976.

5. What quantity and sulfur content of residual oil could Union's Los Angeles refinery, equipped with residual processing facilities now in design stages, make available to Oregon when Alaskan crude is available (in quantities for which Union has commitments or is negotiating commitments)?

With the availability of Alaskan North Slope crude, Cook Inlet crude and the potential of Gulf of Alaska crude, Union Oil would continue to meet its Oregon customer's requirements at 1.75% sulfur. To reach the 1979 requirements of 0.5% sulfur, residual oil processing equipment will be required.

Kessler R. Cannon
Portland, Oregon
6/26/75

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Variance Extension Request
Sulfur Content of Residual Oil

6. Please include an average refinery fuel balance to help describe answers to questions 4 and 5 showing refinery capacities, crude inputs and major product outputs including sulfur content.

See attached sketch.

7. Will Union's Los Angeles refinery equipped with new residual processing facilities now in the design stage and using Alaskan crude be able to meet Oregon's 0.5% sulfur content limit of residual fuels become effective January 1, 1979 in Multnomah, Clackamas, Columbia and Washington Counties. If not, does Union still intend to try and market residual fuel in the four-county area complying with the Department's regulation at some date beyond January 1, 1979? If yes, when?

Yes (January 1, 1979)

8. When will design, financial commitments, and installation of residual processing in the Los Angeles refinery be completed? Please supply approximate dates for each of the three items mentioned.

Design: Mid-1976

Financial Commitment: Undefined currently

Installation: December 1978

9. Since May 1974, has Union obtained any new residual fuel oil customers within the State of Oregon? If so, please list the customers and the amount of fuel oil supplied to them since May 1974.

The Union Oil Company has obtained no new residual fuel oil customers within the State of Oregon since May 1974. However, in 1974 the residual fuel oil business of two wholly owned subsidiaries of the Union Oil Company in Oregon were sold to Carson Oil Company. This does not represent new business for Union within the State of Oregon but merely a change in its methods of operation, i.e., we now sell this fuel to the ultimate consumer through the Carson Oil Company rather than through our wholly owned subsidiary companies. In 1974 the volume sold in this manner was 44,946 barrels and in 1975 it was 55,728 barrels.

10. Has the quantity of residual fuel oil being supplied to your existing customers within the State of Oregon increased since May 1974? If so, how much?

Per our discussion with Mr. Jack A. Payne of your Department, we find that we cannot answer this question. It is our understanding that the data supplied in No. 11 below provides the information which the Department is seeking.

Kessler R. Cannon
Portland, Oregon
6/26/75

-4-

Variance Extension Request
Sulfur Content of Residual Oil

11. What was the total quantity (barrels per year) of residual fuel oil that Union shipped into the State of Oregon for 1972, 1973, 1974? What is the expected amount to be shipped in for 1975 through 1979? Please explain basis for arriving at your predicted values.

The following quantities were shipped into the State of Oregon in the years in question. Not all of it was ultimately burned within the State of Oregon.

1972 - 664,421 bbls.
1973 - 801,903 "
1974 - 842,281 "

It is extremely difficult to predict the expected amount to be shipped in for 1974 through 1979. As you are aware, the consumption of fuel oil depends on many variable factors. The most important of these being the number of days during which natural gas is interrupted. We have no way of predicting the supplies of natural gas within the State. Should the supplies be about the same as in 1974 and 1975, we would anticipate shipments of between 800,000 and 900,000 barrels into the State depending on fluctuations in the needs of our existing customers.

12. What was the price (per gallon) of your #6 or bunker fuel from October 1974 through April 1975 at the Portland Terminal?

Our posted price for bunker fuel oil f.o.b., Portland, during the time period indicated in the question was \$.25547 per gal. into truck/trailer, \$.25428 per gal. into barges.

We hope this meets your needs. If we can be of further service, please advise.

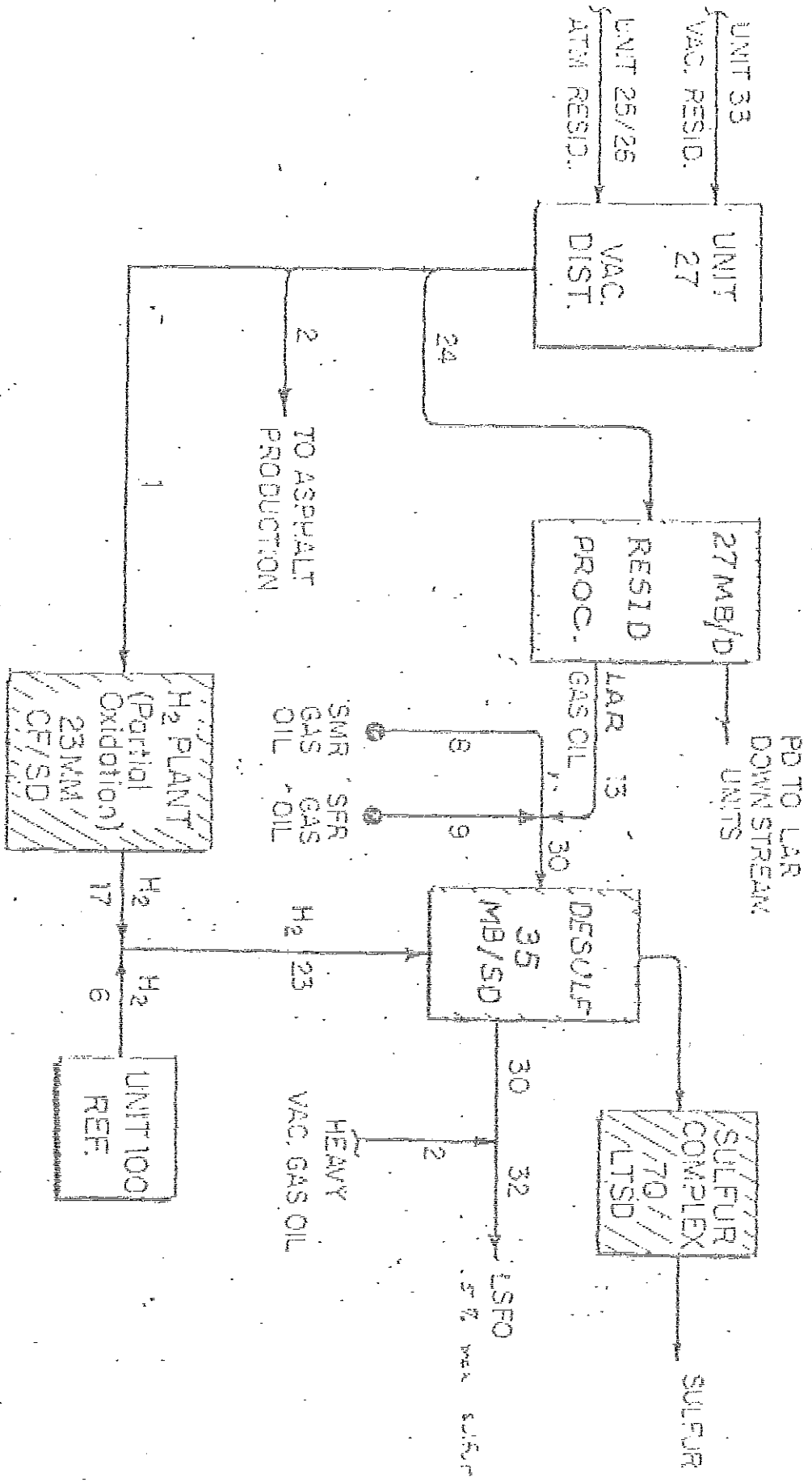
Sincerely,

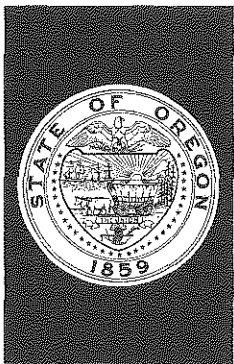
DJ Fogelquist

D. J. Fogelquist

attch.
djf:ed

LAR Resid Desulfurization





ENVIRONMENTAL QUALITY COMMISSION

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

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Salem

RONALD M. SOMERS
The Dalles

MEMORANDUM

TO: Environmental Quality Commission
FROM: Director
SUBJECT: Agenda Item No. G, August 22, 1975, EQC Meeting

Staff Report - Public Hearing to Consider Adoption of Statewide
Rules Containing a Civil Penalty Schedule for Violation of
Noise Emission Standards

Background

In July and September 1974 the Commission adopted noise control rules for new motor vehicles, in-use motor vehicles, and commercial and industrial noise sources. As the noise control program moves into the implementation phase, it is essential that the Commission be able to assess civil penalties when there are violations and when a person will not comply with the standards.

Evaluation

The Department staff, with legal guidance, has developed a proposed amendment to the Civil Penalties Rules. This amendment is a schedule for different violations of the noise control rules and is attached for your information.

The Department has notified interested persons of this proposal. People on the Department's mailing list received the public hearing notice and a copy of the proposed amendment. In addition, representatives of organizations that had commented on previous proposed noise rules were contacted by letter to review the proposed amendment with Department staff.

The Civil Penalties Rules amendment for noise control will provide the following enforcement ability:

1. Manufacturers, importers and dealers of new motorcycles, snowmobiles, trucks, buses and passenger cars must conform to the adopted rules and procedures.
2. Owners of noisy road and off-road recreational vehicles will be held responsible for violation of the in-use motor vehicle



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noise rules. Owners of land located near "noise sensitive property" must control the operation of noisy vehicles, (primary motorcycles), found to be in excess of ambient noise limits.

3. Commercial and industrial noise sources must control noise emissions below the adopted standards. Requests for information and conformance to compliance schedules must be in accordance to the adopted rules.

Recommendation

Following a staff analysis of this proposed amendment, it is recommended that public testimony be received at this time. If there is not a considerable amount of testimony and/or comments received, it is recommended that the Commission adopt this proposed amendment at this meeting. If there is sufficient testimony and/or comments received, it would be recommended that the staff review this information and make a recommendation for adoption of the proposed amendment at the Commission's next regularly scheduled meeting.



LOREN KRAMER
Director

JH/cam
July 24, 1975

Attachments: 1) proposed amendment
2) public hearings notice

PROPOSED

12-052 NOISE CONTROL SCHEDULE OF CIVIL PENALTIES. In addition to any liability, duty, or other penalty provided by law, the Director may assess a civil penalty for any violation pertaining to noise control by service of a written notice of assessment of civil penalty upon the respondent. The amount of such civil penalty shall be determined consistent with the following schedule:

(1) Not less than one hundred dollars (\$100) nor more than five hundred dollars (\$500) for violation of an order of the Commission or Department.

(2) Not less than twenty-five dollars (\$25) nor more than five hundred dollars (\$500) for any violation which causes, contributes to, or threatens:

(a) The emission of noise in excess of levels established by the Commission for any category of noise emission source.

(b) Ambient noise at any type of noise sensitive real property to exceed the levels established therefor by the Commission.

(3) Not less than ten dollars (\$10) nor more than three hundred dollars (\$300) for any other violation.

NOTICE OF PUBLIC HEARING
ENVIRONMENTAL QUALITY COMMISSION
State of Oregon

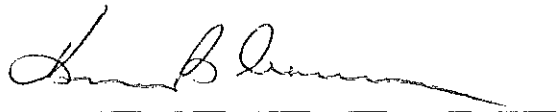
NOTICE IS HEREBY GIVEN that the Environmental Quality Commission will consider, by public testimony, a noise control schedule amendment to the rules pertaining to civil penalties at a public hearing commencing at 11:00 a.m. on the 22nd of August, 1975, in Room 602, at Multnomah County Court House, 1021 S. W. 4th Avenue, Portland, Oregon.

The commission adopted noise control rules for motor vehicles and industrial and commercial type sources in 1974 and in order to enforce these rules it is essential that the commission be able to assess civil penalties when there are violations and when a person will not comply with the standards.

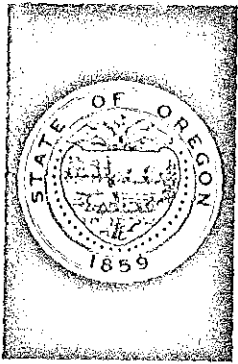
Copies of the proposed amendment are available for public inspection, or may be obtained by request from the Department of Environmental Quality, Regional Operations Program, 1234 S. W. Morrison Street, Portland, Oregon 97205.

Any interested person desiring to submit written testimony concerning the issues of fact, law, or policy on these matters may do so by forwarding them to the office of the Department of Environmental Quality, Regional Operations Program, 1234 S. W. Morrison Street, Portland, Oregon 97205, prior to the hearing.

Dated this 25th day of June, 1975



KESSLER R. CANNON, Director



DEPARTMENT OF
ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, OREGON • 97205 • (503) 229-5372

ROBERT W. STRAUB

~~XXXXXXXXXXXX~~
GOVERNOR

~~XXXXXXXXXXXX~~
XXXXXXXXXX

August 5, 1975

Mr. L. W. Newbry
Medford Corporation
P. O. Box 550
Medford, Oregon 97501

Re: Civil Penalties on Noise Control

Dear Mr. Newbry:

This will acknowledge receipt of your letter dated July 30, 1975 in regard to proposed regulations on a Noise Control Schedule of Civil Penalties.

Your testimony so contained in that document will be brought to the attention of the Commission and included in the records at the hearing set for August 22, 1975.

Thank you for your interest and for commenting on the proposed regulations.

Sincerely,

LOREN KRAMER
Director

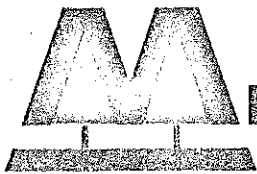
Fred M. Bolton
Assistant Director

FMB/bw

cc: Raymond P. Underwood, Legal Counsel
cc: John Hector, Administrator
Noise Control Section



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MEDFORD CORPORATION

P. O. BOX 550, MEDFORD, OREGON 97501 ★ TELEPHONE 503 - 773 7491

July 30, 1975

Department of Environmental Quality
Regional Operations Program
1234 S. W. Morrison Street
Portland, Oregon 97205

Dear Chairman Richards and Members of the Commission:

We will be unable to attend the formal hearing on the adoption of regulation 12-052 Noise Control Schedule of Civil Penalties. We respectfully request that the following testimony be included in the record.

The Legislature first recognized noise as an element of the environment and as a source of potential pollution in 1971. The authority given in the statutes is extremely broad and without adequate guidelines to the Commission. It is obvious that the complexities of noise regulation were not fully understood by the Legislature, the Department, nor the Commission until the staff undertook the task of writing regulations.

There appears to be no question but what enforcement of the regulations will be difficult because of the extremely technical noise level measurement requirements. This no doubt prompted the Commission to order enforcement to be undertaken by the Department only upon findings as a result of complaints by citizens.

Since this method of enforcement has been adopted by the Commission, it seems inappropriate to us to be promulgating civil penalties at this time. This is particularly true of subsections (2) and (3) of the proposed regulations.

Sound measuring equipment is expensive and requires some technical knowledge to operate. Many businesses in the State do not own this equipment and cannot be aware of violations. To establish civil penalties for violations as outlined in subsection (2) of the proposed regulation seems unfair and premature.

Subsection (3) is so broad that it could be applied to almost any minor infraction.

We would suggest that the Commission follow the provisions of ORS 468.125 (1) providing a violator with five days notice of the violation before invoking civil penalties and then the

Department of Environmental Quality

Page 2

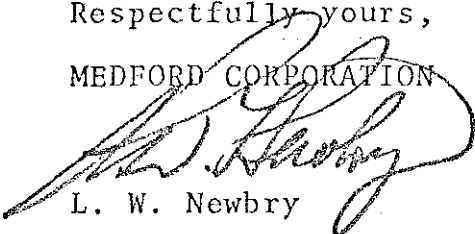
July 30, 1975

penalty should only be applied for violation of an order by the Department or the Commission as outlined in subsection (1) of the proposed regulation. We further suggest the deletion of subsections (2) and (3).

It seems to us that this procedure would provide the Department with all the enforcement tools needed until we all have a better understanding of the highly complex and technical aspects of sound measurement and noise control.

Respectfully yours,

MEDFORD CORPORATION



L. W. Newbry

LWN/d1

PETITION TO AMEND REGULATION 35-000
 (VEHICLE NOISE EMISSIONS)
 AS ADOPTED JULY 19, 1974

- I. Petitioner, Freightliner Corporation, 2525 S.W. Third Avenue, Portland, Oregon, is a manufacturer of Class 8 diesel vehicles operated in the State of Oregon. These vehicles are subject to regulation by the Department.
- II. The Environmental Quality Commission is hereby petitioned, pursuant to Chapter 340, Section 11-045, of the Oregon Administrative Rules, to amend Department of Environmental Quality Regulation 35-000 in the following particulars:
- A. Table "A" referred to in Section 35-025 be amended for truck and bus vehicle type as follows:
- 1) Maintain a maximum specified noise level of 86 dB(A) after 1975.
 - 2) Delete 83 dB(A) level specified for 1976-1978.
 - 3) Delete 80 dB(A) level specified after 1978.

Table "A" as amended is shown below--additions are underlined; deletions are slashed (///):

TABLE A
 MOVING TEST AT 50 FEET

<u>Vehicle Type</u>	<u>Model Year</u>	<u>Maximum Noise Level, dB(A)</u>
Motorcycles	1975	86
	1976	83
	1977 - 1978	80
	after 1978	75
Snowmobiles as defined in ORS 481.048	1975	82
	1976 - 1978	78
	after 1978	75
Truck and Bus as defined under ORS 481.030 and 481.035	after 1975	86
	1976 - 1978	83
	after 1978	80
Automobiles, light trucks and all other ROAD VEHICLES	1975	83
	1976 - 1978	80
	after 1978	75

B. Table "B" referred to in Section 35-030 be amended for truck and bus vehicle type as follows:

- 1) Maintain a maximum specified noise level of 94 dB(A) for all model years.
- 2) Delete 91 dB(A) for level specified for 1976-1978.
- 3) Delete 88 dB(A) level specified for after 1978.

Table "B" as amended is shown below--additions are underlined; deletions are slashed (///):

TABLE B
STATIONARY TEST AT 25 FEET OR GREATER

<u>Vehicle Type</u>	<u>Model Year</u>	<u>Maximum Noise Level, dB(A)</u>
Truck and Bus as defined under ORS 481.030 and 481.035	before 1976 <u>All</u>	94
	1976 + 1978	91
	after 1978	88
Motorcycles	before 1976	94
	1976	91
	1977 - 1978	88
	after 1978	83
Automobiles, light trucks and all other ROAD VEHICLES	before 1976	92
	1976 - 1978	88
	after 1978	83

C. Table "C" referred to in Section 35-030 be amended for truck and bus vehicle type as follows:

- 1) Maintain maximum specified noise levels of 86 dB(A) for 35 mph or less and 90 dB(A) for speeds greater than 35 mph for all model years.
- 2) Delete 85 and 87 dB(A) levels specified for 1976-1978.
- 3) Delete 82 and 84 dB(A) levels specified for after 1978.

Table "C" as amended is shown below--additions are underlined; deletions are slashed (///):

TABLE C
MOVING TEST AT 50 FEET OR GREATER AT VEHICLE SPEED

<u>Vehicle Type</u>	<u>Model Year</u>	<u>Maximum Noise Level dB(A)</u>	
		<u>35 Mph or less</u>	<u>Greater than 35 Mph</u>
Truck and Bus as defined under ORS 481.030 and 481.035	before 1976 All	86	90
	1976 - 1978	88	87
	after 1978	82	84
Motorcycles	before 1976	84	88
	1976	81	85
	1977 - 1978	78	82
	after 1978	73	77
Automobiles, light trucks and all other ROAD VEHICLES	before 1976	81	85
	1976 - 1978	78	82
	after 1978	73	77

III. Petitioner asserts these amendments should be made for the following reasons as more fully explained and supported in the section, "Data, Views and Arguments" below:

- A. Reducing allowable noise emissions below those proposed in this petition will have no appreciable effect on the overall noise heard by the public.
- B. The increased cost of operating a vehicle meeting the regulations is disproportionate to any public interest.
- C. The increased initial cost of a vehicle meeting the regulations is also disproportionate to any public benefit.
- D. The ultimate cost to the public is 100 percent nonproductive and inflationary.
- E. Since initial adoption of the Department of Environmental Quality regulation, the Federal EPA has made proposals to regulate this very area which would pre-empt regulations by Oregon.
- F. The effect of an aggressive enforcement program has not been adequately considered, and, if developed and implemented, would accomplish the objective of the present regulation and at a lower cost.

IV. Petitioner asserts the following point of law:

The legislative standard for regulation by the commission is contained in ORS 471.010, and is to adopt "reasonable" regulations to protect "the health, safety and welfare of Oregon citizens from the hazards and deterioration of the quality of life imposed by excessive noise emissions..." (emphasis added). As more fully set forth below, the standards which are the subject of this petition are neither necessary nor reasonable to effectuate the legislative policy. Furthermore, the noise levels petitioned for after 1975 are not "excessive" in light of surrounding circumstances, i.e., tire noise.

V. Petitioner knows of no specific person interested in the proposed statement, but for the purpose of Department of Environmental Quality rules 11-045(3)(a), the following are assumed to be interested:

- A. American Trucking Association, 1616 P Street, N.W., Washington, D.C. 20036
- B. Oregon Trucking Association, 1500 N.E. Irving Street, Portland, Oregon 97232
- C. Truck Industry Service, Suite 1100, 900 17th St., N.W., Washington, D.C. 20006
- D. Motor Vehicle Manufacturers' Association, 320 New Center Building, Detroit, Michigan 48202
- E. Western Highway Institute, 333 Pine Street, San Francisco, California 94104

VI. Data, Views, and Arguments:

Interest and Qualifications of Freightliner

We are vitally interested in commercial vehicle noise control. Freightliner Corporation manufactures White-Freightliner trucks in the state of Oregon. White-Freightliner trucks are diesel-powered vehicles, of both cab-over and conventional configuration, and are generally used in over-the-road transportation. These vehicles are marketed by the

White Motor Corporation. Approximately 10 percent of the Class 8 diesel vehicles and over 20 percent of the Class 8 vehicles of cab-over design sold in the United States last year were built by Freightliner. Ninety-four percent of our vehicles pull a semi-trailer; an additional 5 percent plus are straight trucks pulling a full trailer.

Freightliner is currently under contract to the Office of Noise Abatement, U.S. Department of Transportation, to develop and demonstrate noise control technology in terms of its economic impact and user acceptability. This we suggest has given us valuable insight into the field of commercial vehicle noise control.

Freightliner submitted comments on the noise regulations proposed by the Department of Environmental Quality, dated October 30, 1973, under the signature of Norman B. Chew, Senior Vice-President of Engineering, and under the signature of Ray W. Murphy, Director of Research and Development, dated March 4, 1974, and again on June 18, 1974, under signature of Thomas D. Hutton, Research Supervisor. We are pleased to note that many of the suggestions that we were able to offer in our previous comments have been incorporated into the noise control regulations. We are especially pleased to note that the D.E.Q. has given serious consideration to the problems and costs involved in retrofitting vehicles manufactured prior to 1970 to meet noise requirements at levels below 88 dB(A).

We are, however, dismayed that the D.E.Q. was unresponsive to comments in the following particulars:

- A. Has in Section 35-025, Noise Control Regulations for Sale of New Motor Vehicles set a standard of 83 dB(A) in 1976 and 80 dB(A) in 1978.
- B. Has in Section 35-030, Noise Control Regulations for In-Use Motor Vehicles set a standard in Table "B" of 91 dB(A) in 1976 and 88 dB(A) in 1978.
- C. Has in Section 35-030 in Table "C" for speeds under 35 mph of 85 dB(A) in 1976 and 82 dB(A) in 1978, and for speeds over 35 mph of 87 dB(A) in 1976 and 84 dB(A) in 1978.

Freightliner asserts these sections should be amended for truck and bus vehicle type as follows:

- A. In Section 35-025 maintain a maximum specified noise level of 86 dB(A) for the foreseeable future.
- B. In Section 35-030 maintain a maximum specified noise level of 94 dB(A) for all model years as measured by the procedures in Table "B".
- C. In Section 35-030 maintain maximum specified noise levels of 86 dB(A) for 35 mph or less and 90 dB(A) for speeds greater than 35 mph for all model years.

Petitioner's Rationale for Amendment

- A. NO EFFECT ON NOISE PUBLIC HEARS. Setting limits lower than those we have suggested will have the net effect of increasing the cost of commercial vehicles without any significant benefit to the public. Lower limits do not significantly decrease the noise the public hears at highway speeds because the dominant noise at highway speeds is tire noise.

The noise controlled, heavy-duty diesel tractor that Freightliner produced under contract DOT-OS-20095 demonstrated that it is possible, but not necessarily practical or cost-effective, to manufacture a vehicle of this type to a noise level of 72 dB(A) at 50 ft., as tested in accordance with the D.E.Q. procedures. This noise level is not much above that produced by just coasting a solo tractor (with the engine turned off and the transmission out of gear) past a microphone located 50 feet from the vehicle's path at 35 mph. Under these conditions, a bobtail tractor having straight ribbed (quiet) tires produces a noise level of 68 dB(A). In other words, the noise produced by the truck under full power acceleration was only 4 dB(A) higher than it was just coasting with the engine turned off. Coast-by under the same conditions with a 6x4 tractor and a loaded semi-trailer with new straight ribbed tires all around produces a noise nearly 80 dB(A) at 60 mph, which demonstrates the influence of not only increased speed, but of adding the trailer as well.

The straight ribbed tread patterns used in these tests are known to generate a lower noise level than other tread designs, but they are inferior to the lug pattern in durability and traction characteristics. It should be pointed out that the economic operation of a large fleet of trucks is dependent upon the selection of tires having performance properties and endurance characteristics matched to the intended service conditions so that maximum tire mileage and lowest cost per tire mile will be ensured.

A loaded tractor-trailer equipped with the quietest practical tires commercially available will have a coast-by noise level of 84 dB(A) at 55 mph. The overall noise level of the tractor-trailer combination with an 86 dB(A) tractor under full power will then be 88.1 dB(A) at 55 mph.

However, with a tractor meeting the 83 dB(A) drive-by requirement, the noise level of the combination under full power will be 86.5 dB(A). The noise that the public hears at highway speed is reduced by only 1-1/2 dB(A)! A change of 1-1/2 dB(A) is barely perceptible to the human ear.

Under the same test conditions, a tractor whose noise rating is 80 dB(A) would, when in combination with the above trailer, have an overall noise level at 55 mph of 85.5 dB(A), or only 1 dB(A) lower than the combinations having the tractor quieted to 83 dB(A). In these examples, which are illustrated in Table I, even though the noise produced by the tractor is reduced from 86 dB(A) to 80 dB(A), or by 6 dB(A), the overall noise of the vehicle combination was only reduced from 88.1 dB(A) to 85.5 dB(A), or by 2.6 dB(A).

TABLE I
NOISE LEVEL OF TRACTOR AND TRAILER EQUIPPED
WITH QUIETEST TIRES AVAILABLE - TIRES HALF WORN

Tractor DEQ Noise Rating @ 50 Ft	Tractor & Trl, 55 Mph @ 50 Ft		Reduction in Noise Level	
	Coast-By Noise Level	Full Power Noise Level	Tractor DEQ Test	Trt & Trl Traffic
86	84	88.1	0	0
83	84	86.5	3	1.5
80	84	85.5	6	2.6

The inflationary aspects of increased truck cost for compliance with the low levels specified by the D.E.Q. cannot be justified by the small reduction in traffic noise levels that they will produce.

To reiterate, a significant breakthrough in tire design must be made (and none is on the horizon*) before noise control design changes to the truck itself will result in appreciably lower overall noise produced by heavy-duty trucks at normal highway speeds.

The questions to be resolved: Is a 1-1/2 dB(A) reduction in traffic noise worth the cost penalty to the intrastate truck operators and ultimately the residents of Oregon for compliance with the specified 83 dB(A) noise standard?

B. INCREASED OPERATING COST

The commercial vehicle has evolved over the years as a design compromise. The chassis, cab, engine, power train, and tires are each part of a system, the primary aim of which is to haul freight in a safe, reliable, and economical manner within the operational regime defined for the commercial vehicle. This regime is characterized by high payload/vehicle weight ratios, and minimal operating and maintenance costs. These vehicles are generally custom built to suit the specific needs of the particular user. To introduce a requirement for severely decreased noise levels for commercial vehicles necessarily requires an extensive re-evaluation of the design of the entire vehicle. Our experience in building vehicles to meet the current 86 dB(A) levels, in developing special "quiet packages" to meet the Oregon 1976, 83 dB(A) level, and our work on the D.O.T.-sponsored Quiet Truck Project, indicates the effect of modifying trucks to meet the lower levels specified by the D.E.Q. are as follows:

1. The additional weight required for noise control equipment reduces the payload/vehicle weight ratio and thus decreases productivity.

-
1. Testimony of W.H. Close at Public Hearings of the U.S. Environmental Protection Agency, February 20, 1975.
 2. "Regulatory Implications of Truck Tire Noise Studies," S.A.E. Paper 740606, authored by W.H. Close, Chief, Office of Noise Abatement, U.S. D.O.T.

2. The redesigned exhaust system, cooling system, air intake system, and engine enclosures increase the initial cost of the vehicle.
3. Maintenance costs are increased due to the requirement to keep the noise attenuation equipment at "specified" performance levels and the extra effort required to attain access through engine panels and enclosures for normal maintenance.

To achieve 83 dB(A), the weight of a Freightliner truck is increased by 38 to 285 lbs., depending upon engine and cab configuration. In a general freight operation, it is estimated that the cost of lost cargo due to increased weight is \$1.95 per pound per million miles. This is lost revenue. On the basis of 125,000 miles/year per tractor, this would amount to between \$8 and \$69 per year to achieve the 83 dB(A) level. In a bulk hauling operation, the cost of increased weight is \$12.50 per pound per million miles, which increases the costs to achieve 83 dB(A) to between \$51 and \$445 per year, depending upon engine and cab configuration.*

C. INCREASED INITIAL COST

The proposed noise control regulations for trucks will not adversely affect Freightliner or other manufacturers of heavy duty diesel powered trucks as all the vehicles we are currently producing comply with the D.E.Q. 1975 regulation of 86 dB(A) at 50 feet, and we are also manufacturing vehicles for sale with special quiet kits designed for compliance with an 83 dB(A) standard. However, we are concerned over the increased costs associated with the 83 dB(A) requirement. The major noise sources contributing to the overall 86 dB(A) level are the engine, the fan, and the exhaust system. Individual contributions for each of these sources vary widely. For example: the engine source level ranges from 76 dB(A) to 85 dB(A) depending upon engine type and design; the fan source level ranges from 75 dB(A) to 85 dB(A) depending upon fan diameter, speed, and shroud design; and the exhaust source level ranges from 75 dB(A)

*Figures based upon information contained in the attached document, "The Economics of Quietening the Freightliner Cab-Over-Engine Diesel Truck," by G.E. Fax and M.C. Kaye, October, 1974, Report No. Truck Noise III-d, for the Office of Noise Abatement, Department of Transportation.

to 85 dB(A) depending upon muffler design, size and mounting, exhaust pipe mounting, and exhaust flex joint design. To achieve the 86 dB(A) requirement, if the engine is quiet, exhaust and fan need less treatment. If the engine is close to 85 dB(A), however, extreme care must be taken in treating fan and exhaust noise. This points up the problem with the 83 dB(A) level.

To achieve the 83 dB(A) level, the following modifications must be made beyond those made to achieve the current 86 dB(A) levels:

- 1) For our most popular engine/vehicle configuration, representing 30% of our production, a dual muffler exhaust system must be substituted for the single muffler that is now used, the radiator cooling fan must be increased in diameter and slowed down in speed, and engine mechanical noise treated with a quiet kit. The increased cost to the customer for this noise control is currently \$580.
- 2) For our second most popular engine/vehicle configuration, representing nearly 26% of our production, no change is required to the exhaust system. However, the fan and engine must be treated as above for a customer cost increase of \$568.
- 3) For our third most popular engine/vehicle configuration, representing 15% of our production, dual exhaust mufflers are required, the fan must be increased in diameter and slowed down in speed, a quiet kit must be added to the engine, and a super cooling package is required for adequate engine cooling. Customer cost increase is \$743 per vehicle.

Based upon our current product mix, the composite, average cost per vehicle for controlling noise to the 83 dB(A) level is \$458. In 1974, a total of 56,953 new trucks were registered in the state of Oregon. Over half of these (30,767) were light trucks having a gross vehicle weight (GVW) rating of 6,000 lbs. or less. Heavy duty trucks, having a GVW rating of 19,501 lbs. or more, accounted for 6,725 new vehicle registrations. Eight hundred seventy-two of these were new Freightliners. If a similar number of new Freightliners

are sold in Oregon in 1976, truck buyers and ultimately the public will pay an additional \$399,376 for Freightliner trucks for compliance with the D.E.Q. 83 dB(A) limit. If the average cost increase for noise control to the 83 dB(A) limit on other heavy duty trucks is similar to Freightliner, then in 1976, these new trucks will cost Oregon truck buyers and additional \$3,080,050 just for compliance with Section 35-025 of the D.E.Q. regulation. This three million dollar figure represents increased capital costs only and does not include increased operating costs, which we have shown will be nearly as high as the increased capital costs for certain types of trucking operations.

D. COST IS ULTIMATELY PASSED ON TO THE CONSUMER

It must be emphasized that increased costs of new equipment purchased by motor carriers and increased operational and maintenance costs are ultimately passed on to the consumer. These costs are not accompanied by increases in productivity, so the results are clearly inflationary.

An effective statewide enforcement program (utilizing existing personnel in the D.E.Q., Permits Section of the State Highway Division, and/or the State Highway Patrol) at the level we are petitioning for will drastically reduce the public complaints about truck noise without imposing undue economic penalty on the motor carrier or the public.

E. FEDERAL PRE-EMPTION

In the past, we have supported noise control regulations based upon both the level and time frame of the state of California. These regulations have been used as a model by the state of Oregon. Now, however, the Federal Environmental Protection Agency has established noise emission standards for vehicles in-use by interstate motor carriers and has also proposed noise standards for new motor vehicles. The noise emissions of in-use vehicles having a gross combination weight rating in excess of 10,000 lbs. operated by motor carriers engaged in interstate commerce will, on October 15, 1975, be regulated by Federal Environmental Protection Agency Noise Emission Standard Part 202 of Title 40 of the Code of Federal Regulations.

Under Section 18(c)(1) of the Noise Control Act of 1972, the federal noise emission standards will pre-empt those of the states and their political subdivisions. After the effective date of the federal regulations, no state or political subdivision thereof may adopt or enforce any noise emission standard unless it is identical to the federal standard.

The E.P.A. regulations for in-use vehicles engaged in interstate commerce specifies a noise level of 86 dB(A) at 50 feet for 35 mph or less and 90 dB(A) for speeds greater than 35 mph. These are the same levels we seek, for in-use trucks, in our petition. It hardly seems reasonable for the state of Oregon to penalize truckers engaged in intrastate commerce to lower noise emission levels than those engaged in interstate commerce. This anomaly is corrected by our petition.

We are further concerned that the Oregon 83 dB(A) noise level at 50 feet for new trucks in 1976 will result in Oregon having a substantially lower noise level requirement than most of the other states, as federal E.P.A. standards for new vehicles are not apt to be enacted by then because of serious deficiencies in their original proposal. This could result in the residents of the state of Oregon paying more for nearly everything they purchase to offset increased shipping costs as the truck operators must obtain an increase in freight design to comply with the 83 dB(A) noise level.

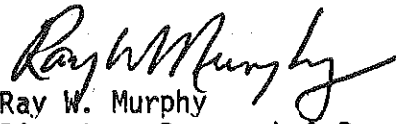
F. The MOST IMPORTANT ASPECT OF NOISE CONTROL IS ENFORCEMENT

Unless an effective program is implemented to enforce noise emission standards, we will continue to be faced with public pressure to have unrealistically stringent standards. Without strong local enforcement, there is continued public clamor for lower limits to solve the problem, while the vehicles most complained about already violate existing regulations.

In summary, we believe that environmental improvement is possible, at lower total cost, by enforcement of petitioned-for noise levels. In view of the marginal difference in sound levels impacting the public, we believe the cost to the residents of Oregon for noise

standards lower than we have petitioned for are grossly out of proportion to the benefits. We do not believe that Oregon can afford to squander resources to achieve a benefit that will be barely perceived, if at all, by the public who will ultimately have to pay for it. This pitfall is avoided at the sound levels petitioned for, levels which we believe will provide optimum public interest.

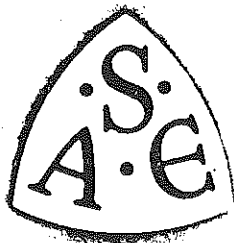
Respectfully Submitted,



Ray W. Murphy
Director, Research & Development
Freightliner Corporation
July 30, 1975

TOM H. ALLEN
R+D File

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SOCIETY OF AUTOMOTIVE ENGINEERS, INC.
Two Pennsylvania Plaza, New York, N. Y. 10006

Regulatory Implications of Truck Tire Noise Studies

William H. Close
Office of Noise Abatement, U. S. Department of Transportation

SOCIETY OF AUTOMOTIVE ENGINEERS

West Coast Meeting
Anaheim, Calif.
August 12-16, 1974

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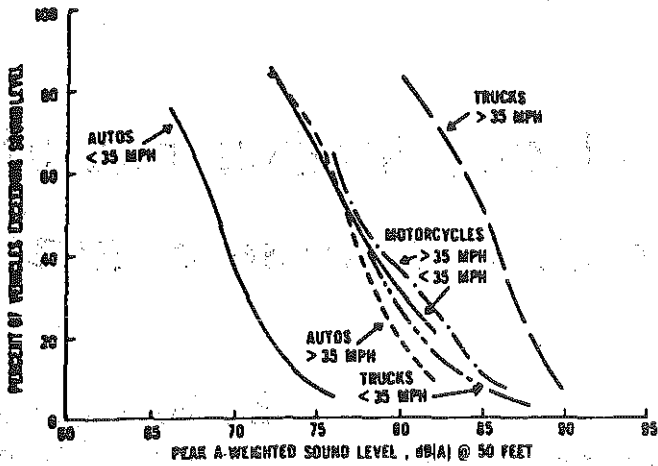


Fig. 1 - Summary of California Highway Patrol vehicle noise survey

and no idea at all as to what he will be really up against if he is going to have to comply with federal or state or local regulations that are going to say: "You can't make so much tire noise."

The problem that is confronting us with the interstate motor carrier regulations right now is what to do about this wide variety of tires; why are more than 1000 different truck tire treads offered for sale; what does it mean to industry; and what should the government noise regulator do about it? The U.S. Department of Transportation (DOT) has been active in the field of truck tire noise for four years trying to get some answers. Some pilot truck tire noise work had been done and was published in the open literature by the General Motors Corp. (2), and this information served as a basis for the DOT's research planning and for testing now under way by the tire manufacturers.

TIRE TYPES TESTED

Fig. 4 represents the kind of data the DOT got from two summers of solid testing of commercially available tires acquired from the American Trucking Association's fleet tire banks. The National Bureau of Standards performed the tests, and details are published in Refs. 3 and 4. This figure illustrates the sound level, as a function of speed, for four test tires on the rear of a straight truck, coasting by the microphone 50 ft to the side; there is no engine noise at all. Rib A, which has only circumferential grooves around it, is the control tire. It is a tire that is sometimes used on the steering axles of tractor-trailers but is generally not found in regular highway service. A completely bald tire, that is, a new tire that was cast without any tread features, would probably illustrate a sound level 1 or 2 dB lower than our control tire.

The quietest tires are the so-called rib tires. These tires have treads that look like the kind of tread pattern that you would run on the steering axle of your automobile and on the rear axle in the summer. The louder tires are called crossbars; these are tires that have aggressive lug features somewhat like snow tires. One can see that there is a considerable difference in sound level between rib tires and crossbars, and, within the

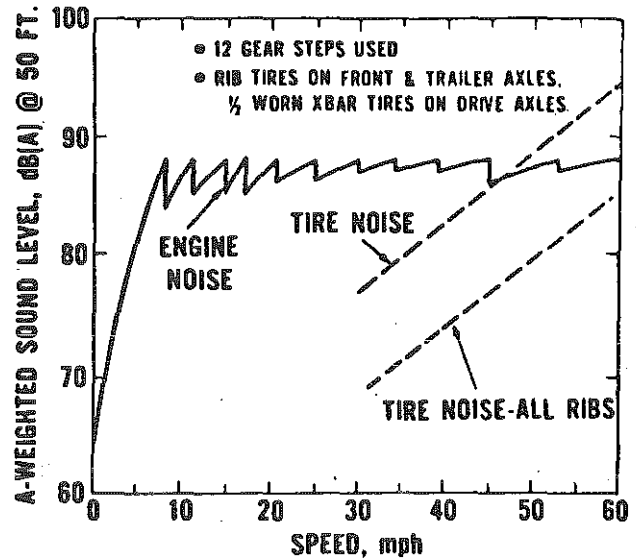


Fig. 2 - Diesel truck pull-away and highway noise profile

class of the crossbars, there are appreciable differences between brands.

Finally, there is a recap; it is a tire that has pockets cast into the middle, ostensibly to give it traction. It is a very loud tire that is very tonal in nature. The persistence of the sound as it goes down the highway is quite long, and it is not too surprising that it is called "Singing Sam" in the trade.

VARIABLES

TIRE WEAR - One other problem we are confronted with in this business is that as the tires wear, the sound level increases. Fig. 5 is a cross-plot of some of our data to show the noise effects as tires are worn in normal service. The data points on the right-hand end of the lines are for the new or newly retreaded tire tread depth. As the tires wear, the tread depth, of course, becomes less, and the sound level increases to a point; then it decreases, in most cases. Unhappily, the maximum noise occurs at about the half-worn point and, if one were to give a realistic appraisal, one would say that most tires are half worn. At least that is what must be taken into account in looking at regulatory approaches to the problem.

On the right-hand side of Fig. 5, the tread patterns for the various tire types are illustrated. Two representative crossbars, a "semitraction" retread and a rib tire, are shown by the "patch prints." The light areas are the pockets or the recesses in the tire tread.

In trying to assess this problem of wear, we merely connected data points for the several conditions of wear that were tested. We did not have the time or the resources to take those test tires and to wear them and test them sufficiently to obtain continuous curves which would positively determine where the real maximum noise occurred. The manufacturers of tires will have to do this.

One of the problems in testing is that you cannot just take a tire and grind it down to simulate wear. Fig. 6, for example, presents data from a new tire and a tire that is ground down.

Regulatory Implications of Truck Tire Noise Studies

William H. Close

Office of Noise Abatement, U. S. Department of Transportation

THIS PAPER is an attempt to make the case for tire noise regulation and to illustrate the implications of such regulations to tire users. Fig. 1 is a product of the 1971 California Highway Patrol noise survey (1)* reflecting the percentage of vehicles exceeding given A-weighted sound levels measured 50 ft to the side of the center lane of travel for a variety of vehicles at high and at low speeds. The quietest group of vehicles is automobiles travelling at speeds less than 35 mph, and the noisiest group is trucks at speeds in excess of 35 mph. In the middle are low speed trucks, high speed autos, and motorcycles at all speeds.

In the case of automobiles, we have a relatively quiet machine when driven sensibly in the urban street situation. At higher speeds, the auto engine noise increases some, and the tire noise increases appreciably, resulting in about an 8 dB translation of the distribution. The trucks are fairly noisy to start with but, as the speed is increased, the engine noise actually does not increase; the increase in sound level shown in Fig. 1 is mainly attributable to tire noise. Motorcycles have light wheel loading and, hence, their noise illustrates very little speed dependency.

*Numbers in parentheses designate References at end of paper.

EFFECT OF TIRES ON NOISE LEVEL

Looking in more detail at truck tire noise, Fig. 2 illustrates the A-weighted sound level 50 ft to the side of a truck as it accelerates away from a stop light and accelerates to cruising speed, with the measurement taken theoretically always beside the vehicle as it accelerates. From idle, the engine revs up through the first gear step and continues to operate within 300-400 rpm of the governed engine speed as it goes through the full gear box, in this case 12 gear steps, up to highway speed. Depending on the kind of tires that are used on this 18 wheel tractor-trailer, we can get tire noise levels as shown which would be added to the rather constant engine noise. Only if the truck were run on all new rib tires would the tire noise level be low enough to keep from appreciably raising the overall vehicle sound level at speeds up to 60 mph.

Fig. 3 represents only a few of about a thousand different types of truck tires a user can select to put on his trucks. Many times this is the only kind of information the user has to select by, augmented perhaps by brochures that a salesman will bring in. Of course, the trucker very quickly begins to accumulate some experience and feel for the reliability of the product and of the company that supplies it. But he really does not have much idea about the tire noise that it generates

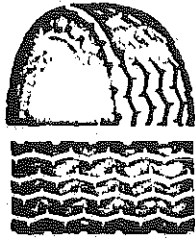
ABSTRACT

Based on the past research of the U.S. Department of Transportation, this paper is an attempt to make the case for tire noise regulation and to illustrate the implications of such regulations to tire users. The paper examines the effects of speed, load, tire tread type, road surface, and placement of tires on combination truck vehicles insofar as passby sound levels are concerned. A concluding table of expected roadside sound

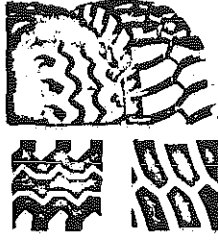
levels based upon typical tire use indicates the potential restrictions in tire types that are inherent in presently proposed federal noise regulations on interstate motor carriers. It is concluded that as significant technological improvements are implemented in the design and regulation of truck engine noise, more severe tire user requirements will follow in order that tire noise keep pace with declining engine noise.

HIGHWAY SPECIAL SERVICE

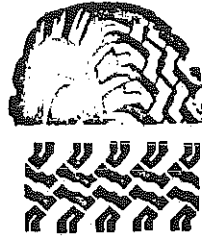
GENERAL



Power-Jet L.P.T.



H. C. T. N.D. Lugger



Super All-Grip

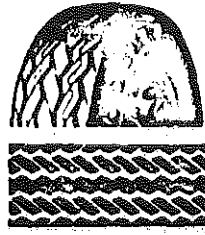


Jumbo Super All-Grip

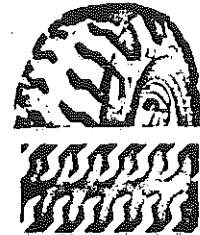


All Grip

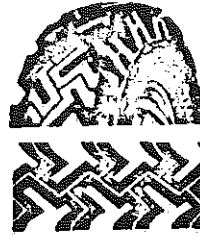
GOODYEAR



Custom Hi-Miler



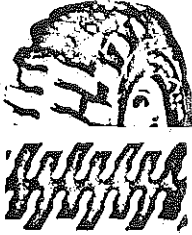
Super Road Lug



Hi-Miler Xtra Grip

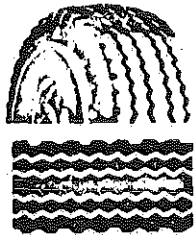


Super Single Road Lug

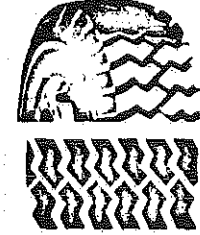


Road Lug

FIRESTONE



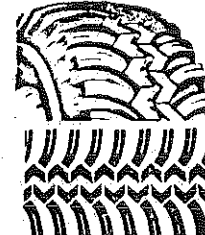
Transport 110 L.P. Trailer



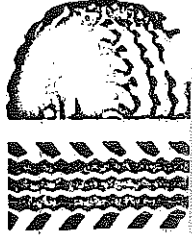
Transport All Traction Premium



Super All Traction

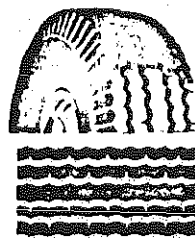


Super All Traction Duplex

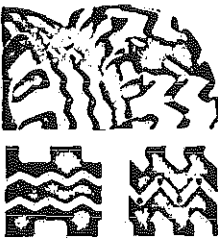


All Traction

B. F. GOODRICH



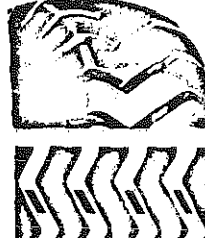
Trailer Express



Rib Logger Rock Logger



All Purpose Extra Traction

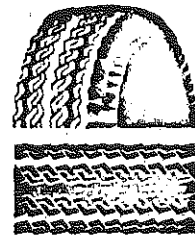


SDR-Lug



All Purpose

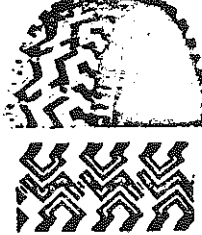
UNIROYAL



Fleet Master Triple Tread Trailer



Super Fleetmaster



Fleetmaster Deep Lug



Fleet Uni-Master Lug

Fig. 3 - Comparable truck tire types and tread designs, May 1969

COMPARABLE TRUCK TIRE TYPES






























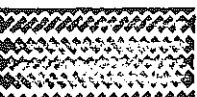



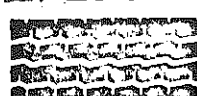









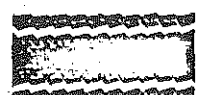






Radial	HIGHWAY				
  Dual Super G	  Power-Jet Nygen	  Power-Jet Nylon	  Jumbo Power-Jet	  TSR	 
  Hi-Miler Flexsteel	  Custom Hi-Miler	  Super Hi-Miler	  Super Single Hi-Miler	  Traction Hi-Miler	
  Transport Steel	  Transport 150 Premium	  Transport 110	  Transport Duplex	  H.D. Transport	
  Maxi-Miler Express	  Extra Miler Premium	  Silvertown Extra Miler	  SDR-Rib	  Power Express	
	  Fleetmaster Triple Tread	  Fleet Carrier	  Fleet Uni-Master Rib	  Fleetway	

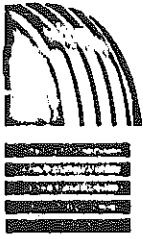
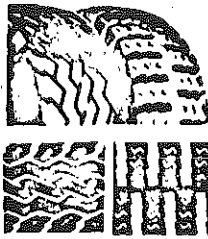
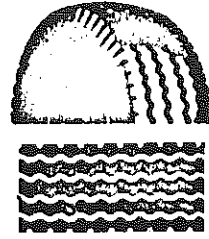
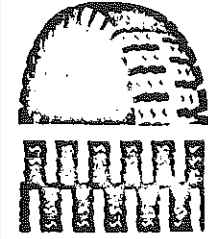
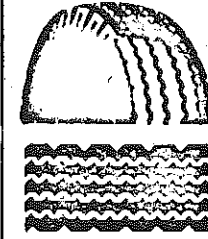
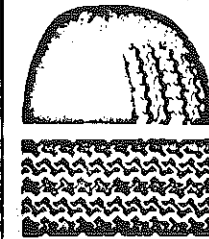
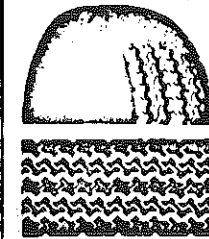
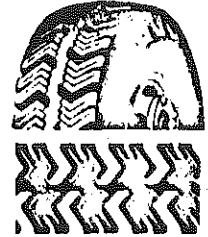
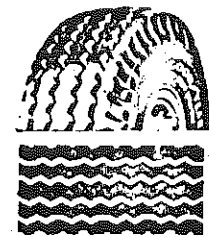
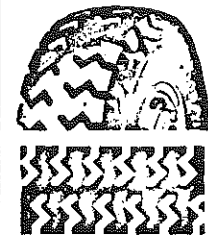
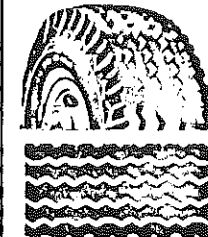
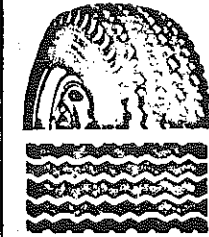
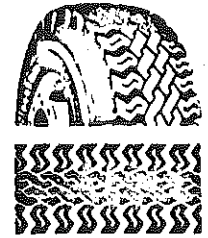
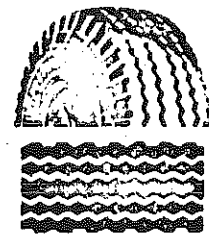
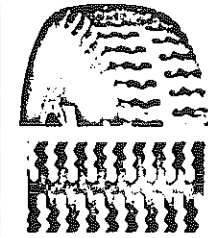
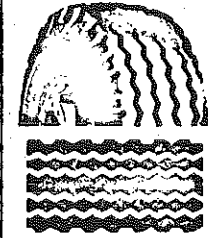
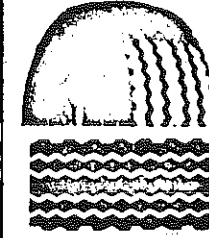
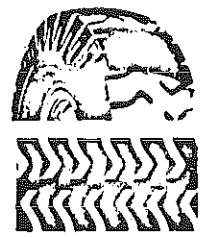
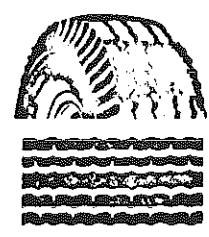

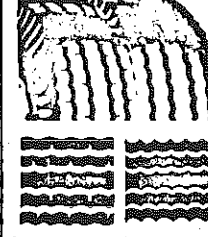
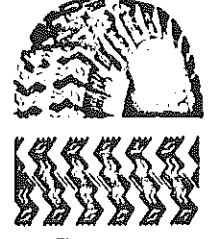
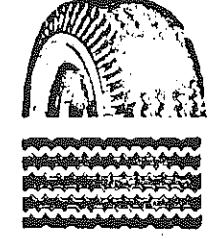
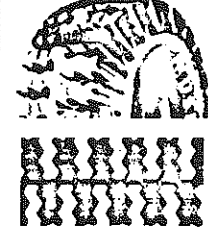
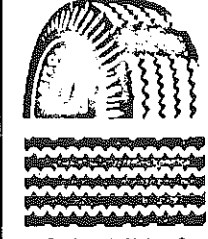
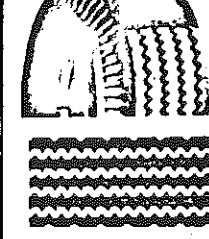
Fig. 3 - Comparable truck tire

AND TREAD DESIGNS - MAY 1969

SERVICE

* Third line or discontinued tires (limited sizes)

Piggyback Service Only

 <p>HCR</p>	 <p>Jet-Trac</p>	 <p>D.C.L. Nygen</p>	 <p>Super Expressway</p>	 <p>D.C.L. Nylon</p>	 <p>Traction Rib Special Service</p>	 <p>Railvan</p>
	 <p>Custom Cross Rib Hi-Miler</p>	 <p>Hi-Miler Xtra Tread</p>	 <p>Hi-Miler Cross Rib</p>	 <p>Rib High-Miler</p>	 <p>T/T Special</p>	
	 <p>Transport 200 Premium</p>	 <p>Super Transport Premium</p>	 <p>Transport Cross Bar</p>	 <p>Transport</p>	 <p>Transport Trailer</p>	
	 <p>Traction Express Nylon</p>	 <p>Silvertown Super Express</p>	 <p>Power Traction</p>	 <p>Commercial Heavy Duty Express</p>		
	 <p>Fleetmaster Super Lug</p>	 <p>Super Fleet Carrier</p>	 <p>Fleet Traction</p>	 <p>Stalwart Nylon-C Fleet Trailer</p>	 <p>Fleet Trailer</p>	

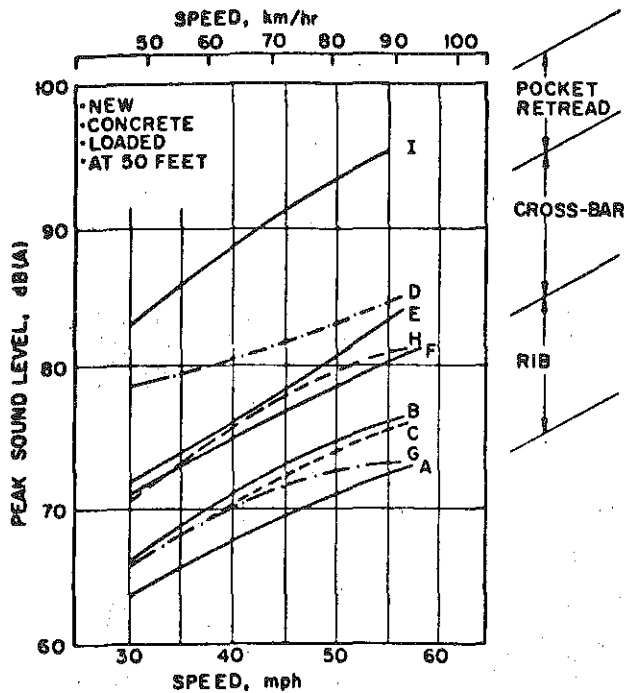


Fig. 4 - Truck tire noise as a function of speed (four test tires on drive axle, truck coasting)

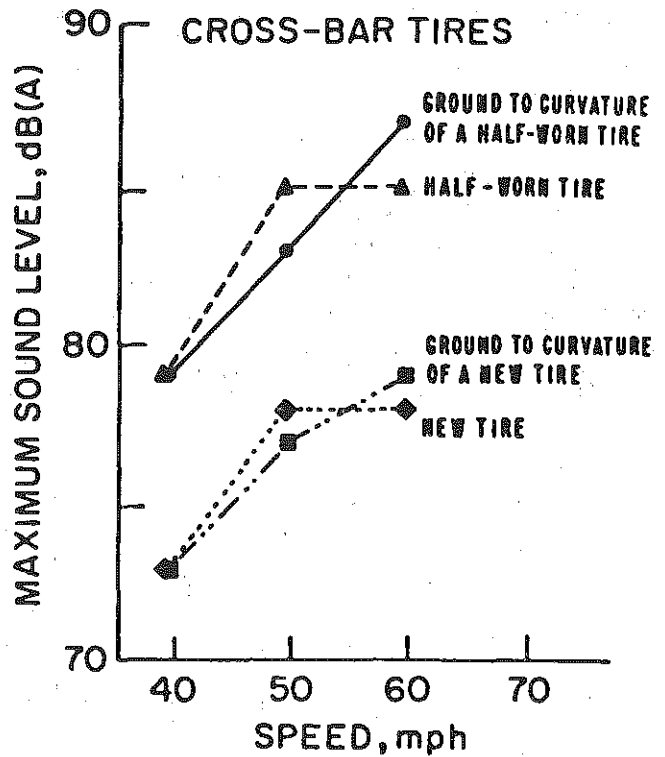


Fig. 6 - Sound level comparison of new and worn tires with tires artificially ground

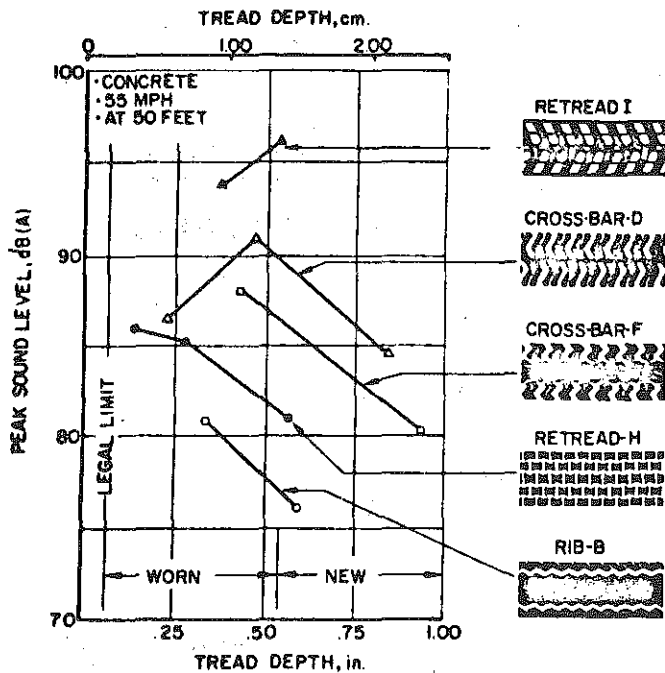


Fig. 5 - Effects of wear on truck tire noise (four test tires on drive axle, truck coasting)

The sound level really does not change that much as a result of the amount of grinding. One would have to know what the curvature of the half-worn or fully-worn tire is to begin to approximate the sound level by grinding the tire, and even then, there would be rather gross disparities in the points here. The only way a manufacturer, user, or regulator can obtain a fairly accurate idea of what is the actual variation in tire sound through the wear cycle is to take the tire out and put it in actual fleet service, wear it, and test it. When you consider that

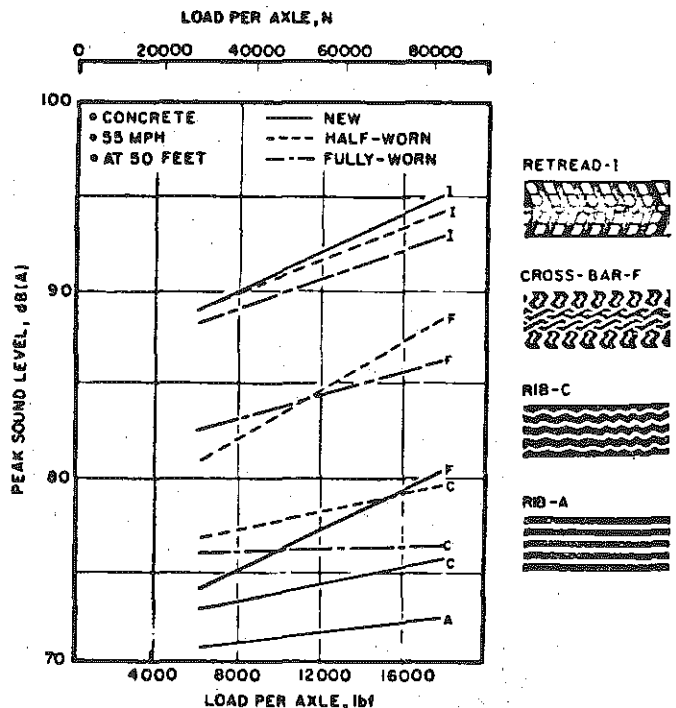


Fig. 7 - Effects of load on truck tire noise

truck tires will last in some situations over 125,000 miles, this is a lot of testing between long waiting periods to get the needed noise data.

LOAD - One of the other variables that has to be considered in establishing roadside enforcement levels is what happens as the load on the truck is changed. Fig. 7 again shows the four test tires on the drive axle, quiet tires on the front, and a con-

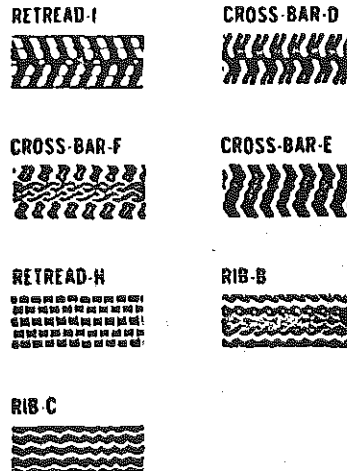
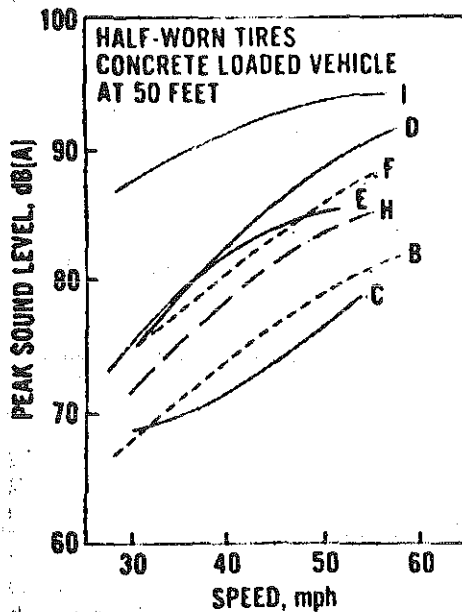


Fig. 8 - Sound level as a function of speed for half-worn truck tires

stant speed of 55 mph. This figure shows the increase in sound level which results from axle loading. At the low end is the empty truck, and at the high end a typical legal 17,000-18,000 lb load on the rear axle is represented.

ROAD SURFACE - One of the other questions is how much road surface affects the tire sound. The answer, in some cases, is quite a bit. Effort has been made to find the critical variable in this case: the thing that could be used to describe the road surface and which would account for the interaction of the tire and road and show some sort of correlation with the noise output.

The principle argument today revolves around the crossbar tires. From present data it can be said that they are generally unaffected by the road surface. At least they are not as susceptible to change in sound level as a function of road surface as the other tread types. Hence, for crossbar tires, there appears to be no major predictable effect of road surface that is going to really get in the way of setting regulations.

INTERPRETATION OF DATA

Fig. 8 is representative of the kind of data that manufacturers are going to have to generate to try to determine where they stand regarding government regulations and the kind of data that users are going to need to find out where they will stand in the future as to the products they buy and use. SAE has just established a test procedure (5) which searches for the maximum wear point and qualifies the sound level of the tire in much the same way as they were tested here, that is, a truck coast-by on a concrete surface, with the vehicle fully loaded. Fifty miles per hour was picked as the standard speed for the SAE J57 test procedure, and this chart, illustrating half-worn points, gives the sort of numbers that one can expect from such tests. The rib tires run in the 75-78 dB(A) range, and the crossbars go from 82 to 87 dB at 50 mph. All of the data presented here have been acquired with fast meter response. The

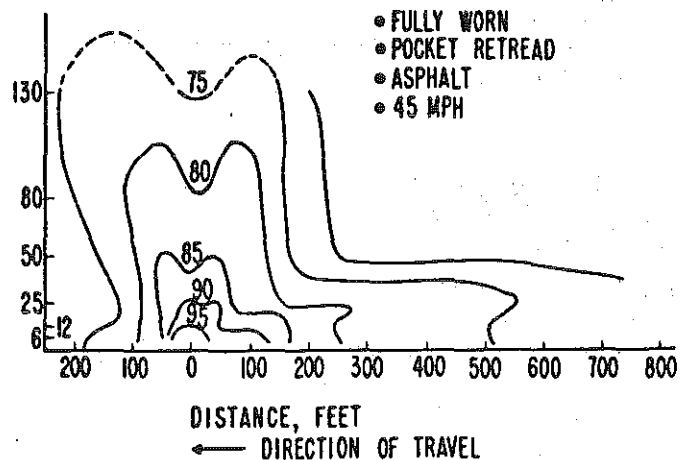


Fig. 9 - Typical tire sound map

comparable SAE J57 ratings would be at least 1 dB lower than the data presented here because of the different meter response settings.

The proposition before us now is to try to analyze those tire data to produce a meaningful strategy for reducing community noise. One of the things we decided to do in most of our tests was to acquire the data using an array of microphones perpendicular to the path of the vehicle so that by a retarded time analysis one could actually map out contours of the sound level for the coasting truck. Fig. 9, for example, is the sound contour plot for the pocket retread "Singing Sam" running on an asphalt surface, a fairly rough surface, at 45 mph. The test tires are at the origin of the spatial grid. One can see how these contours spread out, and surprisingly enough, a very strong lobe exists to the front of the truck. The front and rear side lobes were much the same for the tires tested. Each tire also exhibited a lobe of noise back along the highway, but the pocket retread had by far the largest (or strongest) rear lobe along the roadway.

The effort was made to try to put all of these data together

**Table 1 - Effects of Tire Noise Certification Levels at 50 Ft
on Passby Sound Levels at 50 Ft**

Truck Configuration	4 X 2 Straight	6 X 4 Straight	4 X 2 Single Axle Trailer	4 X 2 Double Axle Trailer	4 X 2 Double Bottom	6 X 4 Double Axle Trailer	6 X 4 Double Bottom
Gross weight, lb	27,000	45,000	45,000	59,000	73,000	73,000	73,000
Certification Limit, dB(A)	50 ft Passby Sound Level, dB(A)						
78	88.0	89.0	88.5	88.8	89.0	89.4	89.4
80	87.5	88.4	88.2	88.5	88.9	88.9	89.1
82	88.8	90.3	89.3	89.6	89.5	90.1	89.1
84	90.8	93.0	91.1	91.3	90.8	92.2	90.2
86	89.9	91.7	92.1	91.8	91.5	92.4	91.4
90	94.8	96.7	95.4	95.0	94.3	96.4	94.0
95	98.3	101.2	98.6	100.4	101.8	100.5	101.7

to postulate the values and ranges of sound levels that would be generated using the myriad of possible tire combinations on an 18 wheel tractor-semitrailer, a 24 wheel double bottom, etc., that are running on the highways today. Actual time history data like those shown in Fig. 10 were used for one set of test tires and superimposed upon similar time histories for other tires which were offset in time to appropriately represent the spacing of axles on the various vehicles of interest. The time histories and an omnidirectional 86 dB(A) engine noise source were added to arrive at predicted sound levels for the variety of trucks and truck combinations shown in Table 1.

The first truck configuration, called a 4 X 2 straight truck, has four axle ends, two of which were driven. There is, in this case, a steering axle with two tires in the front, a drive axle that is powered in the rear with four tires on that axle. A 6 X 4 is a tandem drive axle truck. The 4 X 2 single axle trailer is a single-drive axle tractor with a single axle trailer, and so on. A double bottom is a combination of two trailers hooked behind the tractor and incorporates a dolly with a single axle between the two trailers. The total vehicle combination weight is shown on the table. The respective axle loads have been adjusted to represent stable configurations within the typical state axle load limits. The maximum sound levels anticipated to be measured 50 ft to the side of these configurations if they were running on the highway at 60 mph are shown in the column below the respective truck configurations. The variations in sound level down each column are caused by the assumptions made regarding the tire types used on the drive axles and in some cases, the trailer axles of these vehicles. Simply stated, these assumptions are represented by the far left-hand column in terms of the A-weighted (fast response) sound level that would be produced by these drive axle tires at 50 mph on the rear axle of a 4 X 2 straight truck loaded to the rated tire load and running on a semipolished concrete surface. In the first line across the columns, the quietest rib tires, that is, 78 dB(A) certification level, are being used all the way around on each of the configurations. One can see that

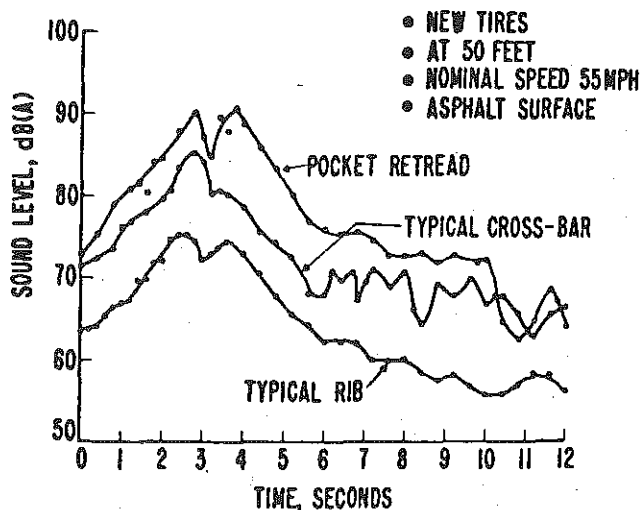


Fig. 10 - Representative sound level time histories of truck tire noise

the coasting tire sound coupled with an assumed 86 dB(A) engine noise contribution gives from 88 to 89.4 dB(A) anticipated passby sound levels.

As we go down through the noisier ribs, the sound levels go up a little bit, but not a great deal. As we get into the 82 dB(A) certification level, which is the very bottom of the crossbars or maybe a little bit below the bottom of the crossbars, we can see that we are up right on the 90 dB(A) total vehicle line which happens to be the proposed federal maximum for high-speed operation of interstate motor carrier vehicles. (6) With 84 or 86 dB(A) certification levels, which are typical of a number of present crossbar tires, we are over the 90 dB(A) level. If we are going to try to keep truck combinations at a 90 dB(A) maximum noise level measured on the side of the road, the 50 mph, 4 test tire coast-by has to be maintained at about 82 dB(A). Conversely, if we allow tires such as "Singing Sam" to be used (that is, 95 dB(A) certification level), there will be a range of very high sound levels that are very easily measured alongside of the freeway.

CONCLUSIONS

The future need for tire noise research and control is going to be even greater than it is today because research by DOT and the industry is rapidly progressing toward technically and economically feasible low engine noise trucks. Thus, if we refer back to Fig. 2 and consider future rigs which will not make 86-88 dB(A) engine noise but perhaps 72-78 dB(A) engine noise, it is evident that our present alternative of using rib tires is going to make tire noise dominant now at about 40 mph. Therefore, I think it is safe to say that regardless of how tire noise is regulated in the near term, it is just going to be the first step in the process, and much more will need to follow. At a September 1973 meeting in Williamsburg of the SAE Vehicle Research Institute (7), a commercial vehicle panel concluded that until commercial vehicle noise is reduced to levels near that of the noise generated by the other vehicles on the highway, that is automobiles, the public and publicly appointed administrators are going to continue to pay very special attention to the heavy commercial vehicle and pay very special attention to increasingly stringent regulations to reduce the noise of these vehicles. This situation will continue to have significant implications for tire users and tire manufacturers alike.

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TESTIMONY OF

W. H. CLOSE
ACTING DIRECTOR
OFFICE OF NOISE ABATEMENT
U.S. DEPARTMENT OF TRANSPORTATION

AT
PUBLIC HEARINGS

OF THE

U. S. ENVIRONMENTAL PROTECTION AGENCY

ON

PROPOSED NOISE EMISSION STANDARDS
FOR NEW PRODUCTS

NEW MEDIUM AND HEAVY DUTY TRUCKS

Washington, D. C.

February 20, 1975

It is a pleasure to appear before the hearing panel today to discuss the technology, cost and other aspects of the standards proposed by the Environmental Protection Agency for noise emission limits applicable to new medium and heavy duty trucks distributed in commerce.

In 1968 the then newly-created Department of Transportation realized the need to develop technological solutions to the problem of highway noise generated by trucks and began a deliberate program to satisfy that need. Since our initial pilot programs in tire noise research, the base of DOT research has expanded greatly. Tire noise research has expanded, research into the effectiveness of commercial mufflers has been completed, retrofit studies have been undertaken involving some 20 different vehicles, and the so-called Quiet Truck program is now nearing completion. These programs have produced an impressive array of new knowledge and have documented much information heretofore known but not demonstrated in practical vehicles.

During this period, the industry has also mounted significant efforts which have resulted in the availability of new product lines which aid the achievement of lower noise levels for trucks. The Department of Transportation is optimistic that lower truck noise levels can be achieved based upon the technology now in hand. We endorse the thrust of the EPA proposed rulemaking and, as always, stand ready to provide assistance to the EPA in achieving quieter communities adjacent to our highways.

We wish to make specific information available at this time which pertains to points contained in the Notice of Proposed Rule Making and to provide some other information which we believe is pertinent.

In the preamble of the notice, the discussion of cooling system noise is not consistent with the findings of our programs; for example, thermostatically-controlled radiator shutters are reported as noise reduction components, when in fact such shutters have repeatedly been shown to increase fan noise by 2dB or more when closed. We would suggest the elimination, not the installation of such shutters as the proper course to follow in reducing the noise of commercial vehicles.

In the same section, we suggest that many cooling systems generate noise levels in excess of 80dB(A) at 50 feet when tested in accordance with J366b procedures. As an example, every one of our Quiet Truck baseline vehicles exhibited cooling system noise levels in excess of 80dB(A). Based on tests of many different fans during the Quiet Truck program, we also take exception to the contention that fan noise can be reduced by using a slightly different fan model. These tests clearly indicated that when radiator air flow (or cooling) is held constant, a wide variety of test fans, including smoothly-molded, aerodynamically-contoured fans, all produce essentially the same noise level. Reduction of cooling system noise to 75dB(A) will require extensive modifications to the fan shroud, radiator-to-fan-to-engine spacing, etc. Reduction of cooling system noise to 65dB(A) at 50' under full engine speed conditions may be feasible only with uniquely large radiators applicable to some cab-over-

engine trucks (not practical for conventional truck installations due to visibility considerations) with flow-thru engine enclosures. One of the quiet trucks with such a unique combination came close to, but did not reach the 65dB(A) fan level.

The use of thermostatically-controlled fan clutches is alluded to in this section as a means to reduce fan noise to 65dB(A). Such fan clutches can eliminate fan noise for some 97% of the engine operating time (i.e., fan is not driven) and from 0 to 65dB another 2% of the time (i.e., fan driven at less than 1600 rpm). Thus, with thermostatically-controlled fans, this source of noise can be virtually eliminated 99% of the time. This fact is borne out by the results of DOT-sponsored tests of three fan clutch types in 24 different trucks. We believe these data to be a compelling argument in favor of a test procedure for these standards such that fan clutches are permitted to operate normally (i.e., disengaged) during testing and that normal cool-down procedures be permitted between tests. We feel that our program results fully justify the fan clutch from a noise standpoint and that the pay back in fuel economy resulting from such fan clutch usage helps to ease the cost burden of the proposed standards and to assist the national fuel conservation goals. In the DOT/EPA report on truck and bus fuel economy improvement, fan clutches are credited with up to 10% improvement in fuel economy and are highly recommended for use in future production trucks and buses.

The discussion of exhaust systems (FR Page 38340, Col 2, d) also is not in keeping with our research experience. The statement that very few trucks need modification of shell noise to reach 83dB(A) overall noise

is not in keeping with the results obtained by International Harvester in its quiet truck program effort. "Truck Noise, IV-D" is the most recent publication on this subject and it illustrates the dominance of shell noise (pipe shell 82dB(A), muffler shell 74dB(A)) as compared to gas discharge noise (discharge 76dB(A) and leaks 72dB(A)) in a typical 1972 production vehicle. It is not likely that this vehicle or others using such 2-stroke engines could comply with an 83dB(A) limit without some modifications.

Mufflers are available to reduce exhaust noise of all popular truck diesel engines to 75dB(A), including the 2-stroke engines, even 12-cylinder versions. In many cases this does not require dual mufflers, and in all cases can be achieved without use of series muffling according to at least one large supplier of diesel engine mufflers. Such exhaust system performance has not yet been demonstrated by horizontal or underframe systems, but the question of exhaust outlet height must always be raised in any discussion of highway noise control strategy. We believe the EPA should consider carefully the technology, cost and benefit factors for each type of exhaust system. We offer below some of the considerations as we presently see them:

1. Lower exhaust noise levels are achievable more easily with vertical systems than with horizontal due to apparent image source enhancement of the horizontal underframe systems;
2. Technology is more advanced for the vertical systems; thus significantly lower exhaust noise levels have been demonstrated with

vertical components (consistently 75dB(A) or lower), offering real incentives to "overkill" exhaust noise in meeting near term standards;

3. Underframe exhausts discharge products of combustion into the air at levels aggravating occupants of the vehicle and others adjacent, particularly in urban traffic conditions;

4. Underframe exhaust discharges also aggravate splash and spray visibility problems which are already severe under wet road passing conditions;

5. Underframe exhaust systems with inherent low source height enhance the effectiveness of roadside barriers in reducing community noise levels. Roadside barrier costs savings over the next 8 years have been estimated to be \$1/2 billion if barrier heights could be lowered due to universal use of horizontal muffler and tail pipe systems. Moreover, additional sites would likely receive roadside barriers as a result of more favorable highway department and citizen response to lower height barriers or berms paralleling the highways;

6. Underframe exhaust systems present difficult packaging problems for many heavy duty trucks;

7. Test results indicate approximately 2dB higher noise radiated vertically by vertical systems which would impact highrise residents adjacent to highways.

The Department of Transportation strongly urges the EPA to establish truck tire noise standards. We suggest that 50 mph coast-by tests of fully loaded, two-axle (six-tire) trucks, similar to SAE J57, but using fast meter response, can be prescribed and that limiting noise values of 83dB(A) and 80dB(A) might well be established for tires manufactured

during the time periods in which trucks will be required to comply with those levels. The Department has made available data and analyses supporting the above position. A full report is in preparation to address the matter more thoroughly. This will be forwarded to the EPA at the earliest possible date to facilitate its efforts in tire noise regulation. Clearly, regulations are needed to force usage of tires which are half as noisy, just as safe, and as economically acceptable as many that are in widespread use today. This effort should not be delayed, or relegated to a mere labelling exercise as suggested at the end of the tire noise discussion.

On page 38341, item 5 Summary, the 75dB(A) level is purported to have been demonstrated by more than one truck. EPA should be more specific as to what trucks have demonstrated such low levels. In our Quiet Truck program, three contractors attempted to reach 75dB(A) but only one vehicle achieved such a level. We fully believe that 75dB(A) can be achieved, but we must caution that the means and costs developed to date apply only to a very limited segment of the nation's truck production.

There is a typographical error in paragraph "a" under the Summary. "68"dB(A) should read "86"dB(A).

The discussion that follows in the Summary gives very little flavor of the difficulties that will be encountered by manufacturers in meeting the prescribed levels and tends to minimize the extent of engineering changes needed throughout a manufacturer's product line.

The statement that all trucks may reach 75dB(A) is without basis.

While we believe that such a level may be achievable and by our research have substantiated avenues leading to that end, we do not feel that sufficient information exists to make such confident predictions for all vehicles.

Section V pertains to Applicability and specifically excludes buses from consideration because EPA feels that they are not major noise sources. Other vehicle subcategories which EPA has included, such as motor homes, could in no way impact as many citizens as buses. The Department of Transportation takes the position that the approximately 44,000 school buses, 3,000 transit coaches, and 4,000 intercity coaches newly registered each year should be subject to the proposed standards. We see no fundamental difference in technology between trucks and buses, and can therefore see no reason to treat them separately simply because the packaging of the engine is different in some cases. We further question the basis upon which the EPA contends that buses are not a major noise source and the basis for the assumed typical transit coach noise level of 73dB(A) at 50 feet. Considering the fact that transit coaches are typically accelerating past any point on their route, considering the fact that the 2-stroke engines referred to in the preamble are almost exclusively used in such coaches, and considering the fact that transit coaches operate where population densities support such public transportation, it appears that such coaches should be included within the scope of these standards. Our retrofit studies with General Motors and Rohr Corporation (Flexible) indicate 83-86dB(A) sound levels for current

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The statement that all trucks may reach 75dB(A) is without basis.

While we believe that such a level may be achievable and by our research have substantiated avenues leading to that end, we do not feel that sufficient information exists to make such confident predictions for all vehicles.

Section V pertains to Applicability and specifically excludes buses from consideration because EPA feels that they are not major noise sources. Other vehicle subcategories which EPA has included, such as motor homes, could in no way impact as many citizens as buses. The Department of Transportation takes the position that the approximately 44,000 school buses, 3,000 transit coaches, and 4,000 intercity coaches newly registered each year should be subject to the proposed standards. We see no fundamental difference in technology between trucks and buses, and can therefore see no reason to treat them separately simply because the packaging of the engine is different in some cases. We further question the basis upon which the EPA contends that buses are not a major noise source and the basis for the assumed typical transit coach noise level of 73dB(A) at 50 feet. Considering the fact that transit coaches are typically accelerating past any point on their route, considering the fact that the 2-stroke engines referred to in the preamble are almost exclusively used in such coaches, and considering the fact that transit coaches operate where population densities support such public transportation, it appears that such coaches should be included within the scope of these standards. Our retrofit studies with General Motors and Rohr Corporation (Flexible) indicate 83-86dB(A) sound levels for current

production transit coaches. Kits to reduce GM 8V-71 powered coaches to 82dB(A) are tentatively priced at \$555. Rohr has developed kits to lower the sound level of a 6V-71 powered coach to 77-80dB(A). Prices are not yet available on this kit. Both kits use demand fan drives.

Similarly, we question the exclusion of auxiliary or special purpose equipment such as refrigeration equipment. It would appear appropriate under the definitions of "truck" and "manufacturer" to define special purpose equipment in the same fashion as it is prescribed in the Interstate Motor Carrier Noise Standards, just issued by EPA. Specifically, we endorse the logic put forth by EPA that separates regulated from unregulated special purpose or auxiliary equipment depending upon whether or not it is normally operated at speeds in excess of 5 mph. Such a definition includes refrigerator units, air conditioners and the like as regulated equipment. We endorse the inclusion of such equipment within the bounds of the proposed standards.

We are also concerned with the methods which EPA has used to estimate potential benefits which should result from these proposed standards. We have had the advantage of reviewing the Transportation Research Board Design Guide (HRBDG) cited by EPA as its source for much of the input data for its benefit predictions. Most of those concerned with this proposed standard have not had access to these privileged data. During earlier reviews of the EPA Background Document for this proposed standard, we advised EPA that the HRBDG data appeared to be in error, or was based on unspecified assumptions which appeared to be in error. As a matter of fact, those data have been revised by the Highway Research Board, but

have not been released for unlimited use. In general, the nominal truck noise levels used in the EPA analysis were based upon engine exhaust and fan noise levels for highway operation which were higher than the J366 test levels. Since the J366 test procedure is designed to maximize engine-related noise levels, and "nominal" highway operating conditions would not entail full throttle or governed-speed operation, our data indicate that engine-related highway noise levels should be at least 2 dB lower than J366 levels, rather than higher. The EPA-assumed noise levels appear, therefore, to be about 5 dB high compared with our information. More importantly, in assessing the potential benefits for the EPA Background Document, a noise level of 77dB(A) at 50 feet is assumed for tire noise at highway speeds. Such a level is not attainable for any tires known today, or currently foreseen for "nominal" speed, load, road surface, or wear conditions.

We have attempted to reconstruct the EPA's benefit analysis, in order to understand the logic being applied by EPA in its decision-making on this proposed standard. We were sufficiently successful in duplicating the EPA benefit results; using the HRBDG data as cited by EPA, that we can make several points regarding the potential benefits obtainable from these standards. First, the claimed benefits in the EPA Background Document are actually derived from the following four separate actions:

1. Implementation of the new Interstate Motor Carrier Noise Emission Standards;
2. Progressively lower new automobile noise emission standards, effectively and uniformly enforced by state and local governments;

3. Tire noise standards, yielding low noise levels beyond those now achievable through known technology; and

4. The proposed new truck standards.

In order to separate the potential benefits from these proposed standards, we performed a series of calculations, both to duplicate the EPA's results, and to represent our best estimates of potential benefits emanating from each part of the overall highway noise reduction strategy. Tire noise levels were based on measurements selected from the DOT/NBS Wallops Island tests. Engine-related noise levels were assumed to be 2 dB lower than the new product level, reflecting the real-life condition that less than full power is required in highway operation, and the mean-energy noise level for a population of trucks should be below the regulated level. Automobile noise levels were taken from the HRBDG document, cited by the EPA. More specifically, the following values of mean-energy noise level were used:

a.	Crossbar tire noise, heavy-duty truck @ 55 MPH @ 50'	88dB(A)
	@ 27 MPH	77
	medium-duty @ 27 MPH	73
	All-rib tire noise, heavy-duty truck @ 55 MPH @ 50'	81
	@ 27 MPH	72
	medium-duty @ 27 MPH	67

b. Engine-related noise, 2 dB below new product regulated level, or J366 test level.

c. Passenger automobiles and light-duty vehicles

currently @ 55 MPH @ 50'	77.4 dB(A)
@ 27 MPH	75.8
by 1985 @ 55 MPH @ 50'	73.5
@ 27 MPH	67.5

Figure 1 displays our duplication of the results indicated in the EPA Background Document for the freeway model, using the EPA assumption, insofar as we could find them. The assumed implementation of the Interstate Motor Carrier Noise Emission Standards and the assumed 4 dB reduction in automobile noise levels should produce a mean-energy community noise reduction of 1.1 dB by the year 2000. Assumption of the very low tire noise level of 77 dB(A) @55 MPH @ 50', and regulation of medium and heavy duty truck noise levels to 83 dB(A) @ 50' should provide an additional 3.5 dB reduction; truck noise level of 80 dB(A) should reduce noise levels by 4.5 dB, and truck noise level regulations of 75 dB(A) should reduce noise levels by 5.5 dB according to the input assumptions made by the EPA.

Figure 2 presents a comparable plot of our calculations of potential benefit, using the assumptions defined above. If conventional crossbar tires are permitted, community noise level reductions of 0.2, 0.5, and 0.7 dB should be achieved from regulated new product truck noise levels of 83, 80, and 75dB(A), respectively. If, however, regulations are promulgated which limit sales to new tires which possess noise characteristics similar to present rib tires, the reductions in freeway community noise

levels deriving from the proposed truck standards are 3.5, 4.1, and 4.6 dB, respectively. Similar data are displayed in Figure 3 for the urban model, as defined in the EPA Background Document, using our assumptions defined above. Here, the influence of quieter rib tires is not as dramatic as in the freeway model, but tire regulation is still an important factor in the potential benefits to be derived from any truck noise regulation.

We point to the essential nature of each part of the noise reduction strategy discussed by the EPA rather than diminishing the value of these proposed standards in the overall scheme of things. We feel very strongly that those elements of the strategy not yet in place must be vigorously pursued. We are concerned, however, lest the benefits of these future actions be erroneously assigned to the present proposal hence diminishing the incentive to complete the regulatory strategy.

The estimated costs per vehicle for heavy duty diesel trucks appear to be somewhat lower than our Quiet Truck Program contractor estimates for noise levels not so low. Specifically, our contractors have submitted information on costs and levels as follows:

<u>Contractor</u>	<u>J366 Level</u>	<u>Est. Cost</u>
Freightliner Corp.	72-74dB(A)	\$1400
International Harvester	78dB(A)	\$1390
	80dB(A)	\$ 516
White Motors	77-79dB(A)	\$1307
	79-81dB(A)	\$ 260

It should be evident that a manufacturer would have to design to a level at least 2dB lower than the Standard to ensure that

production vehicles will comply with the standard. The total cost impact of the proposed regulations can not be established by this documentation since the spread of production is not known and the adjustment for cost versus design level thus cannot be made.

The cost estimates put forward in the NPRM and the background document therefore appear to be quite low or are based on some undisclosed source which differs from the above.

We would suggest that it is premature to set a level of 75dB(A) when so little information exists upon which impacts can be estimated. As previously stated, only one of three attempts to meet 75dB(A) was successful in our Quiet Truck Program. Since evidence is not available as to other successful efforts to build a heavy duty diesel truck at 75dB(A), with necessary production and test tolerances, we suggest that EPA reconsider setting this stringent level requirement until more data are acquired at the intermediate levels and other vehicular noise sources are brought under control e.g. buses, tires, and auxiliary equipment.

The enforcement procedures set forth are causing extreme concern to the manufacturers of commercial vehicles. While procedures of the type proposed may be appropriate for enforcement of exhaust emission standards directed at large manufacturers of standardized products, e.g. passenger cars or production runs of basic diesel engines; they appear inappropriate for small manufacturers of highly individualistic products such as heavy trucks.

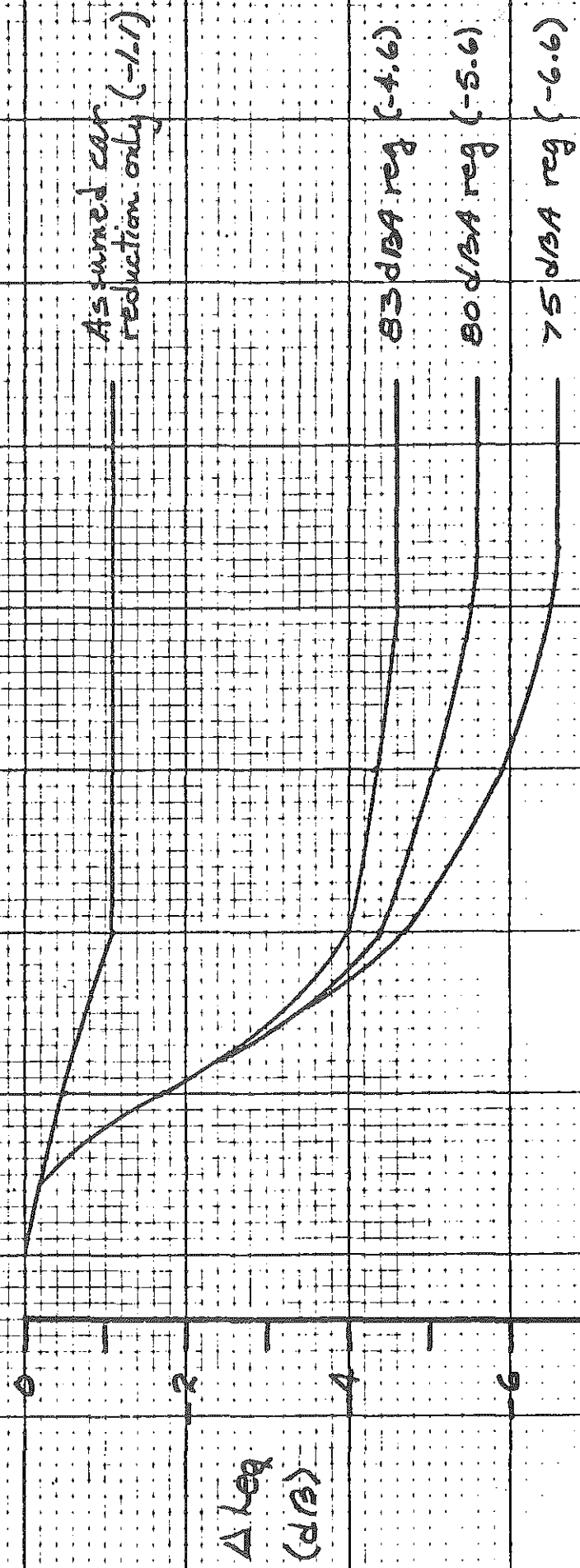
We suggest that EPA consider enforcement provisions similar to those followed by the National Highway Traffic Safety Administration. Such procedures place the responsibility for assuring compliance of all products squarely on the manufacturers. Spot checks by EPA which detect non-compliance would be followed by appropriate recall or other penalty provisions.

Finally, we would suggest that the EPA place manufacturers and users on notice that rulemaking will be pursued which would require trucks and buses subject to these regulations to comply with stationary run up test levels of no more than 3 or 4dB higher than the new product regulated level.

Such regulations should be promulgated under authority of Section 18 of the Noise Control Act amending the Interstate Motor Carrier Noise Emission Standards. This, of course, would assure proper maintenance of the noise abatement devices placed on new trucks subject to these regulations.

COMPARATIVE EFFECTIVENESS OF NEW TEST NOISE REGULATIONS

EPA Freeway Model



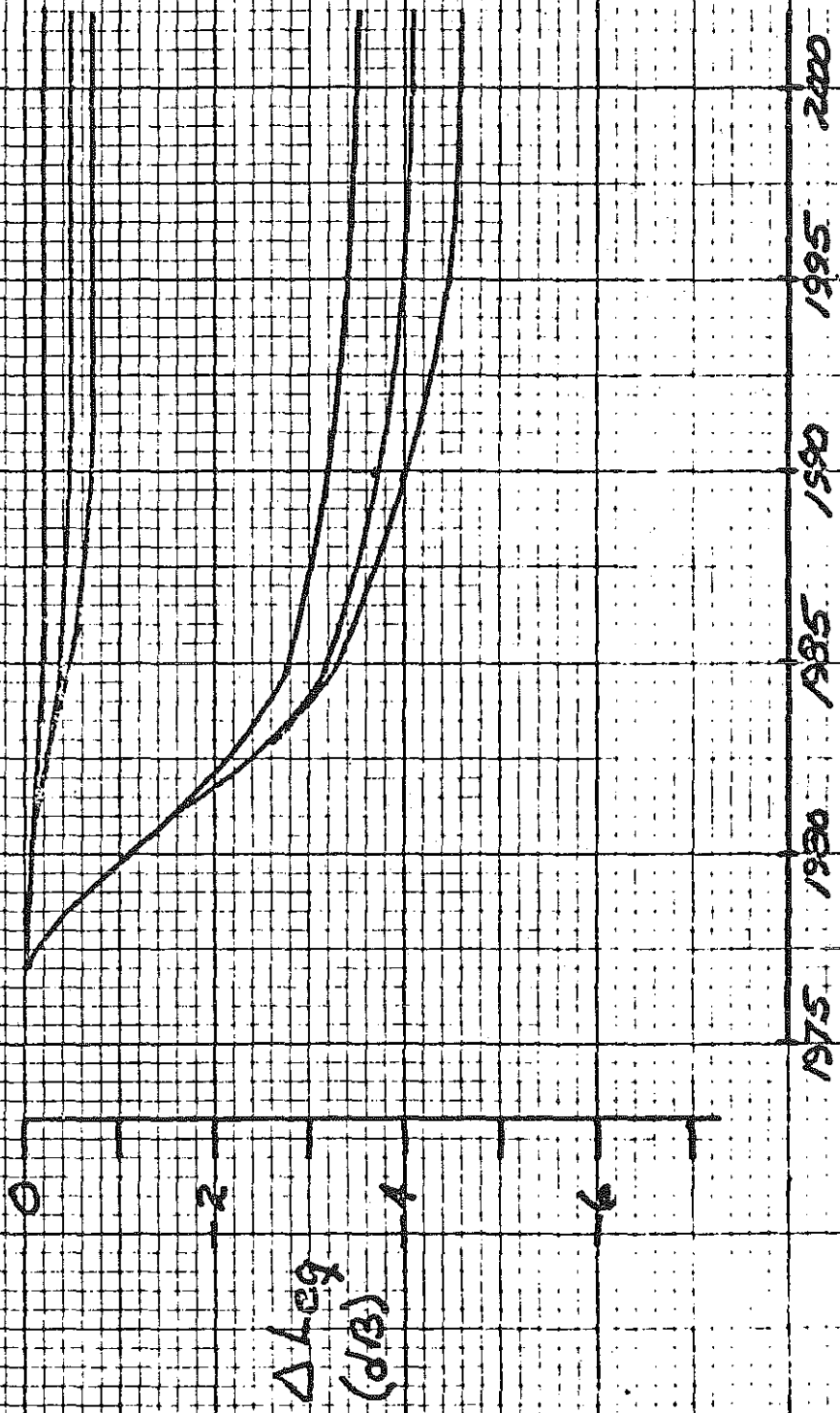
ΔLeq (dB)

1975 1980 1985 1990 1995 2000
YEAR

COMPARATIVE EFFECTIVENESS
OF NOISE BARRIERS RESOLUTIONS ONLY
DOT Freeway Model

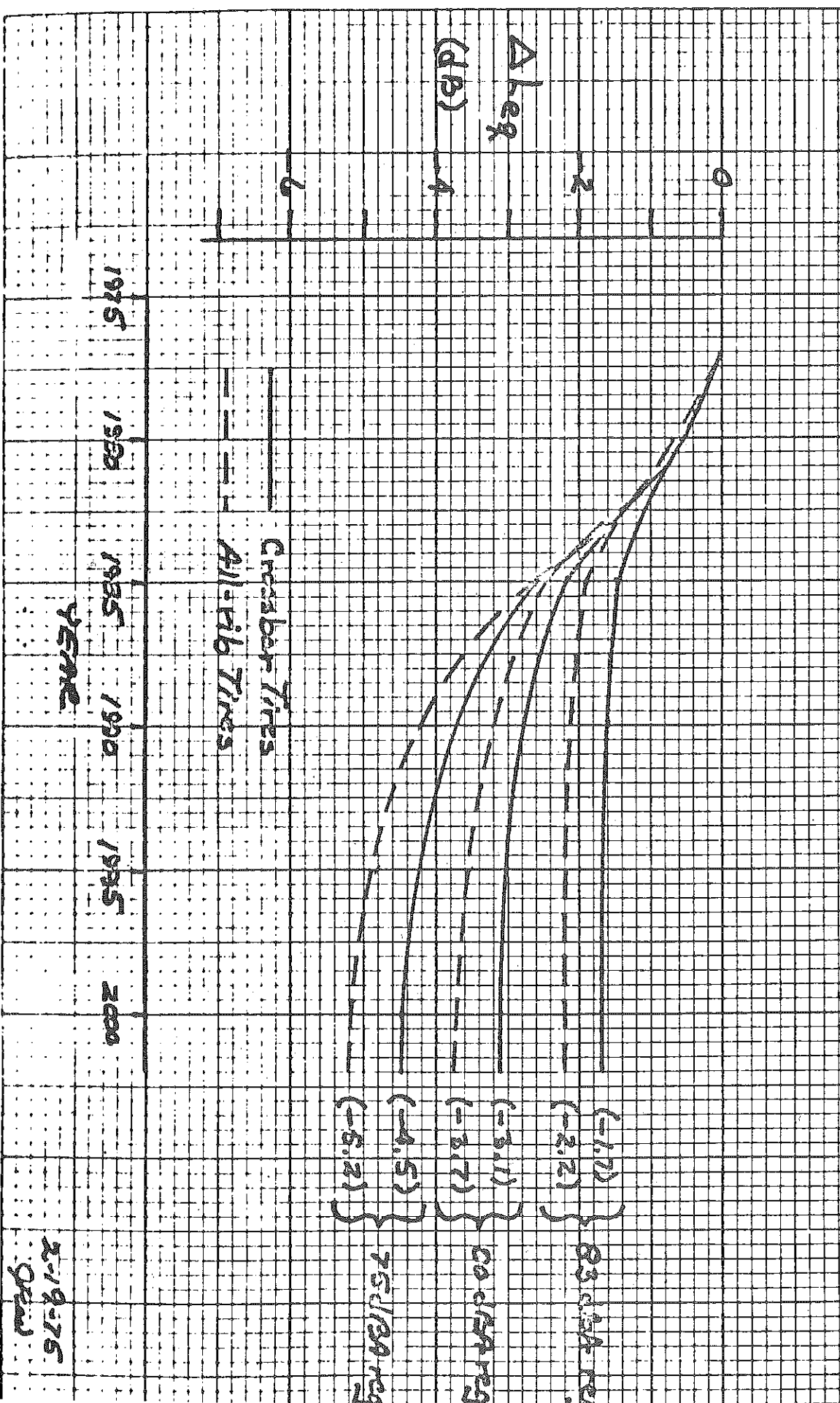
CROSSER TYPES
83 dBA req (-0.2)
80 dBA req (-0.5)
75 dBA req (-0.7)

All-rib tires
83 dBA req (-3.5)
80 dBA req (-4.1)
75 dBA req (-4.6)



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P. 10

COMPARATIVE EFFECTIVENESS OF NEW TOWAC NOISE REDUCTIONS DILLS DOT DESIGN MODEL

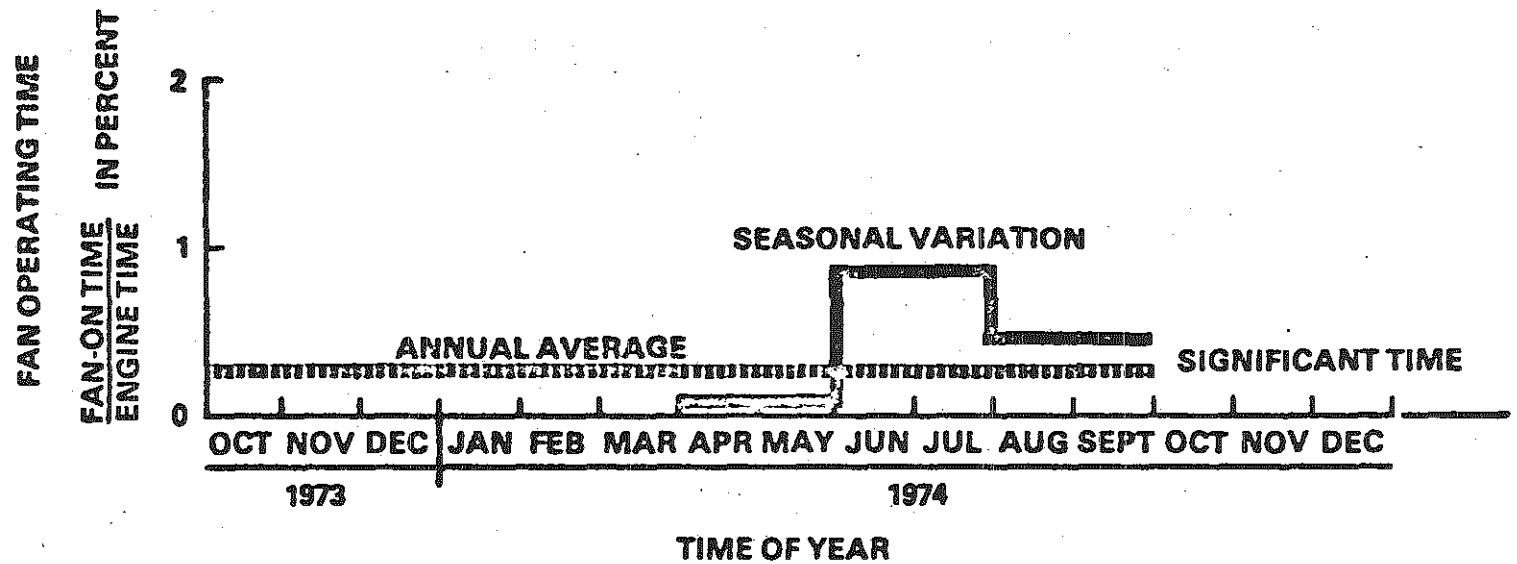


(-1.7) } 83.13A RE
 (-2.2) }
 (-3.1) } Co-12A RE
 (-3.7) }
 (-4.5) } 75.130 RE
 (-5.2) }

2-19-75
QRM

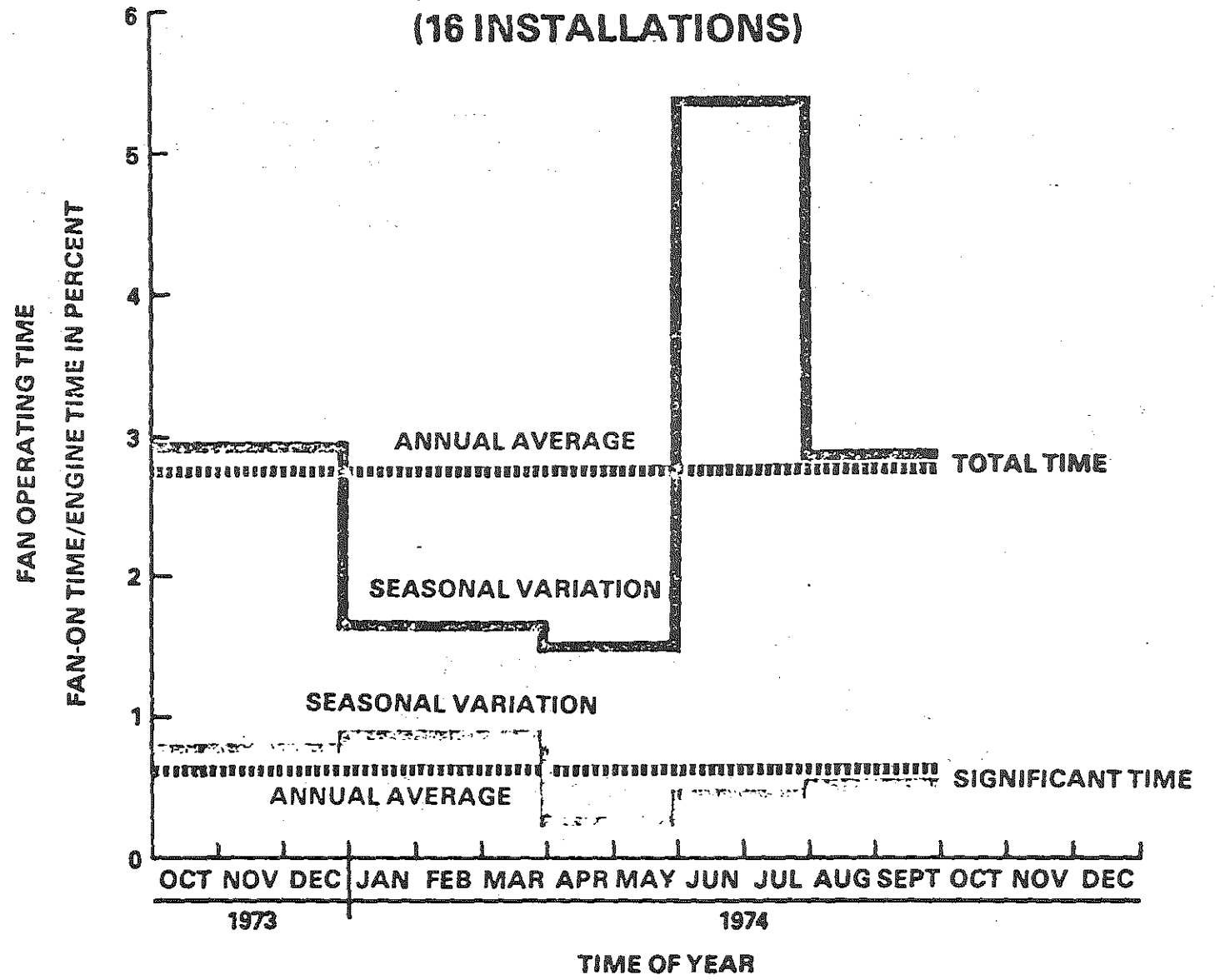
FAN CLUTCH OPERATING TIME

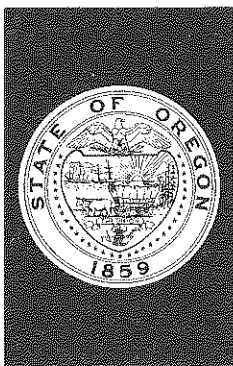
MODULATED FAN CLUTCH (7 INSTALLATIONS)



FAN CLUTCH OPERATING TIME

ON-OFF FAN CLUTCH
(16 INSTALLATIONS)





ENVIRONMENTAL QUALITY COMMISSION

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MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item H, August 22, 1975 EQC Meeting

Consideration of Adoption of Proposed Revisions and Additions to Administrative Rules Governing Subsurface and Alternative Systems of Sewage Disposal Including Nonwater-Carried Waste Disposal Facilities

Background

After a series of statewide public hearings the main portion of the present rules pertaining to subsurface sewage and nonwater-carried waste disposal was adopted by the Commission in January 1974. At the 1974 Special Session of the Legislature certain changes in the law were made which required amendments and additions to the rules. The latter were adopted by the Commission in March 1974 and pertained to increased fees and to county appeals boards. In June and September 1974 further amendments pertaining to prior approvals and specifications for pipe materials were adopted.

At the statewide public hearings held by the Department late in 1973 much conflicting testimony had been received regarding the proposed rules. As a consequence the Director in March 1974 appointed a 16-member Citizens' Task Force to make an extensive study of the subject for the purpose of helping to resolve the conflicts and to develop a more equitable and workable set of rules.

After several months of study and numerous public hearings throughout the state the Committee developed recommended revisions and additions to the rules which were subjected to public review and comment at a public hearing held in Portland on May 21, 1975. They were then given preliminary consideration by the Commission at its meeting in Salem on May 23, 1975, at which time, except for extending by two months the deadlines pertaining to prior approvals, action on the Committee's proposed amendments was deferred until a later meeting of the Commission.



Contains
Recycled
Materials

In the meantime several additional changes were made by the 1975 Legislative Assembly in the laws governing sewage disposal. Two of the bills which were enacted, namely, SB 297 (Chapter 167, O.L. 1975) and SB 34 (Chapter 309, O.L. 1975) authorized and mandated certain significant changes in the rules. Pursuant to the provisions of those bills temporary rules were adopted by the Commission on June 27 and July 10, 1975 pertaining to increased fees, granting of variances, regional differences, certain set back requirements and transfer of prior approval permits.

SB 297 specifically mandates that the Commission by September 1, 1975 adopt rules which prescribe minimum requirements for the design and construction of alternative sewage and gray water waste disposal systems and which allow the use of alternative systems and component materials. Pursuant to this requirement the Department staff with the assistance of the Citizens' Task Force, agreement counties personnel and others has drafted proposed rules governing alternative and gray water waste disposal systems or facilities, mechanical oxidation treatment plants, and experimental systems. These proposed rules together with other proposals and the revisions previously recommended by the Citizens' Task Force were the subject of public hearings held before DEQ hearings officers during the period of August 4 to 7, 1975 in Bend, Coos Bay, Grants Pass, Medford, Pendleton, Roseburg, Salem and Tillamook. Those hearings involved 14 separate sessions. A summary of the testimony received at those hearings is contained in the attached hearings officer's report. An evaluation by the DEQ staff of the testimony received is also attached.

Discussion

The testimony received at the August 4-7 hearings has been thoroughly reviewed by the Department and as a result it is proposed that many of the changes suggested by the witnesses be incorporated into the amendments and additions being considered at this meeting for adoption by the Commission. Attachment A contains the further changes which are recommended for consideration by the Commission. Those changes which are recommended as a result of public testimony received at the hearings or in letters to the Department are marked with an asterisk.

The recommendations of the Citizens' Task Force which were previously considered but not acted on by the Commission on May 23, 1975 are included in the proposal to be considered for adoption at today's meeting.

The section on definitions (Section 71-010) has been considerably expanded to include all significant terms used in the proposed rules. In addition, several new diagrams have been added to illustrate certain definitions.

Sections 71-011, 71-012, 71-013, 71-016, 71-017 and 71-018 were drafted and are recommended by the Department's Legal Counsel to facilitate enforcement.

Section 71-027 prescribes standards for the design and installation of aerobic sewage treatment (mechanical oxidation) facilities which, if approved by the Commission, will permit the use of such facilities as a part of subsurface or alternative sewage disposal systems. The original draft of these particular standards has been revised to include certain changes proposed by witnesses at the public hearings or in correspondence.

Pursuant to the requirements of SB 297 (Chapter 167, O.L. 1975) standards for gray water waste disposal facilities are prescribed in subsection 71-030 (5) and Appendix D, and standards for alternative sewage disposal systems are prescribed in section 71-037. In addition to the latter, provisions are set forth in Subdivision 4 (sections 74-005, 74-015 and 74-020) for the use of experimental facilities, such as mounded disposal beds and evapotranspiration systems.

The previous rules pertaining to county appeals boards are to be replaced by rules governing the granting of variances because the statute authorizing county appeals boards was repealed by the 1975 Legislature.

The rules governing the granting of variances are presently in effect as temporary rules adopted on July 10, 1975. The Geographic Region Rule A (subsection 71-030 (8)) is also in effect as a temporary rule adopted on the same date.

Conclusions

1. The proposed revisions and additions, including those contained in Attachment A, to the administrative rules governing subsurface and alternative sewage disposal systems and nonwater-carried waste disposal facilities are based on the recommendations of the Citizens' Task Force after more than a year of intensive study, the recommendations of the Department's consultants, Brown and Caldwell, as contained in their April 1975 report "An Evaluation of Alternatives for On-Site Sewage Treatment and Disposal", the testimony of witnesses received at public hearings held throughout the state and from other individuals, and the recommendations of representatives of agreement counties as well as the Department's own professional staff and other experts in the field of sewage disposal.
2. To meet the requirements of SB 297 (Chapter 167, O.L. 1975) it is necessary that standards for the design and installation of alternative sewage disposal systems and gray water waste disposal facilities be adopted at this meeting as temporary rules so that they will be in effect by the statutory deadline of September 1, 1975.
3. Failure to act promptly in the adoption of the proposed revisions and additions will result in serious prejudice to the public interest or the interest of parties concerned for the specific reasons that it would delay development of certain properties and correction of certain failing existing sewage disposal facilities thereby causing economic losses and continuation of health hazards and nuisance conditions.

Recommendation

It is the Director's recommendation that the Commission:

- (1) Enter a finding that failure to act promptly in this matter will result in serious prejudice to the public interest or the interest of parties concerned for the specific reasons stated above.
- (2) Adopt as temporary rules to be filed promptly with the Secretary of State to become effective September 1, 1975 and as permanent rules to continue in effect after being published by the Secretary of State the Proposed Revisions to Oregon Administrative Rules Chapter 340, Division 7 Subsurface and Alternative Sewage Disposal, dated August 1975 and subjected to public review and comment at public hearings held August 4-7, 1975, including the further revisions and additions contained in Attachment A of this staff report.



LOREN KRAMER
Director

KHS:mm
Attachments (3)

Recommended Changes to August 1975 Draft of Proposed Revisions to Oregon Administrative Rules Chapter 340, Division 7 Subsurface and Alternative Sewage Disposal. Hearings Officer Report. Staff Evaluation of Testimony Received.

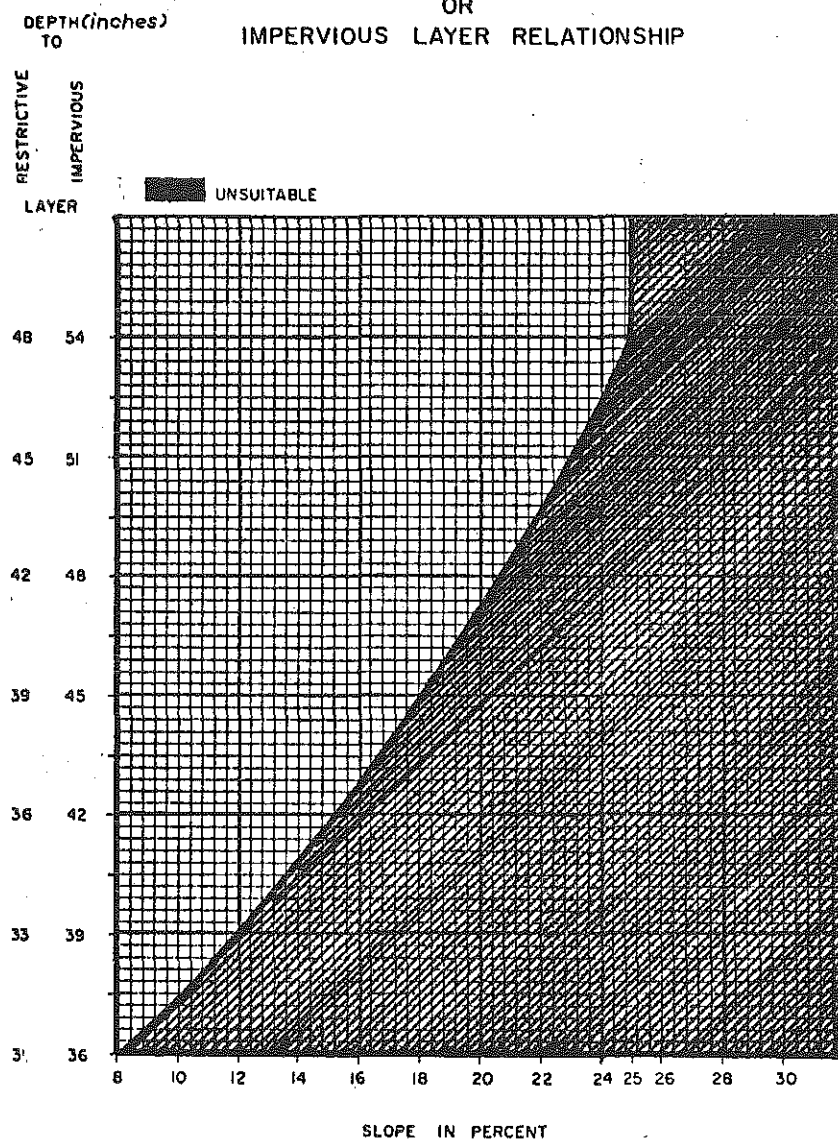
RECOMMENDED CHANGES TO

August 1975 Draft of Proposed Revisions to Oregon Administrative
Rules Chapter 340, Division 7 Subsurface and Alternative Sewage Disposal

1. Page 3, section 71-010, subsection (14), line 2, after "percent" insert "or more".
2. Page 4, section 71-010, subsection (18), line 1, delete "type of".
3. Page 15, section 71-010, subsection (93), line 2, after "and" insert "above".
- 4.* Page 16, at top of right hand column of Table 1 insert "Millimeters".
- 5.* Page 27, replace Diagram 6 with revised drawing to comply with revisions made on pages 41 and 42.
6. Page 30, section 71-013, in subsection (1), lines 2 and 4, subsection (2), line 6, and subsection (4), lines 2 and 4, after "subsurface" insert "or alternative".
7. Page 30, section 71-013, subsection (5), line 2, after "expanded" insert "subsurface or alternative", and before the period in line 4 insert a comma and "provided, however, that this subsection shall not prohibit the issuance of a permit to repair a failing subsurface or alternative sewage disposal system".
- 8.* Page 34, section 71-016, subsection (1), line 2, delete "trailer" and insert "recreation vehicle"; in line 3, after "subsurface" insert "or alternative"; and in line 4, after the period insert "This requirement shall not pertain to the connection of any mobile home or recreation vehicle to an existing subsurface or alternative sewage disposal system serving a mobile home park or recreation park operated by a public entity or under a valid license or certificate issued by the State Health Division or Department of Commerce."
9. Page 35, section 71-016, subsection (4)(b)(ii)(B), line 1, delete "failure" and insert "repair".
10. Page 35, section 71-016, subsection (5), line 2, and subsection (6), line 1, after "subsurface" insert "or alternative".
- 11.* Page 37, section 71-018, subsection (4), line 3, after the comma insert "unless otherwise authorized by the Department,".
- 12.* Page 41, section 71-020, subsection (2), line 3, after the colon insert "(see footnote 1)".
- 13.* Page 41, section 71-020, subsection (2)(c), line 3, column 1, delete "5" and insert "20".

- 14.* Page 42, section 71-020, subsection (2), footnote 1, line 2, delete "Department or contracting agent" and insert "Director or authorized representative".
- 15.* Page 42, section 71-020, subsection (2), footnote 2, delete all of lines 1, 2 and 3; in line 4 delete "facility as possible."; in line 6, after the period insert "However, a curtain drain shall be used only on ground with a minimum slope of five (5) percent, and shall be located at least twenty (20) feet up-gradient from the nearest disposal area and at least fifty (50) feet down-gradient from any other disposal area or potential disposal area."
- 16.* Page 42, section 71-020, subsection (2), footnote 4, lines 1 and 2, delete "Sections 167 and 168 of Chapter 835, Oregon Laws 1973" and insert "ORS 448.205".
- 17.* Page 47, section 71-027, subsection (2), line 1, delete "both" and insert "either a", delete "and" and insert "or an", and delete "systems" and insert "system".
- 18.* Page 47, section 71-027, subsection 3, lines 2 and 4, delete "600" and insert "500".
- 19.* Page 47, section 71-027, subsection 7, line 7, after "responsibility" insert a comma and "or unless other arrangements meeting the approval of the Director have been made which will insure continuous and adequate operation and maintenance of the facility and disposal system".
- 20.* Page 49, section 71-030, subsection (1)(c), line 6, after the period insert "Diagram 7A shows acceptable design where such water table will be five (5) feet or more but less than five and one-half (5 1/2) feet below the surface of the ground."
21. Page 49, section 71-030, subsection (1)(c)(A), line 1, delete "lateraly" and insert "laterally".
22. Page 50, section 71-030, subsection (1)(d), line 2, after "inches" insert "below the surface of the ground".
- 23.* Page 50, section 71-030, subsection (1)(e), line 1, delete "Slopes exceeding these maximums" and insert "Slope-depth relationship exceeds these values", and in the same subsection delete all of paragraphs (A) and (B) and insert the following graph showing the slope-depth relationship.

SLOPE, DEPTH TO RESTRICTIVE LAYER
OR
IMPERVIOUS LAYER RELATIONSHIP



24.* Page 50, section 71-030, subsection (1)(f), after line 5 insert "Diagram 7A shows acceptable design where coarse grain material is thirty (30) or more inches but less than thirty-six (36) inches below the natural ground surface."

25.* Page 52, section 71-030, subsection (2), in line 10 delete "Any permit proposed to be issued under these", and in the same subsection delete all of lines 11 and 12.

- 26.* Page 54, section 71-030, subsection (4)(e)(A)(ii), line 3, delete "either", and after "paper" delete "or" and insert a comma; and in line 4 of the same subsection before the period insert "or other materials approved by the Department".
27. Page 54, section 71-030, subsection (4)(e)(A)(iii), line 1, delete "Vitrified".
- 28.* Page 57, section 71-030, subsection (7)(b), line 4, delete "In no such case shall" and insert "Where feasible,"; in the same line after "repair" insert "shall"; and in line 5 of the same subsection delete "less than" and insert "at least".
29. Page 59, section 71-030, subsection (8)(a), in line 3 of paragraph (B) and line 2 of paragraph (D) delete "(a)" and insert "(A)", and in line 4 of paragraph (D) delete "7A" and insert "7B".
30. Page 60, section 71-030, subsection (8), in the heading delete "7A" and insert "7B".
- 31.* Page 67, section 71-037, subsection (1)(a), in line 1 of paragraph (A) after "evaporation" insert "potential"; in line 3 of paragraph (A) delete "any" and insert "all" and in the same line delete "time" and insert "times"; in line 1 of paragraph (C) after "Sufficient" insert "land" and in the same line delete "the pond will be"; delete line 2 of paragraph (C) and in line 3 delete "ing or possible future residence" and insert "no existing or possible future residence will be located within three hundred (300) feet of the pond. To insure compliance with this requirement the applicant shall either own or have control of record over the land to be occupied by the pond plus the area extending three hundred (300) feet in all directions beyond the pond"; and in the same subsection delete paragraph (D).
32. Page 68, section 71-037, subsection (1)(b), in paragraph (D) after the last sentence insert "To control soil erosion vegetation shall be established on the outer face, the top of the embankment, and the inner face down to the high water line."
- 33.* Page 69, section 71-037, subsection (3)(a)(B)(ii), delete lines 2, 3 and 4, and insert "or occasional use facilities such as county fairs and rodeos. Unless otherwise authorized by the Department the average daily flow of sewage to be handled shall not be more than 200 gallons."
34. Page 71, section 71-040, subsection (1)(d), line 6, delete "Unslope" and insert "Upslope".
- 35.* Page 78, Appendix A, section III. B., line 1, before "and" insert "fiberglass,".

- 26.* Page 54, section 71-030, subsection (4)(e)(A)(ii), line 3, delete "either", and after "paper" delete "or" and insert a comma; and in line 4 of the same subsection before the period insert "or other materials approved by the Department".
27. Page 54, section 71-030, subsection (4)(e)(A)(iii), line 1, delete "Vitrified".
- 28.* Page 57, section 71-030, subsection (7)(b), line 4, delete "In no such case shall" and insert "Where feasible,"; in the same line after "repair" insert "shall"; and in line 5 of the same subsection delete "less than" and insert "at least".
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- 33.* Page 69, section 71-037, subsection (3)(a)(B)(ii), delete lines 2, 3 and 4, and insert "or occasional use facilities such as county fairs and rodeos. Unless otherwise authorized by the Department the average daily flow of sewage to be handled shall not be more than 200 gallons."
34. Page 71, section 71-040, subsection (1)(d), line 6, delete "Unslope" and insert "Upslope".
- 35.* Page 78, Appendix A, section III. B., line 1, before "and" insert "fiberglass,".

- 36.* Page 83, Appendix B, section II. A. 1., line 2, after "sphere" delete "and" and insert a comma, and in line 3 of the same section before the period insert a comma and "and shall be equipped with closed frame motors and switches".
37. Page 87, Appendix D, in line 2 of the title, after "Disposal" insert "Sumps".
38. Page 93, Appendix E, section II, line 1, after "PIPE" insert "AND FITTINGS"; and in line 2, after "Pipe" insert "and Fittings".
- 39.* Page 94, Appendix E, section II. A., after line 1 insert a new subsection 3 to read as follows:

"3. Polyvinyl chloride (PVC) distribution and header pipe and fittings shall meet ASTM (American Society for Testing and Materials) Designation D2729-72, which is specified as Appendix O and by this reference made a part of these regulations. Pipe and fittings shall pass a deflection test withstanding three hundred-fifty (350) pounds per foot without cracking or collapsing by using the method found in ASTM 2412. Markings shall meet requirements established in ASTM 2729, subsections 9.1.1., 9.1.2. and 9.1.4. Each manufacturer of polyvinyl chloride pipe shall state, in writing, to the Department that he certifies that pipe and fittings to be distributed for use in absorption facilities within the State of Oregon will comply with all requirements of this section."
40. Page 94, Appendix E, line 2, delete "3" and insert "4" and after "The" delete "two" and insert "three".
41. Page 94, Appendix E, section II. C., line 1, delete "Vitrified".
42. Page 103, section 72-015, subsection (1), line 9, delete "Connection Permit" and "\$25".
- 43.* Page 104, section 72-015, subsection (4), line 7, after "Marion," insert "Polk,".
44. Page 108, section 73-025, line 1, delete "VARIANCE CRITERIA."
- 45.* Page 109, section 73-025, after subsection (8) insert a new subsection 9 to read as follows: "(9) Minimum depths to restrictive or impervious layers for given slopes are less than those allowed in OAR 71-030 (1)(e)."
- 46.* Page 112, section 74-015, subsection (1), line 7, after the period insert "If the proposed facility is determined to be ineligible the application shall be denied."
- 47.* Page 112, section 74-015, delete subsection (4).
48. Page 113, line 1, delete "(5)" and insert "(4)", and in line 5 delete "(6)" and insert "(5)".

49.* After Appendix N insert as Appendix O the ASTM Designation: D2729-72, Standard Specification for Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings. (5 pages)

Note: The items listed above which are marked with an asterisk (*) are changes based on comments or suggestions made by witnesses at the hearings on August 4-7, 1975 or in letters to the Department.

CURTAIN DRAIN

(Showing Relationship to Effective Sidewall)

Illustrates Definitions (18), (24) and (31)

Diagram 6

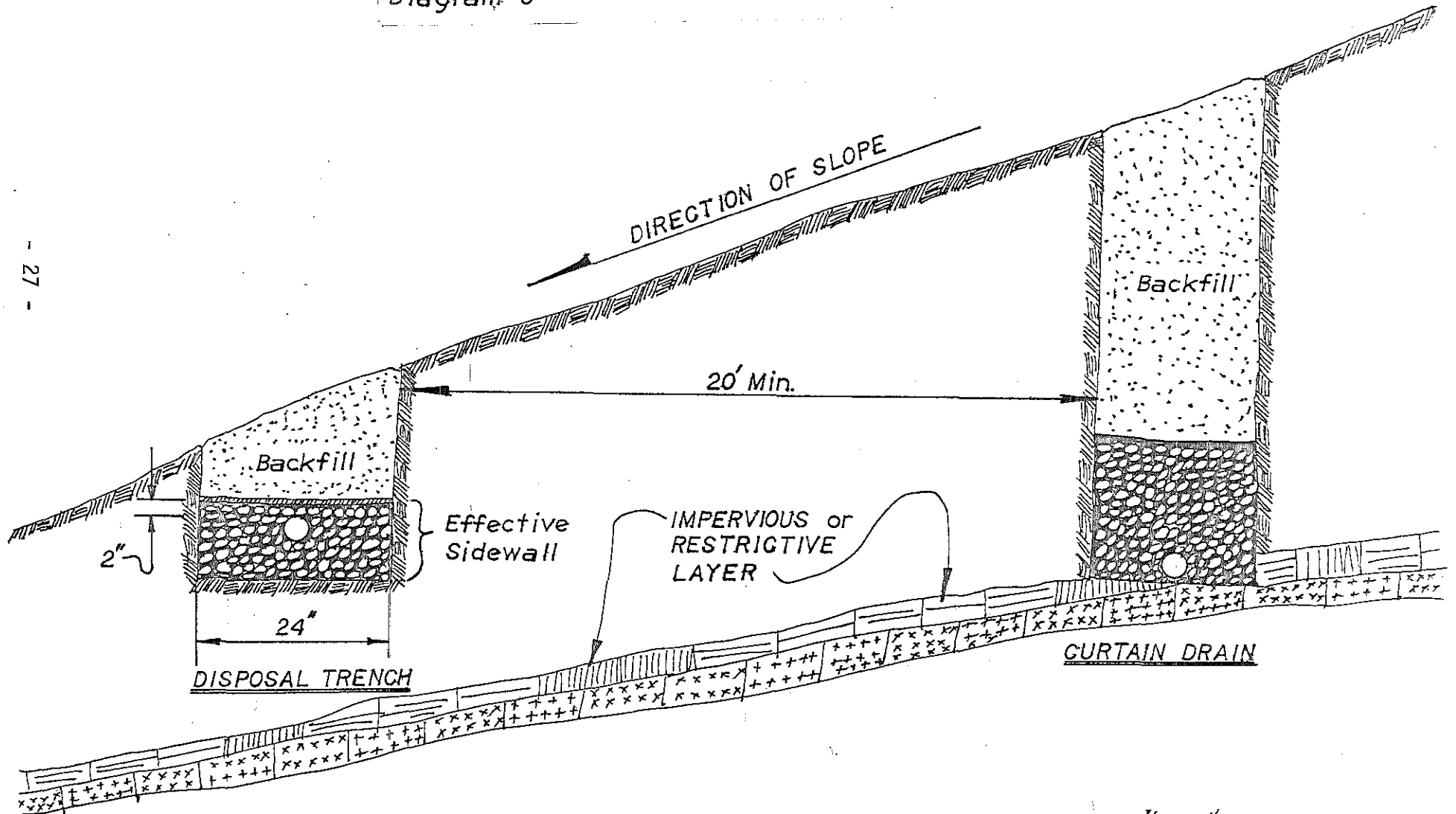
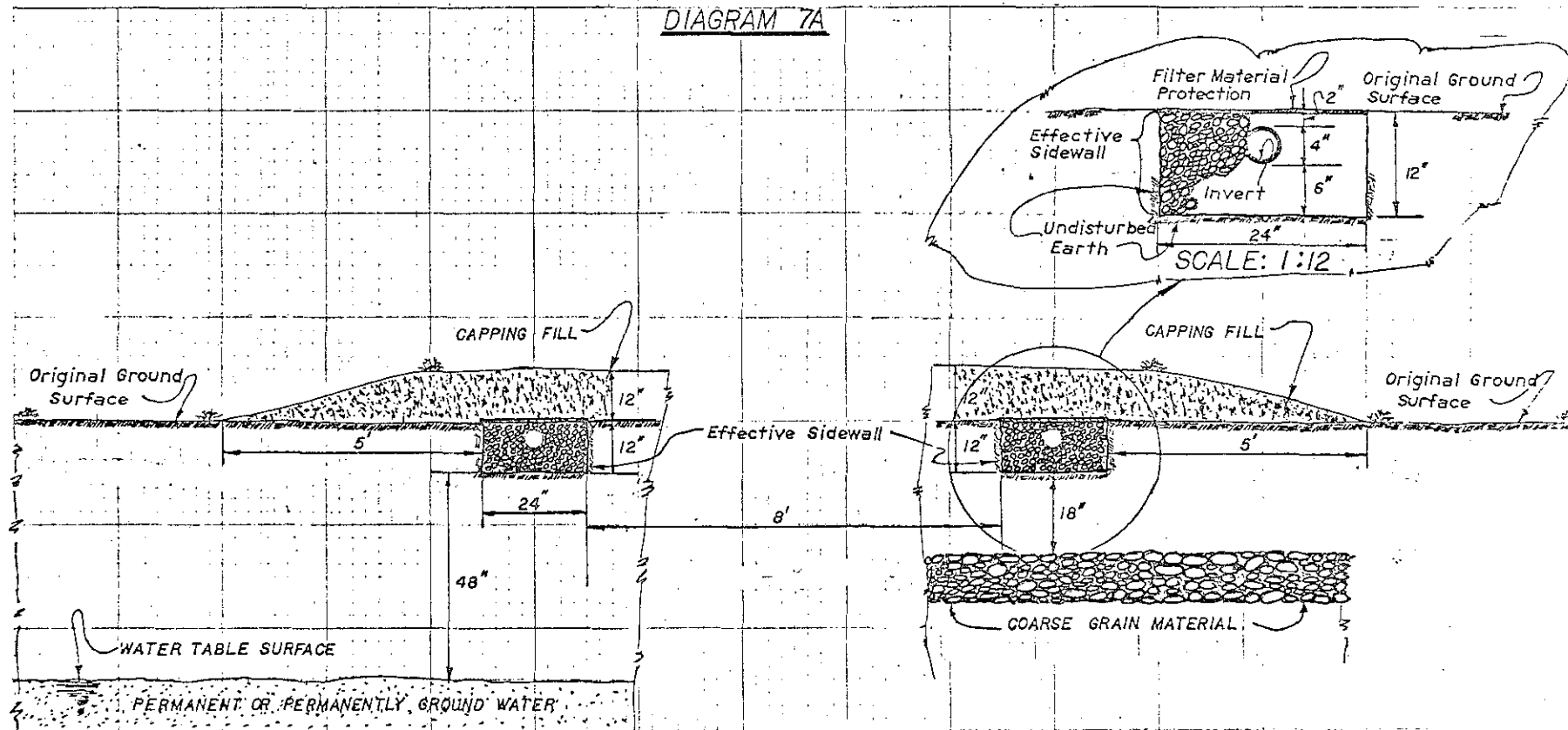


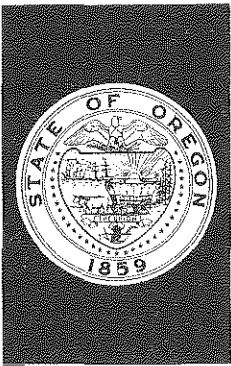
DIAGRAM 7A



FOOTNOTE:

- (A) The fill shall consist of twelve (12) inches of compacted soil the same texture as the original soil or one (1) textural class finer.
- (B) The fill shall be placed when the original soil from the ground surface to the bottom of the proposed disposal trenches is dry, before the trenches are constructed.
- (C) The slope of original ground surface shall not exceed twelve (12) per cent.
- (D) Serial distribution systems shall be used on original slopes of three (3) to twelve (12) per cent. Where serial systems are used, the capping fill shall be sloped so as to extend a minimum of twenty-five (25) feet downgrade from the lowest disposal trench.
- (E) Vegetation shall be removed from the original soil surface before placement of the capping fill.

SCALE: 1:24



ENVIRONMENTAL QUALITY COMMISSION

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To: Environmental Quality Commission

From: Hearing Officer

Subject: Hearing Report: Subsurface Sewage and Alternate Systems Rules

During the week of August 4, Regional Administrators of the Department conducted public hearings (preceded by requisite notice for rule adoption pursuant to ORS Chapter 183) in Bend, Coos Bay, Grants Pass, Medford, Pendleton, Roseburg, Salem and Tillamook. The hearings were to elicit public comment on the Department's Proposed Revisions to Oregon Administrative Rules Chapter 340, Division 7: Subsurface and Alternative Sewage Disposal. Listed on Attachment A are those who gave testimony. Listed on Attachment B is approximate attendance. Set forth below is the substance of testimony given. It is arranged by reference to the section of the proposal to which it refers.

Fortunately, there was considerable testimony of value, presented by witnesses who had obviously studied the proposal at great length. Staff was able to clarify many doubts about the proposal. It is felt that the hearings were well worthwhile.

TESTIMONY

General

The Department should not revoke permits based on prior approvals as was done in Jackson County (Anderson). The rules are not appropriate to Oregon's Coastal Region with its differing conditions (Bailey).

The rules are too permissive, particularly if it is the intent, through regional differences to relax groundwater separation requirements in areas of high groundwater. A report on Crater Lake was cited as illustrative (Barnes).



Contains
Recycled
Materials

The Commission is to be commended for conducting statewide hearings. Question and answer periods have been very helpful. Maximum technical assistance is desirable to implement the added flexibility in the rules (Bonebrake).

The Department has ignored public comment on the rules (Burton).

The Department should not injure those using disposal wells by attempting to phase out their use. (Fix, Hereford)

The rules are too restrictive of independent judgement by sanitarians in the field. (Glover, Langley)

The rules regarding groundwater separation, as applied in the LaPine Area, result in inconsistency of administration and loss of citizen confidence in the rules. (Langley)

Added diagrams and graphs are well done and extremely helpful. (Maurer)

If sewage is not visible on the ground, a system should be deemed to work properly. (O'Neill)

The Department should license firms to sell and service alternate systems in Oregon. More travel by staff is needed to examine installed alternate systems in other jurisdictions. The rules and the Brown and Caldwell Report do not allow sufficient alternatives to water carried systems. (Wilson)

71-010

This section should include definitions for "bedrock," "substratum," and "occasional use facilities." (Adams)

71-010(18) refers to Diagram 6 which illustrates the maximum depth permissible for a curtain drain (Footnote 2 on page 42). This should be changed to increase the minimum distance from disposal trench to curtain drain from 5 to 15 feet. Also, the curtain drain should be at least 6 inches deeper than the disposal trench and preferably below the impervious or restrictive layer. These requirements would insure that the drain will divert shallow groundwater from the absorption facility. (Maurer)

71-010(50) and 71-010(68). The site evaluation technique uses physical soil characteristics to infer permeability. This technique affords insufficient accuracy to discern the permeability increment between restrictive and impervious layers. The distinction should be abandoned in favor of a more understandable replacement for both terms.

The term "Relative Moisture Barrier" would serve and allow latitude for better administration if defined as: "A lateral barrier in the soil or below the soil that, because of its textures, structure, or lack of porosity, does not allow water entering from above to pass through as rapidly as it accumulates and its permeability is 0.2 inches per hour or less, as outlined in USDA Soil Conservation Service OR - Soils - 1 for soils series. Except on certain steep convex landscape positions where surface and subsurface runoff may exceed accumulations during some part of every year, a restrictive layer will have temporarily perched groundwater accumulated above it." (Maurer)

71-011

The Commission should not exercise jurisdiction over the "Building Sewer" in so far as the Commerce Department has regulatory authority over the same. (Wulfer)

71-015

Many of the counties are unable to adhere to the "20 day rule" under 71-015(3). The requirement that no permit be issued upon finding of violation of land use planning, zoning, or building requirement in 71-015(4) should be altered or deleted. It will make it more difficult to meet the 20 day rule, leave the Department open to liability, and inappropriately put the Department in the Land Use Planning business, an area wherein Sanitarians are without expertise and experts are without agreement. (Van Natta) Inferably 71-015(6)(a) is involved in the same considerations. It was found objectionable by Pat Gisler.

The requirements regarding land use consideration can be met by requiring the applicant to have a building permit. (Petrovich)

The bonding requirements of 71-015(6)(b) should be deleted in so far as they achieve no purpose other than harassment of builders. (Gisler)

71-015(8), predictably, was the subject of much testimony:

The expiration of prior approvals poses special hardship in resort areas wherein holders are often planning no installation until retirement. On this basis, recognition ought to be extended beyond September 1, 1975. (Defoe) Recognition ought to be extended to July 1, 1976 (as recommended by CTF (Jaqua, Van Natta), until each holder can be notified (Skillman, Van Natta) or indefinitely (Glover, Meurer, Van Natta). Prior approvals should be recognized even where not mentioning a specific lot within a subdivision if granted in accord with rules at the time (Glover). They should all be unconditionally recognized (Meurer). A recent adverse decision in Lincoln County will inspire litigation against the Department for refusal to acknowledge prior approvals (Van Natta).

71-016

With regard to connections to existing systems, the proposals appear to have been inadvertently drafted to require a permit for each hookup in mobile home or recreational vehicle parks designed to accommodate rotation of units and licensed under ORS Chapter 466. This oversight was brought to staff's attention by many witnesses (Hirsch, Markovich, Petrovich, Shearer, and Stanfield). It was suggested that facilities having a certificate from the Health Division (or Department of Commerce) be exempted from 71-016.

71-018

With regard to 71-018(4) it is unreasonable to require a tank to be pumped out and filled with gravel in all instances. Examples: (a) A new system installed under the prior approval rule whose owner is unable to construct and occupy a house within one year. (b) An existing house left vacant for over one year with intentions to re-occupy (Glover).

71-020

Page 42 (Footnote one): Change "Department or Contract Agent" to "Department or authorized agent" because "contract agent" is not defined in the rules. (Burns)

The capacity for sewage flows should be the same for travel trailer parks regardless of whether individual sewer and water hookups exist and should be set at 100 gallons per day for mobile home park units. (Freeman) (Pages 39 and 40 of the proposal).

The capacity of 250 gallons per day as proposed for mobile home park units (page 39) should be retained (Markovich). It is supported by recent monitoring results.

The table cited in 71-020(1)(b) (Pages 39 and 40) should include deference to differing family sizes. Example: A retired couple may plan a home with more than one bedroom and not fully occupy it. (Small)

Page 42 (Footnote 2) the 5% slope limitation for curtain drains (as deleted from proposed 71-030(k) on page 51) should be introduced here until such time as tests can be run with regard to the advisability of slope limitations (Petrovich, Costanzo). Exception should be given where there is sufficient outlet to discharge intercepted runoff. (Costanzo)

Page 42 (Footnote 2). See testimony of Maurer regarding 71-010(18) and Diagram 6.

71-025

This rule should not be changed to require double compartment septic tanks without a careful look at the increased cost to manufacturers and purchasers (Meurer).

71-027

The proposed "public entity" requirement will cause undue hardship to "Jet Aeration" customers since the distributor/dealer must furnish a two-year warranty for service (Jourdan). It is questionable whether any public entity has the resources necessary (Jourdan) or the willingness (Van Natta) to undertake responsibility for operation and maintenance of the system. Private enterprise, under adequate licensing or other safeguards, should be allowed to provide for operation and service. (Van Natta, Cegauske) Private concerns are licensed to handle materials more hazardous than that involved here. The "public entity" requirement defeats the intent of the legislature, eliminates home or small commercial use of mechanical oxidation systems and constitutes a fraud on the public. The Department should provide maintenance and operation if it is convinced only government is capable. Hundreds of such systems are operated successfully by private concerns in other jurisdictions.

The failure to propose relaxed drainage field standards for the already partially treated effluent eliminates incentive to use a mechanical oxidation system at all. (Van Natta). The "public entity" requirement virtually negates the entire section 71-027 (Van Natta, Jourdan).

71-030

The general provisions of this section are inappropriate to Coast areas of the State where the soils are unique, the water table fluctuates, rainfall is severe, the water supply has a high iron content and is unusable, and other unique conditions prevail. A committee is needed to formulate regional requirements to best suit the Coast areas. (Seabrandt)

The zoning classifications in 71-036(2) should be replaced with minimum setback requirements from side property lines (Adams). The term "rural areas" should be defined (Barnes).

71-030

71-030 is inadequate in terms of its attempt to define and regulate all situations with regard to water table separation. The LaPine area of Oregon is erroneously judged in following such rules because there are too many variables with regard to the behavior of water tables. (Langley)

The minimum separation distance from sidewall (or surface) to water table should and can be relaxed (Burton).

71-030(1)(e) should be revised to abolish the distinction between restrictive and impervious layers (See Maurer on 71-010 above) and use a graph (Attachment C) to set forth maximum slopes in relation to depth of moisture barrier (Maurer).

71-030(5) (See page 88, Appendix D IIA) needs revision to provide for reduced requirements for gray water where black wastes from single family dwellings are disposed of through separate systems (Davis, Everson). Example: A graywater disposal system using a trickle filter (Davis).

71-030(5)(a)(A): Require same separation from groundwater for seepage pits as for disposal fields. Also, in 71-030(5)(a)(C), delete the word "not" (Costanzo).

71-030(7)(b) should be revised to allow as much repair as can be made if there is insufficient room to add to the existing sidewall by 50%. The geographic region rule (71-030(8)) poses a solution to many eastern Oregon problems and should be adopted (Glover).

71-030(8) should be inclusive of a rule dealing with areas adjacent to river systems or areas where conventional rules prevent installation only because of shallow groundwater or coarse gravel materials (Burns, Attachment D).

71-037

The systems permitted hereunder are too expensive for most residents of Jackson County (Moore).

The Department should license private firms to service and sell these and other non-conventional systems (Wilson).

These proposals deserve support (Waggoner).

71-037(1)(a)(C): "possible future residence" is problematic term. It should be rewritten to require a 300 foot setback from other residences on the owner's property and easements to prevent building of residences within 300 feet on adjacent property (Van Natta).

71-037(1)(a)(D): The minimum liquid depth requirement puts the use of a lagoon beyond availability to a single family dwelling (Jourdan).

71-037(3)(a)(B)(ii): The 200 gallon average daily flow limit is arbitrary and no such limit should be imposed (Van Natta). The term "occasional use facility" should be defined (Adams). Holding tanks should be allowed for single family dwellings (Braaten).

The use of non-water carried systems with split disposal systems for grey water should be developed further as an alternative (Evans, Davis). The few alternatives permitted here are an outrage and do not serve the intent of SB 297. They provide no relief for those who adopt a low-profile life style involving reduced water usage and reduced disposal needs in general. (Scherf)

71-040

See testimony of Davis, Everson, and others regarding 71-030(5) and 71-037. Also, much written material was submitted by Davis and Baldinger with regard to the Clivus Multrum as a desirable non-water carried system in terms of resource recovery, health, economics, ecology, and other factors. The thrust of much of their testimony was directed against the use of sewerage works.

The use of additional non-water carried systems should be permitted in buildings with piped in water (Moore, Davis). Attention should be given to which staff member can authorize self contained non-water carried facilities (Moore).

72-010 et seq.

The Department should adopt a fee schedule for a site evaluation in subdivisions which impose a fee of \$300 plus \$5 for each lot in excess of the fourth. A maximum fee of \$5000 is recommended. Also, thought should be given to cheaper, preliminary investigations such as the "feasibility study." Evaluations ought to question which waters need to be protected. (Gisler)

73-010 et seq.

The variance proposals should be adopted as a permanent rule (Moore).

73-025 should include criteria with reference to prior approvals as follows: (a) Indefinite variances to be granted where there are prior approvals of any type, they meet the rules in existence at the time of prior approval, and the area has a history of successful operation. (b) Limited variances to be granted where there is a prior approval counter to previous rules but the area has a history of successful operation of systems. (c) No variances in areas with a history of failing systems. (Gisler).

73-030 should provide that the local sanitarians be variance officers (Meurer).

Too much discretion is vested in one individual. The word "may" should be replaced by "shall" in 73-025, 73-030(1) and 73-056 (Skillman).

It is inequitable to provide in 73-050 that third parties may appeal a variance grant and no one may appeal a denial. (Cegauskie, Van Natta)

74-005 et seq.

This concept is generally a good one. Experimentation should be conducted with respect to systems such as the Clivus Multrum, Methane Digesters, and algae ponds. (Everson, Ging, and Davis).


Mr. Baldinger requests permission to install a Clivus Multrum in his home. Mr. Davis contends that the Department's reluctance to let him install a Clivus Multrum indicates a lack of willingness to experiment under the proposal.

The designer of an experimental system should not have to warrant the design. This is a contradiction in logic. See 74-015(4) (Cegauske).

74-015(4 & 5) are ambiguous as to the extent of liability to be born by the owner. Also unclear are the responsibilities for monitoring. (Skillman).

There should be spelled out in the proposals a definite time or circumstance wherein a system shall no longer be regarded as experimental (i.e. six months, a year, etc.) (Moore, Campbell).

Respectfully Submitted,


Peter W. McSwain
Hearing Officer

ATTACHMENT A

<u>WITNESSES</u>	<u>AFFILIATION</u>	<u>HEARING</u>	<u>SECTIONS</u>
Adams, Gregg	Jackson County Sanitarian	Medford	71-010 71-030 71-037
Alexander, Arthur		Medford	General 71-015
Bailey, Charles D. Baldinger, Wallace	Tillamook County Commissioner Oregon Shores Conservation Coalition	Tillamook Salem	General
Barnes, Ed	Oregon State Health Division	Bend	74-005 General 71-030
Braaten, James Burton, Tom	Burton Engineering	Medford Bend	71-037 General 71-030
Bonebrake, Richard Burns, Roy L.	State Representative (#46) Lane County Department of Environmental Management	Roseburg Roseburg	General 71-020 71-030
Cegauske, Wallace D.	Attorney	Roseburg	71-027 73-050 74-015 74-005
Campbell, Coleman E. Costanzo, Charles	Josephine County Health Department	Grants Pass Grants Pass	71-020 71-030
Davis, Ron L.	Clivus Multrum	Salem and Roseburg	71-040 74-005 74-005
Defoe, Jack Everson, Bjorn	Cascade Realty	Bend Grants Pass	71-015 71-030 74-005
Fix, Willard	Oregon Mobile Home Owners Association	Bend	General
Freeman, Loren Ging, Katherine M.	Mobile Home Park Owner	Pendleton Medford	71-020 74-005
Gisler, Patrick Glover, John	Deschutes County Deschutes County Sanitarian	Bend Bend	71-015 General 71-015 71-018 71-030
Herford, Perry Hirsch, Reuben Jaqua, David Jourdan, Dan	Trailer Park Owner City of Redmond Oregon Environmental Specialties	Bend Medford Bend Grants Pass	General 71-016 71-015 71-027

<u>WITNESSES</u>	<u>AFFILIATION</u>	<u>HEARING</u>	<u>SECTIONS</u>
Langley, Jay	Deschutes County Sanitarian	Bend	General 71-030
Markovich, Joe M.	Rogue Valley Mobile Home Park Association	Medford	71-016 71-020
Maurer, Dave	Soil Scientist	Medford	71-010 71-020 71-030
Meurer, Eric	Marion County Home Builders Association	Salem	71-015 71-025 73-030
Moore, Tam	Jackson County Commissioner	Medford	71-037 71-040 73-015 74-005
O'Neill, James	Developer	Bend	General
Petrovich, Joe	Yamhill County Sanitarian	Salem	71-015 71-016 71-020
Seabrandt, James	Tillamook County Sanitarian	Tillamook	71-030
Shearer, V. W.	Oregon Mobile Park Assoc.	Salem	71-016
Scherf, Walter		Salem	71-037 71-040
Skillman, Don		Medford	71-015 73-025 73-030 74-015
Small, Lee R.	Developer	Grants Pass	71-020
Stanfield, Irene	Mobile Home Park Owner	Grants Pass	71-016
Van Natta, Fred	Oregon State Home Builders Association	Salem	71-015 71-027 71-030 71-037 73-050
Waggoner, Earl	General Contractor	Grants Pass	71-037 74-005
Wilson, C. Ray	J. R. Distributors	Grants Pass	General 71-037
Wulfers, Walter A.	Owner of Ranch for Mobile Homes		

ATTACHMENT B

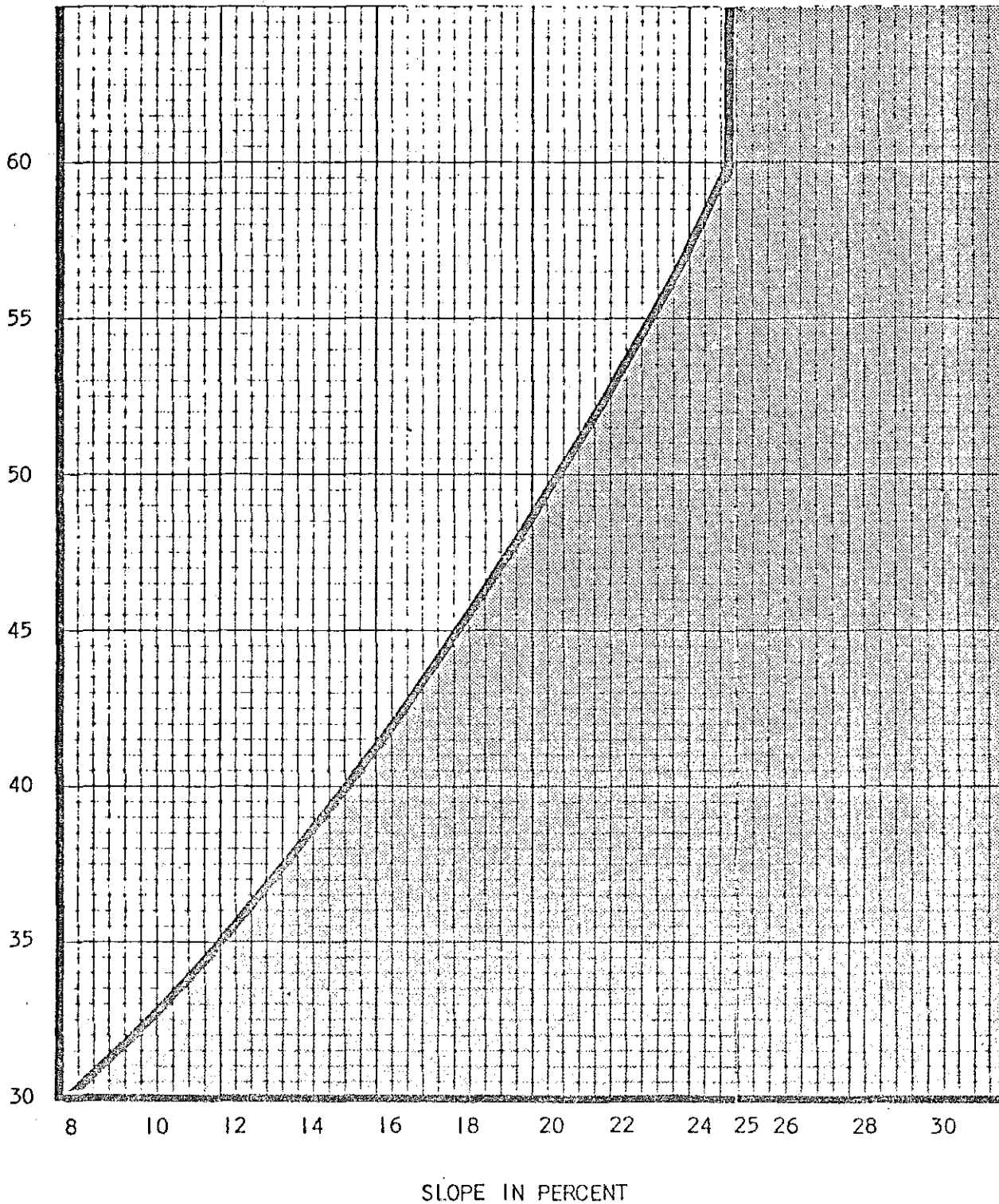
Attendance (Estimate)

Bend	22
Coos Bay	5
Grants Pass	69
Medford	63
Pendleton	7
Roseburg	41
Salem	23
Tillamook	<u>10</u>
Total	243

SLOPE VS DEPTH TO RELATIVE MOISTURE BARRIER

DEPTH TO
RELATIVE
MOISTURE
BARRIER
IN INCHES

 UNSUITABLE



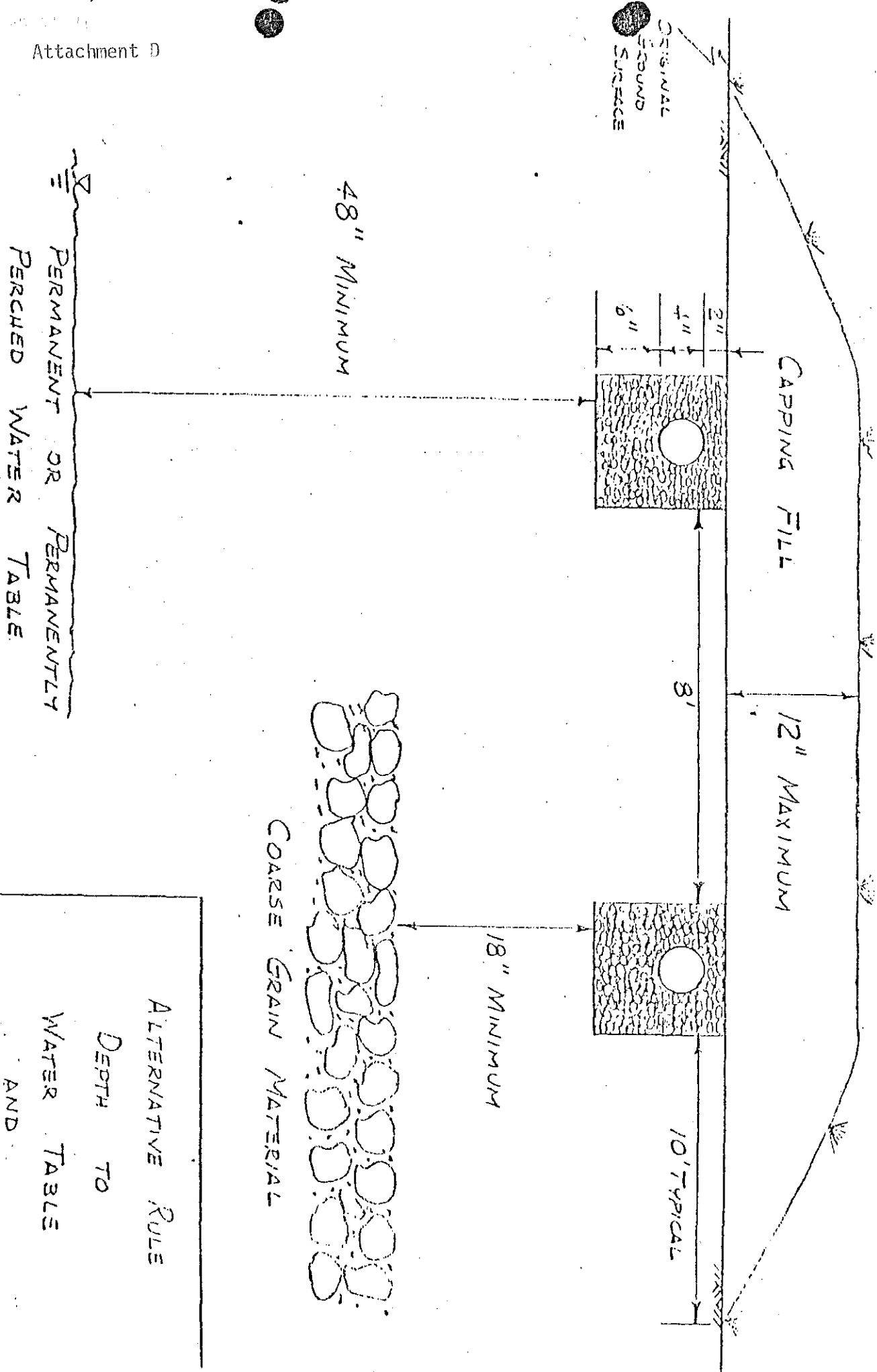
Proposed
Alternative Systems Rule

- I. DEFINITIONS: The definitions contained in ORS 454.605 and OAR 71-010 shall apply as applicable.

- II. ALTERNATIVE SYSTEMS RULE A.
 - (1) In areas where installation of standard subsurface sewage disposal systems is prohibited only by existence of shallow permanent or permanently perched water table and/or coarse grain material, subsurface sewage construction permits may be issued provided:
 - (a). The highest level attained by a permanent water table or permanently perched water table will not be within four (4) feet of the bottom point of the effective sidewall of the disposal trench, and/or
 - (b). A minimum separation distance of eighteen (18) inches can be maintained between coarse grained material and the bottom point of the effective sidewall of the disposal trench, when
 - (c). A capping fill of up to twelve (12) inches in depth and of soil within two (2) textural classes of the soil found in the upper-most horizon is installed in accordance with the design contained in Diagram 1 attached. The system shall be sized according to OAR 340-71-030, Table 6.
 - (d). The repair area shall be protected from damage.
 - (e). Vegetation shall be removed from the fill area and the original soil surface shall be scarified to a depth of at least six (6) inches prior to placement of the fill material.
 - (f) Serial distribution systems shall be used on original soil slopes or 3-12%. Where serial distribution systems are used, the capping fill shall be sloped so as to extend a minimum of twenty-five (25) feet downgrade from the lowest disposal trench.

- (2) The capping fill material and the original soil surface shall be below optimum consolidation moisture before construction is allowed to proceed.
- (3) Except as provided in the preceding sections, installation of a subsurface sewage disposal system shall comply with conditions required by OAR Chapter 340 71-005 through 71-035 and the appendices thereto.

DIAGRAM



Attachment D

PERMANENT OR PERMANENTLY PERCHED WATER TABLE

COARSE GRAIN MATERIAL

18" MINIMUM

48" MINIMUM

CAPPING FILL

12" MAXIMUM

8'

10' TYPICAL

ORIGINAL GROUND SURFACE

ALTERNATIVE RULE
DEPTH TO
WATER TABLE
AND

COARSE GRAIN MATERIAL

STAFF EVALUATION OF TESTIMONY RECEIVED

At Public Hearings August 4-7, 1975 Regarding
August 1975 Draft of Proposed Revisions to Oregon
Administrative Rules Chapter 340, Division 7 Subsurface
and Alternative Sewage Disposal

Note: The testimony summary for each subject is cited in making the staff evaluation.

General

1. The Department has not ignored public comment. Many of the public recommendations made informally or at the recent public hearings are incorporated in the proposed rules as noted in Attachment A to the staff report.
2. Under the proposed change the Agreement County sanitarians will have more opportunity to exercise independent judgment on, for example, the Rural Areas site determinations.

Section 71-010 Definitions

Definitions for "bedrock," "substratum," "occasional use facilities" and "rural areas" are not really needed.

Section 71-011 Systems approved by DEQ

ORS 454.605(12) and 454.695 require DEQ to regulate "Building Sewers," coincidentally with the Department of Commerce under overlapping statutes, which the 1975 legislature did not resolve despite the introduction of proposed legislation.

Section 71-015 Permit procedures

1. Staff believes that the Department's agents, whether DEQ region or agreement county personnel, are meeting the deadline of 20 days to process a completed permit application. We have had no other complaints or evidence to the contrary. An application is not complete until the local land use planning and zoning agency has made its site recommendation. It is absolutely necessary that the Department provide the opportunity for coordination with land use and other applicable local requirements, so that our time is not wasted in performing evaluations of sites otherwise prohibited from development. The land use laws now mandate DEQ not to issue permits for facilities which would violate the goals and guidelines of the Land Conservation and Development Commission, also necessitating our coordination. DEQ does not make the land use determinations.
2. The up to \$25,000 surety bond or equivalent security required prior to issuance of permits for facilities projected to have more than 1,200 gallons per day of sewage flow is necessary to help insure that adequate resources are available to maintain these larger systems.

3. The deadline for obtaining a permit to construct a system under prior approval should remain September 1, 1975. It will be impossible to notify all absentee or unrecorded owners of the deadline. Postponing it will not help. Notification efforts have been made. Many of the prior approved sites are marginal or submarginal and have a potential for failure and resultant health hazard and water pollution. Staff feels that we need to get prior approvals behind us so that under our better rules the public health and environmental quality may be better protected. Applicants after September 1, 1975 on prior approved sites may be able to obtain permits through the new regional, alternative systems or variance rules. It may be wise however to consider extension of the one year deadline for system installation on a case by case basis, so that the system does not have to be installed and subject to potential damage months before the house which it is to serve is constructed.
4. Permits based on prior approvals are honored in nearly all instances, unless it is apparent to the Department that site conditions clearly did not meet the rules in effect at the time of issuance and are so severe that water pollution or a health hazard will result.

Section 71-016 Connection

The proposal for connection to existing systems has been modified to clarify exemption of individual hookups in certified mobile home and recreation parks.

Section 71-018 Abandonment

1. Staff recommends that the dwelling, travel trailer and mobile home park daily sewage flow rates proposed in Table 3 on pages 39 and 40 be adopted as printed. The values listed are close to actual flows. The per bedroom rather than per occupant method of rating dwellings reflects the potential capacity of the home and is the only practical basis for calculation short of census counts with checkbacks, which is neither desirable nor practical. Small families do sell large homes to large families.
2. Upon reconsideration staff recommends that current curtain drain requirements essentially be retained pending proposed winter tests and monitoring to verify the basis for the printed proposed change or a modification thereof.

Section 71-025 Septic tanks

Staff contemplated future recommended rules changes based on the most recent recommendations of the Department's Technical Advisory Committee on Materials and manufacturers, as follows:

1. Conversion from a one to a two compartment septic tank as a minimum in about 16 months.
2. Conversion from the currently required non-vented elbow tank inlet to a vented "tee" -- in a minimum of 6 months.

These recommendations take into account the manufacturer's conversion time needs.

Section 71-027 Aerobic facilities

1. The following changes are recommended as a result of testimony received:
 - a. Subsection (7) on page 47 has been modified to allow the Department to consider methods of assuring continuous and adequate operation and maintenance other than by a public entity.
 - b. The requirement for both an audible and visual alarm has been modified to either/or.
 - c. The minimum rated hydraulic capacity has been reduced from 600 to 500 gallons per day to more nearly reflect requirements in other states.
2. No conclusive scientific evidence is available to support relaxation of drainfield requirements for aerobic facility effluent. Research is ongoing at several locations nationally. Results to date conflict. Certain facets of this research effort may appropriately be performed in Oregon; staff is currently evaluating this.

Section 71-030 Disposal areas

1. The rules are appropriate to the Oregon Coast and all geographic regions. However, the potential need for further region rules to make the requirements even more appropriate to a geographic area will be explored.
2. The rules as proposed are not intended to relax groundwater separation requirements unless it is determined that no health hazard or degradation of ground water supplies will be caused. Further evaluation of these rules implications will be explored. It is necessary to provide separation of sewage systems from potentially usable ground water, in a manner coordinated with all agencies of jurisdiction. It is not enough just to say that sewage is not surfacing on the ground so there is no health hazard.

Under the proposed change the agreement county sanitarians will have more opportunity to exercise independent judgment in, for example, the Rural Areas site determinations.

3. Preliminary indications of ground water degradation support continued phaseout of sewage disposal wells in Central Oregon as soon as other disposal options are developed for each existing site.
4. For the time being the terms restrictive and impervious layers should be retained while further evaluation of the "relative moisture barrier" concept is made.
5. No scientific evidence is available to staff to support reduction of rate of effective sidewall area per gallon of gray water from that required for "mixed waste" (including that from toilets) septic tank effluent. A reduction in installed drainfield size is proposed to reflect reduction of total effluent volume with subsurface disposal of gray water only, in those systems approved for toilet ("black") waste separation. Staff will continue to consider any valid experimental method to resolve the questions of drainfield rate reduction and alternative disposal methods for gray water.

6. The setbacks from the bottoms of either seepage pits, cesspools or disposal fields to permanent or permanently perched ground water is already proposed to be the same; 4 feet. The requirement for a continuous 5 foot deep stratum of clean, coarse (gravel-like) material is correctly stated on page 55 in subsection 71-030(5)(a)(C).
7. The proposed rules have now been changed in several places (see Attachment A) to incorporate testimony recommendations for modifying the placement of disposal trenches while still maintaining consistent setbacks of them above permanent or permanently perched ground water or coarse grain materials under some circumstances.

Section 71-037

1. Staff has made and will continue to make field trips as necessary to examine promising out of state alternate systems.
2. Staff will continue to develop standards for such additional alternative systems as mounded disposal beds, evapotranspiration beds, composting toilets and recycle toilets through the experimental program, incorporating the recommendations of Brown and Caldwell, DEQ consultants. This will need to be an ongoing program. Only those alternative systems whose standards are sufficiently known and understood are ready and are offered as rules now.
3. The Department licenses installers and pumpers of subsurface and alternative systems, but due to statutory limitations cannot license firms which only operate and maintain these systems.
4. Subsection (1)(a)(C) has been rewritten (see Attachment A) to incorporate testimony suggestions regarding the applicant's maintenance of control over a 300 foot buffer area setback between the stabilization pond site and residences.
5. The proposed rules have been changed to clarify that "makeup" water may be added to ponds serving single-family dwellings to maintain the required 2-1/2 foot minimum liquid depth during high evaporation rate periods.
6. Staff still recommends that permanent holding tanks be permitted only for the facilities listed with average daily sewage flows of not more than 200 gallons. However, we have added the provision "unless otherwise authorized."

Section 71-040 Nonwater-carried waste disposal

Other split waste and black waste systems will be incorporated into the rules as they are proven adequate through the Department's experimental program.

Section 72-025 Evaluation report fees

No change is recommended in the proposed fees regarding testimony on a sliding rate based upon subdivision size.

Subdivision 73 Variances

1. No change is recommended regarding testimony on a system of three options to

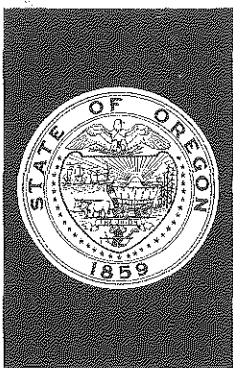
combine prior approvals with the variance procedure.

2. Local sanitarians who qualify may be appointed as "special variance officers" under the rules in counties under contract with DEQ for a variance program.
3. Variance officer discretion should be retained through the use of "may" rather than "shall".
4. The Department's counsel has interpreted that appeal of a variance denial is not provided for in the statute. A formal Attorney General's Opinion has been requested.

Subdivision 74 Experimental facilities

1. Each proposed experimental facility site will be evaluated.
2. The Department is currently developing a plan for all experimentation which appears to be needed in Oregon, taking into account all proposals, the monitoring capability of the Department and its agreement county agents and what would seem to be a reasonable experimental period for each system category. From time to time systems which "pass the test" will be authorized by development of new rules.
3. The proposed requirement for designer warranty of experimental facilities has been dropped.
4. No change is suggested to the statements of owner responsibility as proposed.

RDJ:md
8/15/75



ENVIRONMENTAL QUALITY COMMISSION

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MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. I, August 22, 1975 Meeting

Metropolitan Service District Construction Funding From State
Pollution Control Bonds

Background

The Metropolitan Service District (MSD) has completed the planning phase of its solid waste management program over a 2 1/2 year period using grants from State Pollution Control Bonds totaling \$600,000 and is now ready to begin implementation. The regional plan has been adopted by MSD and approved by the Department. The program consists initially of construction of one receiving and processing station in Clackamas County and one receiving and transfer station in Washington County. After start-up operational experience an additional receiving and processing station is to be constructed in North Portland in the next biennium. Major resource recovery activities will be initiated and recycling markets enhanced through the sale of fuel-from-refuse and ferrous metals.

Under the proposed plan MSD would control all solid waste disposal within the Tri-County area, while the respective counties and the City of Portland would remain in control of collection. Resolutions of agreement to assure smooth flow of all solid wastes to MSD facilities and thereby assure the flow of revenue into the system, have been signed by Clackamas, Washington and Multnomah Counties but remains to be obtained from the City of Portland.

The 1975 Legislature authorized DEQ to fund MSD staff through FY 1976 (\$160,000) and set over to the Emergency Board \$12.5 million in Pollution Control Bond Construction funds for MSD. The additional planning monies were authorized with the understanding that MSD would prepare a detailed financing plan and other information related to guaranteeing repayment of loans from the Pollution Control Bond Fund. They hope to be prepared for presentation to the Emergency Board in October or November 1975. This will require a resolution of support from the City of Portland and approval by the Department and the Environmental Quality Commission.



Contains
Recycled
Materials

Discussion

In July 1971 the EQC adopted the following policy regarding loans from Pollution Control Bond funds relating to sewer construction projects:

"It was moved by Mr. Harms, seconded by Mr. McMath and carried that, except for purchase of bonds which will be considered on an individual basis, it be the policy of the Commission to limit loans to \$50,000 with a 20-year term as maximum for repayment of the indebtedness and that there be a pledge of specific revenue for repayment. In the discussion of this motion it was concluded that special consideration of larger loans might possibly be given in hardship cases."

It was determined that for loans under \$50,000, the bond preparation and election costs would be very high relative to the amount of loan applied for.

To date two loans have been granted by the Department for sewer construction accepting revenue bonds for collateral. All other loans over \$50,000 have been secured by General Obligation Bonds.

During the course of the MSD project there has been much discussion regarding a pledge of user fees in lieu of bonds for guarantee of repayment of loan from the Pollution Control Bond Fund for a solid waste facility. Both MSD's attorney and State Attorney General's Office have rendered opinions that this is a legal course of action. The Department has not indicated in writing to MSD that it would or would not accept a pledge of user fees in lieu of bonds, however MSD's planning activities have proceeded from the beginning with the assumption that bonds would not be required.

For the great majority of anticipated solid waste facility construction projects in Oregon, it is clearly preferable for local government to issue general obligation or revenue bonds for the state to acquire. MSD's attorney contends however that in their particular case a pledge of user fees is equal to the issuance of revenue bonds. It is recognized that MSD does have a broad revenue base from user fees with approximately 1/2 of the State population involved. MSD also has direct authority to require disposal at its facilities of all solid wastes generated within its boundaries. Only a minor portion of the "gate fee" per ton of garbage from this disposal monopoly would be needed to meet debt service for their loan. They also argue, as a backup MSD may assess a user fee on residents to meet contractual indebtedness. Such a user fee would however be subject to remonstrance and could possibly be overturned by the voters.

If DEQ requires MSD to bond at this point it would be necessary for the district to hold an election. A general obligation bond vote would require establishment of a tax base for MSD and may require two elections. MSD has estimated election costs at \$30,000 for a general election and in excess of \$90,000 for a special election. The earliest date of a general election would be in May 1976. A delay to that time would severely hamper the time schedule for implementation of the regional plan and put MSD at the end of its present planning monies. It should be noted that MSD does not have funds to finance either an election or the promotional campaign to make a

success of an election. The respective member counties could issue revenue bonds without a vote of the people on behalf of MSD, however, indications are that at least some of the counties may not be able or willing to do this.

The risk involved with acceptance of a pledge of user fees is that DEQ would fall heir to the facilities if MSD were to dissolve due to political upheaval or lack of revenue sufficient to cover operations and repayment of public funds entrusted to the Department. Attorney General's opinion #6898, February 22, 1972 indicated that MSD may not dissolve without the consent of its creditors. The level of processing disposal fees are controlled by MSD and relatively large adjustments to tonnage fees can be made with small impact to the resident. (Approximately 10:1 ratio of gate fee to residential service charge.)

Based on the staff's analyses of MSD's financing plan for a 4 processing station system it appears that there are sufficient revenues to operate the system and to pay back the State loan. MSD staff are presently computing financing on the reduced system of 2 processing facilities and one transfer station. It is apparent that by reducing the system but still handling the same volume their financial outlook will be even better.

Conclusions

1. MSD is ready to begin implementation of its solid waste plan which was funded with \$600,000 in State grant funds, has been approved by the Department and initiates resource recovery for the Portland Metro area.
2. MSD has been granted an additional \$160,000 for one year from Pollution Control Funds to prepare a funding request to be presented to the E-Board for \$12.5 million in construction funds to initiate construction.
3. MSD is recognized as a governmental entity with a large population base on which to draw revenue through user fees and the authority to assure disposal of all solid wastes through its facilities. Estimated debt service requirements would be a minor portion of a resulting gate fee.
4. EQC policy on sewer construction projects has been to require revenue or G.O. bonds to secure any loan over \$50,000, however it has been determined that the Department may legally accept a pledge of user fees to secure a loan from the Pollution Control Bond Fund. MSD maintains that revenue bonds and a pledge of user fees are equivalent as a "promise to pay".

5. MSD determined early in its planning program that it would not be necessary to ask the public to vote bonds for construction of facilities and has designed its implementation schedule and financing on the basis of a pledge of user fees to secure a loan from the State Pollution Control Bond Fund. The Department has never formally agreed to this procedure. However, requiring MSD to put up bonds at this point would delay and otherwise jeopardize implementation of the regional resource recovery plan.
6. It appears that MSD solid waste disposal revenues would be clearly sufficient to cover operational costs and pay back public funds as long as MSD remains a politically stable organization.

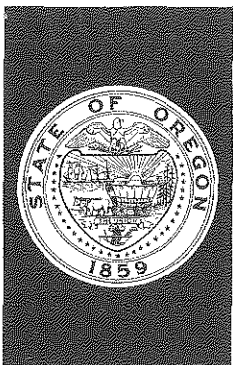
Recommendations

It is the Director's recommendation that MSD be allowed to use a pledge of user fees as security for the loan of approximately 9.2 million dollars of State Pollution Control Bond funds subject to the submittal by MSD and subsequent approval by the Department of a detailed fee schedule, revenue forecast and necessary implementing ordinances and agreements.



LOREN KRAMER
Director

RLB:mm
8/1/75



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MEMORANDUM

To: Environmental Quality Commission

FROM: Director

SUBJECT: Agenda Item No. J, August 22, 1975 EQC Meeting

Authorization for Public Hearing to Consider Adoption of
Rules Pertaining to Management of Environmentally Hazardous
Wastes

Background

The Department has been developing rules for the management of environmentally hazardous wastes for over a year. A public hearing and adoption of such rules has been held in abeyance due to the following factors:

1. Consideration by the Commission and the Department of a proposed hazardous waste disposal site during the period through November 1974. Based on the Commission's action, a license for that site was not granted.
2. Consideration by the 1975 Legislature of legislation that might have authorized a state-operated hazardous waste disposal site. This bill (SB 163) was enacted but was substantially amended so that it does not authorize a state-operated site.

In order to assure proper handling and disposal of hazardous wastes without further delay, it is necessary to adopt administrative rules. The proposed rules which have been developed contain the following provisions:

1. Criteria for classification of wastes as environmentally hazardous.



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Materials

2. General requirements for storage, disposal, reporting and for collection sites.
3. Liability for improper disposition of wastes and enforcement procedures.
4. Classified and declassified pesticide and radioactive wastes and approved disposal procedures for those wastes.

It should be noted that comments on an earlier draft of these rules were solicited from various industrial and governmental organizations. A number of the comments received have been incorporated in the proposed rules.

Conclusions

The proposed rules are necessary for effecting proper disposal of environmentally hazardous wastes.

Recommendation

The Director recommends that a public hearing be held by the Commission at its September 26, 1975 regular meeting, or before a hearings officer at a place and time to be determined by the Director, to receive public and expert testimony concerning the proposed rules.



LOREN KRAMER
Director

PHW:mm
8/1/75

Attachment: (1) Proposed Rules, OAR 340, 63-005 to 63-055

Department of Environmental Quality
Proposed Rules Pertaining to Management
of
Environmentally Hazardous Wastes

OAR Chapter 340, Division 6, Subdivision 3

63-005 PURPOSE. The purpose of these rules is to establish requirements for environmentally hazardous waste management, from the point of waste generation to the point of ultimate disposition, to prescribe criteria for designation of wastes as environmentally hazardous, and to classify certain wastes as environmentally hazardous. These rules are adopted pursuant to Oregon Revised Statutes, Chapter 459.

63-010 DEFINITIONS. As used in these rules unless otherwise required by context:

- (1) "Authorized container recycling or reuse facility" means a facility that recycles, reuses or treats containers and which operates in compliance with ORS Chapters 454, 459 and 468 and rules adopted pursuant thereto.
- (2) "Commission" means the Environmental Quality Commission.
- (3) "Container" means any package, can, bottle, bag, barrel, drum, tank or anything commonly known as a container. If the package or drum has a detachable liner or several separate inner containers, then the outer package or drum is not considered a container for the purposes of these rules.
- (4) "Department" means the Department of Environmental Quality.
- (5) "Dermal LD₅₀" or "Dermal lethal dose fifty" means a measure of dermal penetration toxicity of a substance for which a calculated dermal dose is expected to kill 50% of a population of experimental animals over a 14-day period. LD₅₀ is expressed in milligrams of the substance per kilogram of body weight.
- (6) "Dispose" or "Disposal" means the discarding, treatment, recycling, or decontamination of environmentally hazardous wastes or their collection, maintenance or storage at an EHW disposal site.
- (7) "Empty container" means a container from which the product contained has been removed except for the residual material retained on interior surfaces after emptying.
- (8) "Environmentally hazardous wastes" or "EHW" means discarded, useless or unwanted materials or residues and their containers which are classified as environmentally hazardous but excluding those wastes declassified by these rules.
- (9) "EHW collection site" means a site, other than an EHW disposal site, for the collection and temporary storage of environmentally hazardous wastes, primarily received from persons other than the owner or operator of the site.
- (10) "EHW disposal site" means a geographical site licensed by the Commission in or upon which EHW are disposed of by, but not limited to, land burial, land spreading, soil incorporation and other direct, permanent land disposal methods, in accordance with the provisions of ORS 459.410 to 459.690.

- (11) "EHW facility" means a facility, or operation, other than an EHW disposal site or EHW collection site, at which EHW is produced, treated, recovered, recycled, reused or temporarily stored in compliance with ORS Chapters 454, 459 and 468 and rules adopted pursuant thereto.
- (12) "Flash point" means the minimum temperature at which a given material gives off sufficient vapor to form an ignitable mixture with air near the surface of the material within the confining vessel used for determination of flash point.
- (13) "Home and garden use" means use in or around homes and residences by the occupants, but excludes all commercial agricultural operations and commercial pesticide application.
- (14) "Inhalation LC₅₀" or "inhalation lethal concentration fifty" means a measure of inhalation toxicity of a chemical substance for which a calculated concentration when administered by the respiratory route is expected to kill 50% of a population of experimental animals during exposure of 1 hour. LC₅₀ is expressed in milligrams per liter of air as a dust or mist or in milligrams per cubic meter as a gas or vapor.
- (15) "Jet rinse" or "jet rinsing" means a specific treatment or decontamination of empty pesticide containers using the following procedure:
- (a) A nozzle is inserted into the container such that all interior surfaces of the container will be rinsed.
 - (b) The container is rinsed with the nozzle using water or an appropriate diluent for 30 seconds or more.
 - (c) Rinses shall be added to the spray or mix tank. If rinses cannot be added to the spray or mix tank, then disposal of the rinses shall be as otherwise required by these rules.
- (16) "Locked enclosure" means a room, building, covered or uncovered area that is secured by doors, gates or a climb-proof fencing and is locked except when attended by authorized personnel.
- (17) "Maximum permissible concentration (MPC)" means the level of radioisotopes in waste which if continuously maintained would result in maximum permissible doses to occupationally exposed workers and as specified in Oregon Administrative Rules Chapter 333, Division 2, Subdivision 2, Section 22-150.
- (18) "Median tolerance limit" or "TLM" or "LC₅₀" or "median lethal concentration" means that concentration of a substance which is lethal to 50 percent of an aquatic test population over a 96 hour exposure period. TLM and LC₅₀ are expressed in milligrams of the substance per liter of water.
- (19) "Oral LD₅₀" or "Oral Lethal dose fifty" means a measure of oral toxicity of a substance for which a calculated oral dose is expected to kill 50% of a population of experimental animals over a 14-day period. LD₅₀ is expressed in milligrams of the substance per kilogram of body weight.
- (20) "Pesticide" means any substance or combination of substances intended for the purpose of defoliating plants or for the preventing, destroying, repelling or mitigating of insects, fungi, weeds, rodents or predatory animals or other pests, including but not limited to defoliants, desiccants, fungicides, herbicides, insecticides, nematocides and rodenticides.

- (21) "Person" means the United States and agencies thereof, any state, any individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate or any other legal entity whatsoever.
- (22) "Radioactive material" means any material which emits radiation spontaneously.
- (23) "Radiation" means gamma rays and x-rays, alpha and beta particles, neutrons, protons, high-speed electrons and other nuclear particles.
- (24) "Recovery" means processing of EHW to obtain useful material or energy.
- (25) "Recycling" means any process by which EHW is transformed into new products in such a manner that the original waste may lose its identity.
- (26) "Reuse" means return of EHW into the economic stream for use in the same kind of application as before without change in its identity.
- (27) "Transport" means the movement of environmentally hazardous wastes from the point of generation to any intermediate transfer points or to the point of ultimate disposal.
- (28) "Treatment or decontamination" means any activity of processing that changes the physical form or chemical composition of EHW so as to render it not environmentally hazardous.
- (29) "Triple rinse" or "triple rinsing" means a specific treatment or decontamination of empty pesticide containers using the following procedure:
 - (a) Place volume of water or an appropriate diluent in the container in an amount equal to 20 to 25% of the container volume.
 - (b) Replace container closure.
 - (c) Rotate and up end container to rinse all interior surfaces.
 - (d) Open container and drain rinse into spray or mix tank.
 - (e) Second rinse: repeat steps (a) through (d) of this subsection.
 - (f) Third rinse: repeat steps (a) through (d) of this subsection and allow an additional 30 seconds for drainage.
 - (g) If rinses cannot be added to spray or mix tank, then disposal of rinses shall be as otherwise required by these rules.

63-015 CRITERIA FOR CLASSIFICATION OF WASTES AS ENVIRONMENTALLY HAZARDOUS

- (1) Wastes which have one or more of the following properties, within the limits specified in this section, are classified as environmentally hazardous:
 - (a) Radioactivity. Any discarded, useless or unwanted radioactive materials licensed by the Oregon State Health Division as provided in Oregon Regulations OAR, Chapter 333, Division 2, Subdivision 2, whose concentration is above maximum permissible concentration (MPC), except exempt quantities or concentrations of radioactive materials as specified in Part B, Sections B.3, B.4, or B.6 of Oregon Regulations for the Control of Radiation.

- (b) Toxicity
 - (A) Oral toxicity. Material with an oral LD₅₀ equal to or less than 500 milligrams per kilogram.
 - (B) Inhalation toxicity. Material with an inhalation LC₅₀ equal to or less than 2 milligrams per liter as a dust or mist or an inhalation LC₅₀ equal to or less than 200 milligrams per cubic meter as a gas or vapor.
 - (C) Dermal penetration toxicity. Material with a dermal LD₅₀ equal to or less than 2000 milligrams per kilogram.
 - (D) Aquatic toxicity. Material with 96-hour TLM or 96-hour LC₅₀ equal to or less than 250 milligrams per liter.
 - (c) Flammability
 - (A) Material which is readily ignited under ambient temperatures.
 - (B) Material which on account of its physical form or environmental conditions can form explosive mixtures with air and which is readily dispersed in air, such as dusts of combustible solids and mists of flammable or combustible liquids.
 - (C) Material which burns with extreme rapidity, usually by reason of self-contained oxygen; materials which ignite spontaneously when exposed to air.
 - (D) Liquid, solid or gaseous material having a flash point below 100 F (38 C).
 - (d) Reactivity. Material which is by itself readily capable of detonation or of explosive decomposition or explosive reaction at normal temperatures and pressures, including material which is sensitive to mechanical or localized thermal shock or which reacts explosively with water without requiring heat or confinement, or which generate toxic or flammable vapors upon contact with water.
- (2) Wastes specifically classified as EHW or declassified as not being EHW are designated in sections 63-040 to 63-070 of these rules. Wastes that are not classified by those sections but which meet the criteria of subsection (1) of this section are hereby classified as EHW.

63-020 GENERAL REQUIREMENTS FOR STORAGE AND DISPOSAL OF ENVIRONMENTALLY HAZARDOUS WASTES

- (1) Any person producing environmentally hazardous wastes shall:
 - (a) Use best available technology to reuse, recycle, recover or treat any or all compounds of the waste.
 - (b) Not dilute or alter waste from its original state except if alteration is to recycle, recover, reuse or treat the waste.
 - (c) Dispose wastes that cannot be reused, recycled, recovered or treated at an EHW disposal site, EHW collection site, EHW facility or authorized disposal facility outside the State.

- (2) Any person operating an EHW facility shall:
- (a) Store wastes in a locked enclosure, and in durable, corrosion resistant water-tight and enclosed container, which shall be adequate to prevent unauthorized persons from gaining access to the waste and in such a manner that will minimize the possibility of escape to the environment. Wastes may be stored for no longer than two (2) years unless the Department determines that an acceptable disposal method is not available.
 - (b) Label all containers used for onsite storage of environmentally hazardous wastes. Such label shall include but not necessarily be limited to the following:
 - (A) Composition and physical state of the waste;
 - (B) Special safety recommendations and precautions for handling the waste;
 - (C) Statement or statements which call attention to the particular hazardous properties of the waste.
 - (D) Amount of waste and name and address of the person producing the waste. This subsection shall not apply to storage in non-transportable containers.
 - (c) Post caution signs, visible from any direction of access or view around environmentally hazardous waste storage areas. Caution signs shall be in accordance with the Oregon Safety Code for Places of Employment, Chapter 28, and of the upright pattern, 28x20 inches in size. Lettering of these signs shall be as follows: Caution - - Hazardous Waste Storage Area; Unauthorized Persons Keep Out.
 - (d) Maintain records, beginning January 1, 1976, indicating the quantities of environmental hazardous waste produced, their composition, physical state, methods of reuse, recovery, or treatment, ultimate disposition and name of the person or firm providing transportation for wastes transferred to another location. This information shall be reported annually to the Department on or before February 28, for the previous calendar year. The requirements of this subsection shall not be applicable to wastes transferred to EHW collection sites.
- (3) Transportation of environmentally hazardous waste shall be in compliance with the rules of the Public Utility Commissioner of Oregon and other local, State or Federal agencies if applicable.
- (4) A permit shall be required for EHW collection sites.
- (a) EHW collection sites may not be established, operated or changed until the person owning or controlling the collection site obtains a permit therefor from the Department.
 - (b) Permits issued by the Department shall establish minimum requirements for the collection of environmentally hazardous wastes, limits as to types and quantities of wastes to be stored, minimum requirements for operation, maintenance, monitoring and reporting and supervision of collection sites and shall be properly conditioned to ensure compliance with pertinent local, state and federal standards and other rules.
 - (c) Permits shall be terminated automatically upon issuance of a new or modified permit for the same operation.

- (d) Applications for permits shall be filed and permits shall be issued, denied, modified or revoked in accordance with procedures for Issuance, Denial, Modification and Revocation of Permits as set forth in OAR Chapter 340, Division 1, Subdivision 4.
 - (e) EHW Collection sites may charge reasonable fees for waste delivered to such sites.
 - (f) Any solid waste disposal facility authorized by permit from the Department, which also operates as an EHW collection site shall not be required to have a separate permit for EHW collection. Permits for such facilities shall be conditioned in accordance with subsection 4(b) of this section.
- (5) EHW disposal sites, except as specifically provided herein, shall be operated in accordance with ORS Chapter 459.
 - (6) An EHW facility may be established or operated without an EHW disposal site license.
 - (7) All accidents or unintended occurrences which may result in the discharge of an environmentally hazardous waste to the environment, or the discharge to the environment of a substance which would be an environmentally hazardous waste except for the fact that it is not discarded, useless or unwanted, shall be immediately reported to the Department. If the Department cannot be contacted or if public health and welfare are endangered by such accidents or occurrences, the Emergency Services Division of the Executive Department shall be notified at its Salem office (378-4124).
 - (8) No person shall dispose of EHW except in accordance with these rules and other applicable requirements of ORS Chapter 459.
 - (9) EHW shall be stored and handled in such a manner that incompatible wastes or materials are not mixed together, causing an uncontrolled dangerous chemical action.
 - (10) Any person producing, reusing, recycling, recovering, treating, storing, disposing of or reporting EHW, in addition to complying with these rules, shall also comply with the following statutes and rules adopted pursuant thereto, as such statutes and rules may relate to those activities:
 - (a) ORS Chapter 454, pertaining to sewage treatment and disposal systems;
 - (b) ORS Chapter 459, sections 459.005 to 459.285, pertaining to solid waste management;
 - (c) ORS Chapter 468, pertaining to air and water pollution control; and
 - (d) ORS Chapter 654 and OAR Chapter 333, Sections 22-001 to 22-200, pertaining to occupational safety and health.

63-025 LIABILITY FOR IMPROPER DISPOSITION OF EHW.

- (1) Any person having the care, custody or control of an EHW or a substance which would be an EHW except for the fact that it is not discarded, useless or unwanted, who causes or permits any disposition of such waste or substance in violation of law or otherwise than as reasonably intended for normal use of handling of such waste or substance, including but not limited to accidental spills thereof, shall be liable for the damages to person or property, public or private, caused by such disposition.

- (2) It shall be the obligation of such person to collect, remove or treat such waste or substance immediately, subject to such direction as the Department may give.
- (3) If such person fails to collect, remove or treat such waste or substance when under an obligation to do so as provided by subsection (2) of this section, the Department is authorized to take such actions as are necessary to collect, remove or treat such waste or substance.
- (4) Any person who fails to collect, remove or treat such waste or substance immediately, when under an obligation to do so as provided in subsection (2) of this section, shall be responsible for the necessary expenses incurred by the State in carrying out a clean-up project or activity under subsection (3) of this section.

63-030 ENFORCEMENT. Whenever it appears to the Department that any person is engaged or about to engage in any acts or practices which constitute a violation of ORS 459.410 to 459.690 or the rules and orders adopted thereunder or of the terms of a permit, without prior administrative hearing the Department may institute proceedings at law or in equity to enforce compliance therewith or to restrain further violations thereof.

63-035 VIOLATIONS. Violation of these rules shall be punishable upon conviction as provided in ORS 459.992, Section (4).

63-040 PESTICIDE WASTES.

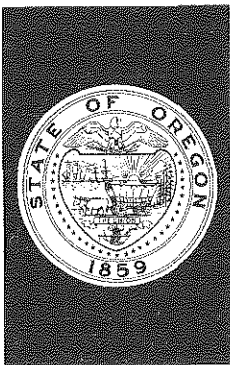
- (1) Classified Wastes. All wastes containing pesticides and pesticide manufacturing residues which meet the criteria under section 63-015, subsections (1)(b), (1)(c) or (1)(d) and empty pesticide containers are hereby classified as environmentally hazardous wastes, except as provided in subsection (2) of this section.
- (2) Declassified Wastes. The following wastes are declassified as not being environmentally hazardous:
 - (a) Empty pesticide containers that have been decontaminated and certified in accordance with subsection 3(a) of this section and which have been transferred to an EHW collection site or authorized container recycling or reuse facility. These wastes may be disposed in a landfill operated under a valid solid waste disposal permit from the Department or an authorized container recycling and reuse facility.
 - (b) Empty pesticide containers that have been employed for home and garden use. These wastes may be disposed with other household refuse pursuant to OAR 340, Division 6, Subdivision 1.
 - (c) Wastes equal to or less than the following quantities:
 - (A) 5 empty pesticide containers per year which have been decontaminated in accordance with subsection 3(a) of this section. These wastes may be disposed by burial in a safe location such that surface and ground water are protected.
 - (B) 5 pounds (2.3 kg) of unwanted, unusable or contaminated pesticides per year. These wastes may be disposed in a landfill operated under a valid solid waste disposal permit from the Department, if transferred directly to the landfill.

- (3) Approved Disposal Procedures For Classified Wastes. In addition to the requirements for storage and disposal of EHW specified in section 63-020 of these rules, the following procedures and methods are approved for disposal of pesticide wastes classified as EHW:
- (a) Rigid containers, including but not limited to cans, pails or drums constructed of steel, plastic, glass or fiberboard, shall be decontaminated by triple rinsing or jet rinsing of containers for liquid or solid pesticides or by other methods approved by the Department. Rigid fumigant pesticide containers shall be decontaminated by standing open to the atmosphere for a period of five (5) or more days. Decontamination shall be performed immediately but not to exceed two (2) days after emptying of containers. Following decontamination, a certificate shall be attached to each container indicating the business name, telephone number or address, date of emptying, decontamination procedure used and signature of the person using the product.
 - (b) Containers decontaminated and certified pursuant to subsection (3) (a) of this section shall be transferred to an EHW collection site, EHW disposal site or authorized container recycling or reuse facility.
 - (c) Non-rigid containers, including bags and sacks, shall be disposed by:
 - (A) Transfer to an EHW collection site or EHW disposal site or,
 - (B) Burning of combustible containers in an incinerator or solid fuel fired furnace which has been certified by the Department to comply with applicable air emission limits or,
 - (C) Open burning of combustible containers of not more than 50 pounds in any day, except those used for organic forms of beryllium, selenium, mercury, lead, cadmium or arsenic. Open burning shall be conducted in compliance with open burning rules, OAR Chapter 340, Division 2, Subdivision 3 according to requirements of local fire departments and districts and in such manner as to protect public health, susceptible crops, animals, surface water supplies and waters of the State.
 - (d) Subsections (3) (a), (3) (b) and (3) (c) of this section shall not apply to pesticide containers for which direct reuse is intended.
 - (e) Subsection (3) (a) and (3) (b) of this section shall become effective March 1, 1976. Prior to March 1, 1976, containers may be disposed of in specifically designated solid waste disposal sites (landfills) operated under a valid solid waste disposal permit from the Department.

63045

RADIOACTIVE WASTES.

- (1) Classified Wastes. All radioactive wastes as defined by these rules and which meet the criteria under section 63015, subsection (1) (a) are hereby classified as environmentally hazardous wastes.
- (2) Approved Disposal Procedures. In addition to the requirements for storage and disposal of EHW specified in section 63-020 of these rules, no radioactive wastes classified as environmentally hazardous by these rules shall be disposed within the State. Such wastes requiring land disposal shall be transferred to an approved disposal facility outside the State.



ENVIRONMENTAL QUALITY COMMISSION

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MEMORANDUM

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To: Environmental Quality Commission
From: Director
Subject: Agenda Item No. K, August 22, 1975, EQC Meeting
Adoption of Policy on Log Handling in Oregon Waters

Background

At the June 21, 1974, Environmental Quality Commission meeting in Coos Bay the Department of Environmental Quality staff presented to the Commission a status report and proposed program relative to log handling in public waters. As a result of testimony presented, the Commission delayed action on the report. The nature of the questions asked by both the Commission members and timber industry personnel made it apparent that further clarification of the proposed program was needed.

Discussion

The Department has met since then with timber industry representatives to discuss the Department's proposed program and the industry comments submitted. The Department has revised the report and proposed program and policy to clarify the intent of the Department and incorporate the latest available information.

Attachment A contains the proposed Implementation Program and Policy for Log Handling in Oregon's Public Waters.

Attachment B is a Status Report which contains more detailed background information on Log Handling in Oregon's Public Waters.

Director's Recommendation

It is recommended that the Implementation Program and Statement of General Policy set forth in Attachment A be adopted by the Environmental Quality Commission to guide the Department and the timber industry in resolving water quality problems resulting from log handling in Oregon's public waters.

LOREN KRAMER
Director

HLS/GDC:ak
August 11, 1975

Attachments



Contains
Recycled
Materials

(Proposed)

Implementation Program & Policy

for

LOG HANDLING IN OREGON'S PUBLIC WATERS

DEPARTMENT OF ENVIRONMENTAL QUALITY

August, 1975

GENERAL SUMMARY OF PROBLEMS

Based on the Department's field evaluations, experience and review of pertinent literature, the following general conclusions about the effects of logs in public waters are drawn:

1. There is ample and conclusive evidence that the bark, debris and leachate releases resulting from dumping, storage and millside handling of logs in public waters have an adverse effect on water quality. The magnitude of the effect varies with the size and characteristic of the waterway and the nature and magnitude of the log handling operation.
2. Free fall log dumping causes the major release of bark and other log debris.
3. Bark and log debris are the major waste products resulting from logs in water. These materials range in size from microscopic particles to whole logs. Some float but most will sink in a short time. Numerous particles may travel submerged a considerable distance before dropping to the bottom. Bottom deposits of these substances may blanket the benthic aquatic life and fish spawning areas. During submerged decomposition stages the wood products rob overlying waters of dissolved oxygen and often give off toxic decay products.
4. Leachates from logs in water are a source of biochemical oxygen demand and dark color. These generally have minimal impact in larger flowing streams but their effect may be compounded in quiet waters.
5. Where logs go aground during tidal changes or flow fluctuations, they are a detriment to bottom dwelling aquatic life and can be the cause of increased turbidity.

6. Even though significant improvements have been made at certain log handling areas, further improvements are needed and can be accomplished on a short-term basis by improved log dumping, handling and storage practices at operations that still adversely impact aquatic life and water quality.
7. Because alternatives to the storage and handling of logs in public waters can result in undesirable as well as desirable environmental trade-offs, it is imperative that each operation be carefully evaluated on its own merits.

IMPLEMENTATION PROGRAM

Based on the statement of general policy which follows and case by case water quality problem assessments, a proposed permit will be developed for each log handling operation in public waters that will:

1. State specific objectives designed to bring that operation into acceptable compliance with water quality standards.
2. Require the permittee to evaluate alternatives and submit a program and time schedule for meeting specific objectives.
3. Require implementation of a control program as approved by the Department.

In accordance with existing permit issuance regulations, each proposed permit would then be subject to review and comment by both the permittee and the public prior to issuance.

STATEMENT OF GENERAL POLICY

The following statement of general policy is set forth to guide both the staff of the DEQ and timber industry representatives in matters pertaining to log handling in public waters:

1. The construction of new wood processing plants which must receive logs directly from public waters will not be approved by the Department without specific authorization of the Environmental Quality Commission. In general, new operations will not be permitted where water quality standards or other beneficial uses would be jeopardized.
2. Existing log dumping, storage and handling shall be adequately controlled, or if necessary phased out, to insure that water quality standards are met at all times. Any control program

- requiring more than five years to implement shall be subject to approval by the Environmental Quality Commission.
3. Establishment of new log storage areas where logs go aground on tidal changes or low flow cycles will not be approved by the Department without specific authorization of the Environmental Quality Commission. Where there is evidence of resulting damages to aquatic life and/or water quality, the existing log storage areas where logs go aground shall be phased out in accordance with an approved schedule. Any phase-out program taking more than five years shall be subject to approval by the EQC.
 4. New free-fall log dumps shall not be permitted. Existing free-fall dumps shall either be phased out as soon as practicable by the installation of DEQ approved easy-let-down devices or controlled in a manner equivalent to the installation of easy-let-down facilities. Any requests for special consideration shall be subject to approval by the EQC.
 5. Best practicable bark and wood debris controls, collection and disposal methods, as approved by the Department, shall be employed at all log dumps, raft building areas and millside handling sites in accordance with specifically approved programs.
 6. The inventory of logs in public waters for any purpose shall be kept to the lowest practicable number for the shortest practicable time, not to exceed one year except by specific approval of the Department.
 7. Upon specific request, the industry shall provide information to the Department relative to log volumes and usage site locations in public waters.
 8. All dry land log storage, wood chip, and hog fuel handling and storage facilities shall be designed, constructed and operated to prevent the loss of wood products into the public waters. Plans and specifications must be approved by the Department prior to construction of new or modified facilities.
 9. Subsequent to adoption of this policy each industry shall be responsible for cleanup and removal of sunken logs, piling, docks, floats and other structures from its log dumping, handling, and storage sites in public waters when use thereof is terminated.

LOG HANDLING IN OREGON'S PUBLIC WATERS
Status Report

DEPARTMENT OF ENVIRONMENTAL QUALITY
January, 1975

BACKGROUND

During the mid 1960 years the Department of Environmental Quality (nee Sanitary Authority) made a decision that poor water quality and stream conditions resulting from logs and log debris must be given priority attention for abatement. While some of the poor conditions were obviously apparent, little research data existed to verify detailed causes and effects. As a beginning step out of this weak regulatory position, the Department joined with the U. S. Environmental Protection Agency and Oregon State University's Department of Civil Engineering to institute basic research that would provide needed information.

The product of that research was a report entitled The Influence of Log Handling on Water Quality by Frank D. Schaumburg, Ph.D., Oregon State University, March, 1970.

Dr. Schaumburg's study results show -

". . . . that measurable pollution is associated with the water storage of logs, but the magnitude of problem must be evaluated in each field situation. Factors to consider include: number, specie and age of logs stored, and the character and flow of log holding water."

"Two general types of pollutants are associated with these storage practices, soluble leachates and bark debris."

"Soluble organic matter and color-producing, lignin-like substances which are extracted from logs floating in water can lead to a gradual deterioration of holding water quality. The organics, measured in this study by COD, TOC, and volatile solids tests, can create a dissolved oxygen demand on the holding water and could lead to foaming problems. Color-producing substances measured by the PBI test affect the aesthetic quality of the water and, thereby reduce its value for recreational use and as a water supply source."

"Vertical dumping of Douglas fir logs can result in a bark loss of up to 17 percent whereas 5 percent can be lost during the log raft transport. Vertical dumping and raft transport of ponderosa pine logs can result in a 6 percent loss of bark."

"Bark debris from ponderosa pine and Douglas fir logs can be expected to sink at the rate of 10 percent the first day and up to 75 percent in two months. Considerable bark deposits are common in log dumping and storage areas."

During the time that Dr. Schaumburg's research was in progress the DEQ staff also searched out other available pieces of related information. Limited data were found from sources in Alaska, Canada, and Washington.

Since the related problem of logs and water quality was common to the Pacific Northwest, the DEQ next joined with Pacific Northwest Pollution Control Council to evaluate the matter throughout the membership areas of Oregon, Washington, Idaho, Montana, Alaska and British Columbia. Both the Environmental Protection Agency and the Canadian Department of National Health and Welfare also had members in the Council.

By a news release dated December 18, 1970, the Pacific Northwest Pollution Control Council announced the appointment of a special Task Force from its membership to evaluate the environmental impacts of dumping and handling logs in public waters, and to make recommendations for the abatement of associated ill effects (Glen Carter was Oregon's assignee to the Task Force). The assignment to the Task Force carried five categories for inclusion in a final report:

1. Summarize the available research findings, including an evaluation of pollution effects.
2. Inventory log dumping, handling, rafting, and storage sites.
3. Establish guidelines for recommended practices which would reduce pollution effects.
4. Determine the impacts of revised log dumping and handling practices on both the industry and the total environment.
5. Establish a plan of implementation to identify where revised operations are required, with schedules for compliance.

In carrying out its assignment, the Task Force first met with personnel from the agencies who are members of the Pacific Northwest Pollution Control Council to gain a better understanding of log handling activities and log-related water quality problems throughout the various zones of the region. Thereafter, they met with key research personnel in the Pacific Northwest who have specifically studied the effects of logs and associated activities on water quality. This was followed by two meetings with a broad array of timber industry and tugboat representatives who aided in an assessment of the impacts to industry and the total environment that would result from revised log dumping and handling practices.

The Task Force produced a final report entitled Log Storage and Rafting in Public Waters, Pacific Northwest Pollution Control Council, August, 1971. They learned from available research findings that,

". . . . log debris, bark, and wood leachates resulting from log handling in public waters can adversely affect water quality. The range of effects varies from mild to gross depending upon the specific characteristics of both the involved water body and log handling practices. In most instances where logs depreciate water quality, there are a number of practicable changes that can be made to improve conditions."

This report sets forth a number of recommendations for implementing improved log handling practices that will benefit water quality:

1. Log storage and handling should be restricted in or eliminated from public waters where water quality standards cannot be met at all times or where these activities are a hindrance to other beneficial water uses such as small craft navigation.
2. The free-fall, violent dumping of logs into water should be prohibited since this is the major cause and point source of loose bark and other log debris.
3. Easy let-down devices should be employed for placing logs in the water, thereby reducing bark separation and the generation of other wood debris.

4. Positive bark and wood debris controls, collection, and disposal methods should be employed at log dumps, raft building areas, and mill-side handling zones. This would be required for both floating and sinking particles.
5. Log dumps should not be located in rapidly flowing waters or other water zones where positive bark and debris controls cannot be made effective.
6. Accumulations of bark and other debris on the land and docks around dump sites should be kept out of the water.
7. Whenever possible, logs should not be dumped, stored, or rafted where grounding will occur.
8. Where water depths will permit the floating of bundled logs, they should be secured in bundles on land before being placed in the water. Bundles should not be broken again except on land or at millside.
9. The inventory of logs in public waters for any purpose should be kept to the lowest possible number for the shortest possible time.
10. Industry should provide and periodically update an accurate quantification of its use of public waters for log handling activities.

"After a thorough review of the problem, the Task Force concluded that the establishment of a specific implementation plan must be the responsibility of the individual state agencies. The diversity of conditions and the possible adverse effects of alternatives dictate that the ultimate decisions must be made on a case by case basis. The Task Force did feel, however, that the recommendations set forth in their report are applicable to all operations and that the regulatory agencies should establish aggressive programs to implement the recommendations."

The Task Force cautioned,

"In those instances where it may be feasible to change from water-oriented log activities to land based, a full consideration and evaluation must be given to the new set of potential environmental impacts. There are the hazards of placing larger volumes of logs in transit on highways and often through

residential areas. Additional noise, dust, and night-time lights in yarding areas could be a disadvantage. Certain logs in "cold deck" storage require sprinkling to retard decay. Resulting effluents are malodorous and could constitute an added source of pollutant to neighboring waterways. Massive stacks of logs on land are not always aesthetically pleasing, particularly where they may be close to city or residential areas. Thus, any such shift of logs from water to land should be made with extreme care and a certain amount of caution to consider the "tradeoffs" in environmental impacts."

"In summary, the impacts of alternatives to water storage and handling of logs influence the total environmental sphere: land use patterns and planning, air and solid waste problems, transportation systems, etc. The ultimate decision as to method must include consideration of all these factors. A total ban on the use of water for log handling without taking into account these other factors is inconsistent with the broad environmental responsibilities faced by regulatory agencies."

In August, 1972, Governor McCall announced a proposed log storage policy for Oregon, based essentially on the findings and recommendations from the Pacific Northwest Pollution Control Report.

"The policy statement was drafted by a natural resources agency committee headed by Dr. Thomas Kruse, Administrator of the Oregon Fish Commission. McCall created the committee in March, 1972, to recommend to him how to reduce conflicts between log storage and rafting, and other water uses in the state. The statement signed by McCall says in part: "The waters of the State of Oregon will be managed to recognize all beneficial uses, including industrial, log storage and transportation, domestic, recreation, navigation, aquaculture, fisheries and wildlife."

Other key points of the policy statement include:

1. Log storage and handling will be permitted in those public waters where these activities are compatible with maintenance of water quality standards and where demonstrated incompatibilities with other beneficial uses of the waters do not exist or can be controlled.

2. Bark and wood debris controls must be employed at log dumps, raft building areas and mill-side handling zones. Bundling of logs for transportation will be required, as practical. Free-rolling of unbarked logs into state waters shall be prohibited.
3. The inventory of logs in state waters will be reduced to the lowest practical level and storage will be for the shortest practical time.
4. The objectives of this policy must be met by July 1, 1975. McCall said an implementation plan to meet the objectives will be developed immediately by state agencies. He said the plan will include identification of areas of conflict and time schedules for meeting agency requirements.

The Division of State Lands, which issues leases for log storage, and the Department of Environmental Quality, which regulates water quality in relation to log storage, will be responsible for implementing the policy, McCall said. (The DEQ is currently working with the DSL to determine the environmental acceptability of long-term log storage sites).

McCall said the implementation plan will be based on the most recent research available. However, he said, sufficient research already has been conducted to convince him that environmental problems exist in some areas as a result of log storage in waterways.

The Governor said that in some instances present lumber mill requirements and operating procedures will have to be modified in the interest of other water users.

AREA PROBLEM REVIEW

The major areas of log handling in public waters around the state have been evaluated to various extents by the staff, and a brief review of current information about each area is presented herewith.

Klamath River

The DEQ actually began to aggressively press for the reduction of logs in Oregon's troubled water areas during 1968 when a water quality improvement plan was implemented for the Klamath River.

Four companies (Weyerhaeuser, Columbia Plywood, Klamath Lumber, and Modoc Lumber) collectively had upwards of 50,000,000 board feet of logs stored in the river during peak seasons. A serious water quality and debris problem resulted.

Floating bark and broken logs from these operations littered the river surface from Klamath Falls to Keno. Irrigation diversion ditches and pumping stations were continuously choked with the waste materials. In the vicinity of each mill, and for several miles downstream, the river bottom was covered with sunken logs and log debris ranging up to 6 or 8 feet deep. Effervescing gases and other decomposition products from the submerged wood masses exerted tremendous demands on the available dissolved oxygen supplies in overlying waters. Massive fish mortalities frequently resulted from a lack of free oxygen during the heat of summer.

Consequently, each company was given a five-year period to either remove logs from the stream or provide debris control equivalent to dryland storage, i.e., no debris in the water. At the end of the five-year period Klamath Lumber Company had all logs and operations out of the river. Modoc Lumber Company reduced their log storage and handling in the water from 12 million board feet annually to a maximum of 4 million board feet during winter and no water storage in summer. In addition, they built a log debris collection and removal system to accommodate the winter log storage and handling in the river. The combination of reduced log storage and debris collection program has substantially lessened Modoc Lumber Company's river problem. However, preliminary evaluation of the lake conditions next to the mill in 1973 indicated that considerable sunken bark was still being laid down on the bottom away from the collection facilities.

Modoc Lumber Company has adequate land next to the mill for total dry-land handling and storage of logs, but to date insists on water storage for a portion of their logs during the winter season.

Weyerhaeuser Company has transferred all log storage and sorting to land, but they continue to utilize a water corridor (300' x 1500') at the Klamath River's edge to transport logs into the sawmill. (The mill was designed and built for water delivery of logs only; thus, that delivery route cannot be changed without rebuilding the mill). Weyerhaeuser Company moves approximately one million board feet of logs through the corridor each day. The resulting debris generation

and accumulation are monumental, and unacceptable by DEQ standards.

At its June, 1972, meeting in Lakeview, the Environmental Quality Commission adopted the following program for Weyerhaeuser Company:

"Weyerhaeuser Company should be required to submit a program by October 1, 1972, for providing such facilities as are necessary to eliminate the use of the Klamath River as a wet feet channel for the mill and cleanup residual debris in the river by not later than October 1, 1974. The company should also be required to immediately improve its present debris control for the interim."

Weyerhaeuser Company hired a consulting engineering firm to study the possible alternatives to their present wet delivery of logs into the mill.* Preliminary schemes were prepared by the firm in November, 1972, and eight revised schemes were finally presented in July, 1973.

Schemes (1), (2) and (3) are variations of handling logs from a large landfill in the river in front of the mill (245,000 cubic yards or about 9 acres). Projected cost: (1) \$1,320,514, (2) \$1,470,776 and (3) \$1,369,162.

Scheme (4) consists of leaving the log handling as is and improving floating bark removal (\$294,336).

Scheme (5) consists of enclosing existing log handling areas with a double row of sheet pile filled with rock (\$2,276,789).

Scheme (6) consists of enclosing existing log handling area with a single row of sheet pile (\$901,461).

Scheme (7) consists of enclosing existing log handling area with an earth dike (\$594,710).

Scheme (8) consists of extending 1" mesh nylon nets from the existing log booms to the river bottom (\$341,462).

Two schemes which have not been addressed are: (1) use of a minimum fill in the river for construction of a conveyor to the log slips; and (2) relocating the barkers and feeding barked logs to the mill.

* R. J. Hill Engineering Company, Log Handling Systems Study on Ways to Feed Mills 1 and 2 at Weyerhaeuser Company, Klamath Falls, Oregon. Revised July 7, 1973.

In total effect, the 8 schemes offer two basic alternatives: (1) a land fill in the river to make a fully land based operation, or (2) modifications of the present wet log delivery system with various bark and log debris control devices. The Departmental staff has rejected possible modifications of the present wet log delivery system for several reasons:

1. The velocity and rate of forcing over one million board feet of logs per day through a narrow water corridor generates large quantities of bark and other log debris.
2. It is extremely difficult to effectively control and remove such large volumes of bark and debris in the water.
3. Bark collection screens or fences in the water, soon plug and have little or no efficiency for containing fine, submerged particles.
4. The heavy buildup of ice behind screens or other enclosures nullify both waste control programs and the company's capability to move logs into the mill.

From a water quality management point of view, a fill in the river for Weyerhaeuser Company would provide the highest and best practicable method for controlling bark and debris. The Department staff has endorsed this method. It can be accomplished without impairing the river's hydrological carrying capacity, and it would have minimal impact on aquatic life and waterfowl. The fill would provide public benefit in the form of a cleaner river for recreational and aesthetic enjoyment. Also, there would be further public benefit in the removal of adverse impact of log debris from downstream irrigation and hydroelectric facilities.

During the Fall of 1974, Weyerhaeuser Company abandoned their proposal for a fill in the river when projected costs rose to a level above economic acceptance. In addition, it also became apparent that the fill would not receive full support from natural resource management agencies. Consequently, the EQC extended the company's deadline for achieving acceptable wood waste controls from October 1, 1974 to June 1, 1976. Alternate proposals are now being developed.

Columbia Plywood Corporation, Klamath Division, came to the end of the five-year period with no reduction in river storage and handling of logs. Their plant is closely bound on each side by the highway, river and other private property. They have no land available for log storage at the mill site, and their neighbors will not sell or lease acreage for log usage.

Consequently the company has appealed to the DEQ for permission to "stay in the river." They have installed an easy letdown sling for unloading trucks. They bundle logs to reduce water surface area requirements for storage, and they have installed a floating debris collection unit. Even though river quality improvements have resulted from the better housekeeping practices, the controls do not effectively keep the river surface free of floating debris nor do they satisfactorily reduce sinking debris. Neither do they lessen the leachate releases from floating logs.

Columbia Plywood Corporation retained Dr. Frank Schaumburg of Oregon State University as a consultant to analyze and compare alternative approaches for the handling and storage of logs. His report, "An Analysis of the Log Storage Situation at Columbia Plywood Corp." was received by the Department on August 15, 1973.

Dr. Schaumburg presented a limited comparison of two alternatives: (1) continuation of present methods and (2) land storage. The comparison stressed energy consumption, largely ignored the primary problem of log debris and its effects on water quality and presented no comparative information on capital or operating costs. The comparison further assumed that bark collected from land storage areas would be contaminated, unusable for fuel and disposed of by land-filling. No apparent consideration was given to a properly designed, surfaced storage area which would facilitate cleanup and use of debris, control of log deck sprinkling water and dust control.

Dr. Schaumburg concludes that continued log storage in the river will not significantly degrade water quality and would have less negative environmental impact than land storage.

Dr. Schaumburg recommended construction of ". . . a wire mesh screen to extend from the floating baffles to the river bottom in the vicinity of the log hoisting and bundle breaking activities and at the lower end of the storage zone."

The Department staff finds several technical difficulties with such screening. No mesh size was specified. No cleaning mechanism was proposed. Screening would not be effective against small particles that travel as submerged, suspended solids. A screen fine enough to trap small particles would soon plug. Further, all wood wastes retained in the water would still exert an adverse impact on water quality.

Columbia Plywood Corporation still has not submitted sufficiently detailed information on capital costs, operating costs, or environmental impacts of specific possible alternatives to their present log handling situation. In effect, the Department still has no sound basis for changing their original decision to require total log removal.

Columbia Plywood Corporation now claims that their only remaining alternative, if pressed, would be to close down the mill. This matter will eventually have to be resolved by the EQC.

Deschutes River

In the upper Deschutes River two lumber companies utilize the waterway for log handling. Brooks Scanlon Lumber Company at Bend has log dumping, storing and mill feed operations in the river. They are currently under order from the DEQ to move all logs out of the stream. Two alternatives are open to the company: (1) relocate the river channel or (2) bridge the stream with a log conveyor. The company initially proposed to pursue the channel relocation, but were stymied by inflated cost projections before work could begin. Late in 1974 the company requested a hearing before the EQC to air their predicament and concerns. The EQC, therefore, agreed to let the company submit a new proposal by January 15, 1975.

Below the Brooks Scanlon operation, the river bottom is laden with many years' accumulation of bark and log debris. These materials have also carried downstream to fill large areas in Bend's Mirror Pond and spread on the riverbed toward Tumalo. Bark and debris also cause plugging problems on downstream irrigation diversion screens.

Gilchrist Lumber Company, at Gilchrist, recently abandoned a flow through log storage pond on the Little Deschutes River. They now store logs on land and feed only debarked logs through the water to the mill. Some log debris and colored water still result from this operation.

Coos Bay

Six companies bordering Coos Bay annually dump and handle approximately 532 million board feet of logs in the water (Weyerhaeuser Company, 300 MBF; Coos Head Timber Co., 69 MBF; Knutson Towboat Co., 50 MBF; Georgia Pacific, 50 MBF; Al Peirce Lumber Co., 38 MBF; and Cape Argo Co., 15 MBF). Most of their collective activities are in the upper bay sloughs and river channels, where resulting log debris and substandard water quality are closely associated.

The DEQ set out in early 1973 to place each of the six timber industries on Coos Bay under an implementation plan for reducing in-water log dumping, handling, and storage to the lowest possible level. Unknown to the DEQ, the Port of Coos Bay and local timber industries had simultaneously applied for and received monies from the U. S. Economic Development Administration (EDA) for "A Study of Economic and Environmental Impacts of Alternate Methods of Log Storage in the Coos Bay Estuary."

Consequently, the Port Commission and industry representatives asked the DEQ to hold the state's implementation plan in abeyance for seven months (until February 1, 1974) to allow completion of the local study. The DEQ agreed to that delay.

Mr. Alex Jackson of Greenacres Consulting Corporation, Bellevue, Washington, conducted the study and submitted his final report in May, 1974. It is interesting to note that Mr. Jackson's final recommendations are very much the same as those of both the Departmental staff and the Pacific N. W. Pollution Control Council Task Force on log storage and rafting in public waters.

Mr. Jackson's final letter of transmittal to the Port of Coos Bay Commissioners carries his summary and recommendations:

"As a result of our investigations we have concluded that log transportation, storage and handling activities, as now practiced in Coos Bay Estuary, do detract from water quality and thus detract from environmental quality. Most alternatives to current practices will also detract from environmental quality and in addition will have an adverse impact on the economics of the forest products industry and thus the economy of the region.

For the guidance of the Commission we wish at this point to summarize our recommendations into two categories as follows:

1. Short-term Recommendations (less than five years).
 - (a) That the forest products industry be allowed to continue its present log transportation, handling and storage practices in the waters of Coos Bay Estuary provided:
 - (i) gentle let-down systems are installed at all log dumps on the estuary;
 - (ii) that the present clean-up practices used in the Coos River drainage are adopted for the entire estuary;
 - (iii) that the peak inventory of logs stored in the water be reduced by improved logistics where improved logistics are possible;
 - (b) That the construction of new wood processing plants which must receive logs from the waters of the estuary be prohibited.
 - (c) That existing wood processing plants now located on the estuary not be required to relocate.
2. Long-term Recommendations (five to ten years).
 - (a) That dry-land storage of all logs at the Eastside Site be encouraged provided:
 - (i) the current shortage of fuel eases;
 - (ii) that dredge spoils are available for development of the site;
 - (iii) that in the interim no higher value and better use be demonstrated for the site;
 - (b) That the continued use of the waters of Coos Bay Estuary for transportation purposes be allowed."

Aside from the obvious environmental benefits to be gained from these recommendations, Mr. Jackson shows conclusively that shorter storage periods for fewer logs in the water and dry-land sorting and storage are economically desirable.

For Coos Bay, and other waters subject to tidal influence, the staff would also recommend that logs not be stored where they go aground during low tides. Logs pounding on the bottom are both harmful to aquatic life and the cause of unnecessary turbidity.

Yaquina Bay

Three timber companies handle logs in Yaquina Bay, the most significant one being the Georgia Pacific Corporation which annually dumps and stores some twelve million board feet.

As yet, the DEQ has not fully evaluated the effect of the logs on Yaquina Bay water quality, i.e., some of the local debris is from land sources and some of the up-bay water stagnation results from natural conditions. In any event, a reduction in logs would have some beneficial effect. Unfortunately, almost no land is conveniently available for cold decking.

Scappoose Slough

Scappoose Slough is utilized by the Multnomah Plywood Corporation for log dumping, rafting, and mill-side handling. The slough is shallow and receives little summer inflow. Consequently, the logs and related activities keep the slough muddy, debris laden, and deficient in dissolved oxygen during summer and early fall. Multnomah Plywood Corporation is under permit requirement to develop a program and time schedule by July, 1977, for replacing their free-fall log dump with acceptable facilities.

Skipanon River

In the Skipanon River, near Warrenton, there are two log handling operations. One has been publicly condemned because logs usurp the whole channel surface, in addition to releasing debris. The second facility is for log rafting and log "take-out" only. Related log storage is on adjacent land.

The DEQ has not yet developed an abatement plan for the Skipanon River problem.

Lewis and Clark River

Also, near Warrenton and Astoria is the Lewis and Clark River where the Crown Zellerbach Company makes up rafts with logs out of land storage. A detailed environmental evaluation of the working area and river has not yet been made. A cursory survey indicates that there is not a serious problem, but some "housekeeping" improvements are needed.

Umpqua Bay

Umpqua Bay supports a minor amount of log rafting and millside handling. The magnitude and effect of the operations are not fully known. Three operators are involved: International Paper Co., Reedsport Lumber Co., and the U. S. Bureau of Land Management.

Siuslaw Bay

There are three lumber industries on Siuslaw Bay: U. S. Plywood Corporation, Davidson Lumber Company and Murphy Veneer Company. The first stores all logs on land and feeds only debarked "blocks" through the water to the plywood plant. This operation is acceptably clean.

Both Davidson and Murphy dump, raft, store, and handle logs in the estuary. Here, as in Yaquina Bay, it is difficult to separate natural debris and reduced water conditions from those caused by the logs. Further study of the estuary and company activities is needed. One thing for sure, there is almost no available land for "cold deck" log storage in the narrow canyon near these two mills. They must utilize the water to survive on present locations.

Columbia River

There are an unknown number of log raft storage areas and scattered sawmills along the Columbia River that have not been either enumerated or evaluated by the DEQ. The Department has no record of reported problems with log debris or log related impairment of water quality in the mainstem Columbia River.

Willamette River

On the Willamette River above the falls, there remains a single log dump at Canby, operated by the Crown Zellerbach Company. Log rafting and storage are still common throughout the Portland Harbor and Multnomah Channel. Here again, these log related activities have not been finitely analyzed for compliance with environmental programs. No serious problems of water quality or log debris are apparent.

Siletz River

Boise Cascade Corporation maintains a flow-through log pond on the upper Siletz River at Valsetz. Log debris and leachates definitely depreciate the water quality. The corporation has been instructed by the DEQ to abate the problem. Final plans for a change have not yet been submitted.

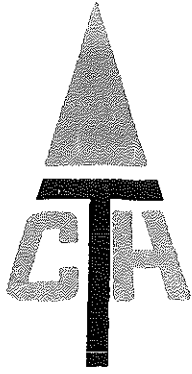
Coquille River

In the Coquille River Estuary, at Coquille, the Georgia Pacific Corporation stores a small quantity of logs. However, their main storage site is on land and only debarked logs are fed from there through the water to the mill. Here again, the DEQ has not yet closely evaluated the water conditions related to the logs.

Moore-Mill and Lumber Company on the Coquille River Estuary at Bandon operates a sawmill with some of the logs stored in the water. Little is known about the log effects on water quality here. Further evaluation is needed.

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COOS HEAD TIMBER COMPANY *lumber / plywood*

P. O. BOX 750 • COOS BAY, OREGON 97420 • PHONE 503-267-2193

Statement
of
Coos Head Timber Company
on
Log Handling in Oregon's Public Waters
before
Oregon Environmental Quality Commission
Portland, Oregon
August 22, 1975

Mr. Chairman and gentlemen, I am C. Wylie Smith, Executive Vice President of the Coos Head Timber Company, Coos Bay, Oregon. Our company has been in business here for in excess of 29 years and presently operates two sawmills and a plywood plant. The direct employment at our plants is approximately 320 people and there are many other related jobs in connection with logging, log trucking and handling, etc. The mills are typical cargo sawmills and are constructed on tidewater. Logs can only be fed into both of our plants from rafts and booms adjacent to the log slip which conveys the logs into the band mills or to the veneer lathe.

The yard areas at each of our plants are extremely crowded and there is no room for dry land storage of logs nor any physical method for feeding these logs into the mills.

The very high cost of logs and the expense of handling logs in inventory forces us to keep our inventories at a bare minimum consistent with having sufficient logs available to keep the mills in operation during the wet weather winter season.

The implication has been made that log rafts in the water cause turbidity when the rafts go aground at periods of low tide. We believe that all informed

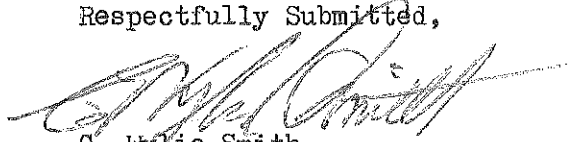
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people would readily agree that one large winterfreshet on the Coos River drainage would cause many times the amount of turbidity to the waters of Coos Bay than would result from the storage of logs in rafts.

For the reasons as briefly set forth above we see no alternative method for log handling beyond that presently being used which would permit our plants to continue in operation and avoid the resulting loss to the economy of this area which removal of logs from the water would cause.

We respectfully request that prior to implementing any changes in log handling methods in the waters of Coos Bay that public hearings be held here so that the full facts can be developed as to the detrimental effects which could result from alternative methods of log handling.

Respectfully Submitted,



C. Wylie Smith
Executive Vice President

INDUSTRIAL FORESTRY ASSOCIATION

SERVING FOREST OWNERS, LOGGERS, WOOD USERS
THROUGHOUT THE DOUGLAS FIR REGION

1220 S.W. COLUMBIA STREET
PORTLAND, OREGON 97201

Telephone:
(503) 222-9505



Statement
of
Industrial Forestry Association
on
Log Handling in Oregon's Public Waters
before
Oregon Environmental Quality Commission
Portland, Oregon
August 22, 1975

Mr. Chairman and gentlemen, I am W. D. Hagenstein, Executive Vice President of Industrial Forestry Association, Portland, Oregon. I am a professional forester and a registered professional engineer in Oregon and Washington.

Industrial Forestry Association represents operators of 400 wood processing plants with 200 continually supporting logging operations throughout all of the 19 counties of Western Oregon and the 19 counties of Western Washington. For 41 years we have been engaged in working in every way to improve the practice of forestry in this Region for the development of a permanent timber supply as the principal backstop it is to our economy. Forestry supports 43 per cent of all the people in Oregon; 21 per cent in Washington. In addition to plants and animals managed through agriculture, trees managed through forestry are the principal renewable source of jobs, payrolls, homes, taxes and a host of other multiple benefits in the Pacific Northwest. The processing of wood presents much less intensive demands on sources of energy than any of its competitive materials that are used for construction, packaging or communication.

From the time that the Department of Environmental Quality first began the development of a policy on log handling in Oregon's public waters, our Association has been working with it and has always made it very clear that whenever any practices that our Industry was engaged in in the handling and transporting of

logs in public waters could be demonstrated as being detrimental to public health and safety or the economy, we stood ready to work with the Department to rectify such situation.

We have been in constant communication with the Department on the log handling policy and want to make a few suggestions to the Commission before it finalizes the policy proposed to you by the Department.

First and foremost, at the outset any policy which affects the handling and transporting of any materials as vital to the benefit of everyone in Oregon as the towing and storage of logs in public waters, such statement should carry with it an appropriate preamble, some such statement as, "Transportation of logs in rafts and log handling and storage in public waters of Oregon are legitimate uses for navigation and commerce." If such is inherent in the laws of the State, it still should be clearly spelled out in any preamble statement so that Oregon's Forest Industry and its employees know that the State is not embarked in any way on a policy which would preclude the use of public waters for this purpose so far as it can be demonstrated that it is not detrimental to the public health and safety and economic welfare of the majority of citizens of this State.

A second general statement that we'd like to make is that any policy statement should be devoid of terminology which indicates that there are detrimental effects generally when every student of the quality of water and other resources knows that each situation is different and that while there may be detrimental effects in one area, there may be none which are measurable in others.

Now I'd like to give a few specific suggestions. In item 1 in General Summary of Problems, there is certainly not "ample and conclusive evidence" that bark debris and leachates have a measurable adverse effect on water quality everywhere. This statement ought to use such terms as "some" evidence and "may" have an adverse effect. In item 5, logs which go aground "may" affect bottom life and "may" cause increased

turbidity but certainly not in every case as indicated in the current proposal. In the preamble under Implementation Program, we would like to see the word "problem" deleted because what we're really talking about is individual water quality assessment and until such assessments have been made there is no certainty that there is a problem. We would like to see this preamble carry the word "state" before "permit" because we believe that this should be independent of the National Pollution Discharge Elimination System procedures.

In item 2 following the preamble just referred to, we would suggest rewording it as follows: "Require Where needed, the permittee to shall evaluate alternatives including consideration of environmental trade-offs and submit a program and time schedule for meeting specific objectives." (Struck out language is proposed for deletion and underscored language for insertion.) There is no sense at all in requiring something that's unnecessary. Under Statement of General Policy, we would suggest that the policy statement with respect to the legitimacy of Oregon's public waters for log handling, storage and transportation should be item 1. The current item 1 should be made positive instead of negatively stated as it is at present, such as, "The construction of new wood processing plants which must receive logs directly from public waters will not only be approved by the Department without specific authorization of the Environmental Quality Commission." The last sentence of item 1 should be struck out in its entirety. In item 2 we would suggest modification as follows: "Where existing log dumping transportation, storage and handling are major factors in influencing water quality they shall be adequately appropriately controlled, or-if-necessary-phased-out,-to-insure-that-water-quality standards-are-met-at-all-times-" No blanket statement that anything should be phased out should be included in a policy statement which will prejudice the employees who will implement such policy that anything should be phased out before there is demonstrable adverse effect upon water quality.

In item 3 in the third line, we would recommend that the word "resulting" be deleted and the word "significant" inserted in its place.

While we support the rest of item 3, we would respectfully suggest that the Commission adopt a policy that before any storage areas where logs can ground are phased out that adequate public hearings be held in such areas. This is the only way we can assure such phasing out will not cause more environmental adversity than that alleged to be caused by grounding. In item 6, we do not believe that the Department of Environmental Quality or the Commission should put a time limit on the inventory of logs in public waters because it is to the economic advantage of every owner to keep them in the water for the shortest possible time. However, no one, including the Commission, has any way of controlling the economic conditions which indicate the movement of logs. Therefore, we think that putting in the requirement of specific approval by the Department of storage to exceed one year is in effect putting a burden on the Department or the Commission which neither can really handle.

This concludes our major suggestions and we would like to congratulate the staff of the Commission for having worked so long and having been so cooperative with the Industry to this date on this policy and particularly on the fact that it recognizes that in solving the actual problems which occur that they should be done on a case-by-case basis because of the great variability of circumstances under which logs are handled in the public waters of Oregon.



Weyerhaeuser Company

Southwest Oregon Region
North Bend, Oregon 97459
(503) 756-5121

August 25, 1975

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY.
RECEIVED
AUG 27 1975

OFFICE OF THE DIRECTOR

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

Dear Mr. Kramer:

Attached, as requested, is a copy of my prepared remarks on the subject of the proposed policy on Log Handling in Oregon Waters.

I appreciate the opportunity to have the entire text included in the record since, in the interest of time, I paraphrased the statement at the August 22, Environmental Quality Commission meeting.

Sincerely,

WEYERHAEUSER COMPANY
Southwest Oregon Region

Ted W. Nelson
Raw Materials Manager

TWN:pc

Att.

STATEMENT OF WEYERHAEUSER COMPANY ON LOG HANDLING IN OREGON'S PUBLIC WATERS

OREGON ENVIRONMENTAL QUALITY COMMISSION

PORTLAND, OREGON

AUGUST 22, 1975

Mr. Chairman, Ladies and Gentlemen, I am Ted Nelson, Raw Materials Manager for the Southwest Oregon Region of Weyerhaeuser Company with headquarters in North Bend, Oregon. Weyerhaeuser in Southwest Oregon employs some 1,700 people and operates a large sawmill and plywood facility as well as being engaged in the export of logs and chips. Our operations are supported by a 210,000 acre tree farm.

Weyerhaeuser has been active in efforts to protect the water environment in connection with the handling, storage and transportation of logs on the Coos River system and in Coos Bay. Within the last four years we have constructed a chain, easy letdown device at our terminal at Dellwood. We have developed and operated daily, the river sweeping logster in the bay and rivers. This vessel, built at a cost of \$150,000, is designed to clean the waters of floating debris of all sizes from leaves and twigs to floating logs.

Through our membership in the Industrial Forestry Association, and individually as a company, we have had an opportunity to work with the department staff in developing the proposed policy before you today. We have appreciated that opportunity.

We support the proposed policy in general subject to the comments made by W. D. Hagenstein. In addition, I would like to briefly underscore the potential impact of the portions of the material before you which deals with the storage of logs where they go aground. Our concerns lie with the specific wording, the resulting logic and the potential implications of these policies as presently worded.

In item 5 of the General Summary of Problems, the statement is made and I quote, "where logs go aground during tidal changes or flow fluctuations they are a detriment to bottom dwelling aquatic life and can be the cause of increased turbidity." Then in item 3 of the attached Proposed Policy and Guidelines, beginning with the second sentence, and I quote, "Where there is evidence of resulting damages to aquatic life and/or water quality, the existing log storage areas where logs go aground shall be phased out in accordance with an approved schedule."

Our concern obviously is that the policy, as now written, first establishes the premise that grounding of logs are a detriment to bottom dwelling life and then with the premise given states that such storage areas shall be phased out. In the case of Weyerhaeuser Company in Southwest Oregon, implementation of this policy, based upon the premise, would have serious economic and environmental effects.

The carrying of log inventories is a necessary part of operating a wood products business. Inventory levels fluctuate throughout the year based upon the seasonality of log production, mill and other business requirements and expected high water conditions in the tributaries feeding our facilities. For example, during

periods of high water on the Coos River system we cannot flow logs from our yards to the mills and there is the periodic risk of being unable to maintain mill production without an adequate volume of logs in the water.

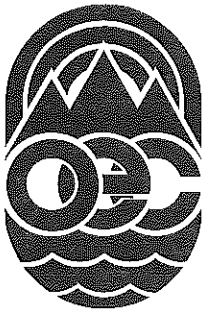
Our business requirements dictate the need for water storage areas sufficient to contain 30 million board feet of logs. To accommodate this storage, we own or control 95 acres of rafted log storage area. On 42% of this area logs periodically go aground. Also, because of the nature of raft tieups, an additional 15% of this area is indirectly effected by grounding. Outboard rafts are tied to inboard rafts and while the outboard rafts float free on any tide, removal of the inboard rafts for use as tieups would eliminate this free floating storage area. Consequently, approximately 57% of our rafted log storage area would be effected if ground storage were disallowed.

To accommodate the loss of this storage area while endeavoring to maintain our present level of business activity, our only recourse would be to store up to approximately 15 million board feet of logs on dry land. This would require the development of two additional dry land storage facilities. A new bridge would be required across the Millicoma Fork of the Coos River to access one of the new yard sites and additional log handling equipment would be required. The capital required, using present costs, would be approximately \$4,500,000. The additional cost to operate the two new yards would be approximately \$300,000 per year and our annual fuel useage would be increased by 108,000 gallons. In addition, the abrasive handling of logs on dry land creates far more bark waste than that associated with easy letdown and subsequent free floating in the water. Thus, the dry waste developed in the yard handling process would create a severe solid waste disposal problem with only limited disposal sites. Finally, there would be the periodic risk of being unable to maintain mill production during periods of high water. Based upon our experience this situation could occur approximately once every four years. It would last a week and reduce payrolls by \$190,000 for each week lost. Therefore, from the point of view of our company, we do not feel that there are sufficient offsetting beneficial gains to society or to the environment to justify the expenditures of these kinds of costs and the secondary adverse environmental impact.

I would like to emphasize that we are not speaking to the development of new areas where logs go aground, but are merely talking of maintaining the opportunity to continue to use areas which have been so employed for the past 40 years. In fact, the area we now use is less than in the past, and for the industry as a whole, requires only 1.6% of Oregon's total esturine intertidal area.

In summary, we appreciate the opportunity to appear before you today and to have had an opportunity to contribute to the development of the proposed policy. We agree with the comments made by W. D. Hagenstein of IFA. Given the specific implications to our operation in Southwest Oregon we would like to underscore the need to modify the statement of item 5 in the General Summary to read that logs which go aground "may" effect bottom life and "may" cause increased turbidity and further that in the proposed policy under item 3, we recommend the word "resulting" to be deleted and the word "significant" be inserted. This would

break the logic which now exists which first establishes a premise and then defines a necessary action and will allow all future considerations to be made on a case by case basis.



OREGON ENVIRONMENTAL COUNCIL

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

August 13, 1975

Mr. Loren Kramer
Director
Department of Environmental Quality
1234 S.W. Morrison
Portland, Oregon 97205

Re: Temporary Rule Adoption for
Significant Air Quality Deterioration

Dear Bud:

We note on the August 22 Agenda that the EQC is going to be asked to adopt a temporary rule for the prevention of air quality deterioration. You are probably aware of the tremendous impact this will have on the State of Oregon and the long history of political controversy it has had nationally.

We have several concerns about this Agenda item which we would like to pass on to you and the Commission members. First of all, we do not see the need to adopt temporary rules unless some major new sources are planning to go in during the next 30 to 60 days, which you feel must be covered by temporary rules.

Secondly, by the act of adopting these temporary rules the Commission will automatically prejudice the adoption of permanent rules. The reason we are concerned about this is that the Environmental Protection Agency has not been at all enthusiastic about protecting the nation from significant air quality deterioration (the graying of America). Because of this they have, on several occasions, promulgated proposed rules which did not carry out the mandate of the Supreme Court order. In fact, their compliance has been so shoddy that the Sierra Club will probably go back to Court to force compliance.

This is important because on page four of the staff report on this subject for the next EQC meeting it is noted that "the Department has drafted a proposed temporary rule for PSD (Attachment B) which in essence duplicates the EPA PSD Rule."

A. F. T. E. R., Tigard
AMERICAN ASSOCIATION OF UNIVERSITY
WOMEN, Forest Grove Chapter
Portland Chapter
AMERICAN INSTITUTE OF ARCHITECTS
The Portland Chapter
Southwestern Oregon Chapter
AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS
Oregon Chapter
ANGLERS CLUB OF PORTLAND
ASSOCIATED GENERAL CONTRACTORS OF AMERICA
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
EAST SALEM ENVIRONMENTAL COUNCIL
ECO-ALLIANCE, Corvallis
EUGENE FUTURE POWER COMMITTEE
EUGENE NATURAL HISTORY SOCIETY
FRIENDS OF THE EARTH
GARDEN CLUBS of Cedar Mill, Corvallis,
Eastmoreland, Fir Grove, Gervis, Nehalem Bay,
McKenzie River, McMinnville, Portland, Scappoose, Villa
GOOSE HOLLOW FOOTHILLS LEAGUE
JUNIOR LEAGUE, Eugene, Portland
LEAGUE OF WOMEN VOTERS
Central Lane
Coos County
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, Tigard, Willamette Falls
OBSIDIANS, INC., Eugene, Oregon
OREGON BASS AND PANFISH CLUB
OREGON CITIZENS FOR CLEAN AIR
OREGON GUIDES AND PACKERS, Sublimity, Oregon
OREGON LUNG ASSOCIATION
OREGON PARK & RECREATION SOCIETY
Eugene, Oregon
OREGON ROADSIDE COUNCIL
OREGON SHORES CONSERVATION COALITION
O.S.P.I.R.G.
PLANNED PARENTHOOD ASSOCIATION, INC.
Lane County
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
Columbia Group, Portland
Klamath, Klamath Falls
Mary's Peak, Corvallis
Mt. Jefferson, Salem
Rogue Valley, Ashland
SOLV
SPENCER BUTTE IMPROVEMENT ASSOCIATION
Eugene, Oregon
STEAMBOATERS
SURVIVAL CENTER, U. of O., Eugene
TEAMSTERS FOOD PROCESSORS
UMPUQUA WILDERNESS DEFENDERS
WESTERN RIVER GUIDES ASSOCIATION, INC.
WILLAMETTE RIVER GREENWAY ASSOCIATION
WOMEN'S LAW FORUM, U of O, Eugene
ZERO POPULATION GROWTH
Lane County Chapter

Loren Kramer
August 13, 1975

Page 2

I enclose a copy of an article from Ecology Law Quarterly which discusses the political background of this whole issue. I think it is important that the Commissioners understand what motivations are behind EPA's proposed rules and therefore develop their own position as to whether EPA has done the best job.

Because of the massive importance of these rules and the fact that no one will have had adequate time to review and analyze them before the August 22 meeting, we ask that this item be deleted from the agenda and that it be put on a later agenda with provisions for a public hearing. The last public hearing that was held on this matter was November 22, 1974. It simply dealt with the philosophical issue as to whether or not such rules should be promulgated. There has been no opportunity for the public to respond to any definite rule making proposal from the Department.

We would appreciate it very much if you would distribute this letter and the attached article to the Commission members with sufficient time for their review prior to the next meeting and that you would delay consideration of the adoption of the temporary rules until the next regular meeting and that the public hearing be provided for.

Sincerely,



Larry Williams
Executive Director

Enclosure

LW:alh

Sierra Club v. Ruckelshaus:
"On A Clear Day . . ."

INTRODUCTION

In May 1972, the Sierra Club and other environmental groups filed suit against the Administrator of EPA under the citizens' suit provision of the Clean Air Act.¹ Plaintiffs challenged certain EPA guidelines promulgated in 1971² on the ground that they would permit significant deterioration of the quality of the nation's clean air, and thus violate the congressional intention embodied in the purposes clause of the Clean Air Act. That clause provides that it is the purpose of the 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."³ Plaintiffs argued that both the language and the legislative history of the Act demonstrated not only a strong congressional commitment to the improvement of air quality in heavily polluted areas, but also a commitment to the prevention of deterioration of air quality in areas currently cleaner than required under federal ambient air quality standards.⁴ Plaintiffs therefore sought a declaratory judgment that EPA's regulations were invalid insofar as they permitted states to adopt implementation plans which allowed for degradation of air quality, and further asked for temporary and permanent injunctive relief forbidding the Administrator from approving any state plan allowing such deterioration to take place.⁵

The district court granted a preliminary injunction which prevented the Administrator from approving any state plan which did not

1. Clean Air Amendments of 1970 § 304(a), 42 U.S.C. § 1857h-2(a) (1970). In all following notes, the term "Clean Air Amendments" refers to the Clean Air Act, 42 U.S.C. §§ 1857-1858f, as amended through 1970. See generally Comment, II: *State Implementation Plans and Air Quality Enforcement*, 4 *ECOLOGY L.Q.* 595 (1975) [hereinafter cited as *State Plans and Enforcement*].

2. 40 C.F.R. § 51.12(b) (1972).

3. Air Quality Act of 1967 § 101(b)(1), 42 U.S.C. § 1857(b)(1) (1967).

4. Brief for Sierra Club as Respondent at 8-9, *Fri v. Sierra Club*, 412 U.S. 541, 5 *ERC* 1417 (1973) [hereinafter cited as *Sierra Club Brief*].

5. *Id.* at 5. For a detailed account of the background to this case and the issues raised by the litigation see Note, *The Clean Air Act and the Concept of Non-Degradation: Sierra Club v. Ruckelshaus*, 2 *ECOLOGY L.Q.* 801 (1972) [hereinafter cited as *Note, Non-Degradation*].

attempt to prevent "significant deterioration of existing air quality in any portion of any state."⁶ It further ordered EPA to prepare regulations adequate to prevent significant deterioration.⁷ After consideration of the merits, the court accepted the Sierra Club's interpretation of the Clean Air Act, striking down as contrary to legislative intent that portion of EPA's state plan guideline regulations which permitted states "to submit plans which allow pollution levels of clean air to rise to the secondary standard level of pollution."⁸

EPA appealed to the Court of Appeals for the District of Columbia. When that court in a memorandum decision affirmed the court below,⁹ appeal was taken to the Supreme Court, which granted certiorari, staying the district court order. The Court affirmed on a tie vote without issuing a written opinion.¹⁰ As a result, EPA reaffirmed disapproval of all state implementation plans which failed to adequately protect against significant deterioration of existing air quality,¹¹ proposed regulations, and promulgated a final set of rules designed to assure that adequate protection will exist.¹²

By definition, a policy preventing significant deterioration applies to those regions where air quality is higher than that required by national secondary ambient air quality standards. Nearly 80 percent of the nation's air presently falls in this category.¹³ But this situation may change. A large portion, if not the majority, of new develop-

6. The injunction was issued on May 30, 1972. It is reprinted in full in *Hearings on the Nondegradation Policy of the Clean Air Act Before the Subcomm. on Air and Water Pollution of the Senate Comm. on Public Works*, 93d Cong., 1st Sess., at 4-5 (1973) [hereinafter cited as *Nondegradation Hearings*].

7. *Id.*

8. *Sierra Club v. Ruckelshaus*, 344 F. Supp. 253, 256, 4 ERC 1205, 1207 (D.D.C. 1972).

9. *Ruckelshaus v. Sierra Club*, 4 ERC 1815 (D.C. Cir. 1972).

10. The decision was affirmed *per curiam* by an equally divided Court *sub nom. Fri v. Sierra Club*, 412 U.S. 541, 5 ERC 1417 (1973). Mr. Justice Powell took no part in the decision.

11. Significant Deterioration of Air Quality, 37 Fed. Reg. 23836 (1972).

12. Prevention of Significant Air Quality Deterioration, 38 Fed. Reg. 18986 (1973) [hereinafter cited as 1973 Proposed Regulations]. This first set of proposed regulations contained four alternative plans, three of which are summarized in note 31 *infra*. The fourth is discussed in text accompanying notes 25-27 *infra*. A new set of proposed regulations was issued August 27, 1974. Prevention of Significant Air Quality Deterioration, 39 Fed. Reg. 31000 (1974) [hereinafter cited as 1974 Proposed Regulations]. As this Comment was going to press, final regulations were announced on Nov. 27, 1974, and became effective on Jan. 6, 1975. Prevention of Significant Air Quality Deterioration, 39 Fed. Reg. 42510 (1974) [hereinafter cited as 1974 Final Regulations]. Discussion of changes made by the final regulations is limited to additional comments in the appropriate footnotes.

13. Natural Resources Defense Council, Comments on the Proposed Rules for Prevention of Significant Air Quality Deterioration, June 20, 1973, at 18 [hereinafter cited as NRDC Comments]. See also note 85 *infra*.

ment is occurring in such areas.¹⁴ This phenomenon may be due in part to the location of major new emission sources in more rural areas in order to avoid stringent pollution controls in urban centers.¹⁵ Thus a policy of no significant deterioration (NSD) which has teeth will have important implications for the pattern of future growth and development. As a result, NSD is a highly volatile issue which serves to highlight some of the most difficult problems posed by air pollution control under the Clean Air Act. Largely because of the volatility of the issue and the serious implications of the problems presented by alternate NSD policies, EPA's response to the court order in *Sierra Club v. Ruckelshaus* has been dilatory and less than enthusiastic.¹⁶

This Comment analyzes EPA's proposed regulations in light of both the requirements of the court order and the policy questions which must be considered in formulating an effective NSD policy. The discussion then examines alternative NSD proposals which have been suggested by various environmental groups. It also provides an assessment of how NSD may affect energy and growth policies. Finally, an alternative NSD scheme is proposed.

A

EPA'S PROPOSED REGULATIONS: COMPLIANCE WITH THE ORDER IN SIERRA CLUB?

1. *Was the Result in Sierra Club v. Ruckelshaus Definitive?*

EPA has suggested that it need not comply with the district court's interpretation of the Act in *Sierra Club*. It cites the Supreme Court's tie vote on the issue and the fact that the order was originally a preliminary injunction as support for its conclusion that there has been "no definitive judicial resolution" of the NSD issue.¹⁷ This argument will not withstand careful scrutiny of the proceedings. Normally, a preliminary injunction is granted prior to full review of the merits of the case;

14. The policy of locating highly polluting sources in clean air areas is one strongly supported by EPA and by some states which have large amounts of undeveloped resources. See Brief for EPA as Petitioner at 21-22, *Fri v. Sierra Club*, 412 U.S. 541, 5 ERC 1417 (1973) [hereinafter cited as EPA brief].

15. Examples of the types of plants locating in such areas are collected in the *Sierra Club* brief, *supra* note 4, at 20-21. An excellent example of some of the problems caused by large sources in sparsely populated, formerly clean air areas, are the coal-fired plants located in the four corners region of the southwest U.S., which were exhaustively examined in Congressional hearings. See generally, *Hearings on Problems of Electrical Power Production in the Southwest Before the Senate Committee on Interior and Insular Affairs*, 92d Cong., 1st Sess. (1971).

16. See note 24 *infra*.

17. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18986 (1973).

the propriety of permanent equitable relief is not determined until after adjudication on the merits. In the case at hand, however, at least three factors support the conclusion that the Supreme Court's affirmance was final. First, no factual issue was in dispute; the question presented to the district court was wholly one of law, and the injunction granted gave Sierra Club the relief it had requested. Second, because only legal issues were in dispute, EPA and the Sierra Club had stipulated that the decree would be adhered to as a final order.¹⁸ Therefore, nothing further needed to be brought before the trial court to determine the appropriateness of the order.¹⁹ Finally, the petition to the Supreme Court for a writ of certiorari presented the merits of the case in full. In essence, the question it posed was: "Does the Clean Air Act contain a policy of NSD?"²⁰

Nor does the tie vote lessen the force of the Supreme Court's affirmance. The long-standing rule on the effect of tie votes was stated by the Supreme Court in 1868 as follows:

It serves to explain the absence of any opinion in the cause, and prevents the decision from becoming an authority for other cases of like character. But the judgment is as conclusive and binding in every respect upon the parties as if rendered upon the concurrence of all the judges upon every question involved in the case.²¹

Since EPA has the primary authority to implement an NSD policy, a judgment binding on the parties in this case effectively settles the issue. Thus, the district court's injunction stands without further modification; it is, in effect, both an injunction and a declaratory judgment, binding upon EPA.²²

18. The stipulation was filed with the Court of Appeals for the District of Columbia by EPA on August 10, 1972. Statement of Bruce J. Terris on Behalf of the Sierra Club Before the Environmental Protection Agency Hearings on Proposed Regulations for the Prevention of Significant Air Quality Degradation, at 3, Washington, D.C., Aug. 27, 1973. [hereinafter cited as Terris Statement]. The stipulation provided that the injunction would be regarded as a final order, since the court had, in effect, determined the controlling legal issue, and nothing remained for trial. EPA brief, *supra* note 14, at 5 n.4; Sierra Club brief, *supra* note 4, at 8.

19. C. WRIGHT, LAW OF FEDERAL COURTS § 102 (5th ed. 1972).

20. The questions presented in the briefs before the Supreme Court essentially posed the same question as had the petition and did not challenge the finality of the original injunction. EPA brief, *supra* note 14, at 2; Sierra Club brief, *supra* note 4, at 2.

21. *Durant v. Essex Co.*, 74 U.S. 107, 113 (1868); *U.S. v. Pink*, 315 U.S. 203, 216 (1942); see also Note, *Environmental Law—Non-Degradation—Clean Air Act and Amendments Held to Mandate a Policy Prohibiting Significant Deterioration of Air Quality in Areas of Relatively Clean Air*, 2 FORDHAM URBAN L.J. 136, 139 (1973).

22. This does not resolve the question of whether other plaintiffs may rely on *Fri v. Sierra Club* to seek enforcement of a no significant deterioration policy. Four cases have examined this problem in different contexts. In the 5th Circuit case of *NRDC v. EPA*, 489 F.2d 390, 6 ERC 1248, 1260 (5th Cir. 1974), *cert. granted sub nom.* *Train v. NRDC*, 95 S. Ct. 39 (1974), the court, relying on the district court decision in *Fri*

2. EPA's Approach

a. The Original Proposals

Despite EPA's stance that it had no legal obligation to do so, the agency in July 1973 published four alternative sets of proposed regulations designed to prevent significant deterioration.²³ After several drafts and considerable delay, EPA has recently issued a new set of proposed regulations which modify one of the earlier proposals.²⁴

v. Sierra Club, recognized congressional intent to include non-degradation as part of the Clean Air Act. This was one basis used to prevent emission control strategies which disperse rather than eliminate pollution from being implemented in Georgia. See text accompanying notes 120-122 *infra*.

In *City of Highland Park v. Train*, — F. Supp. —, 6 ERC 1464 (N.D. Ill. 1974), plaintiffs attempted to obtain a preliminary injunction, which would, *inter alia*, have compelled EPA to issue non-degradation regulations immediately, so that defects in the Illinois implementation plan might be corrected. Plaintiffs anticipated that correcting these defects would result in the denial of construction permits for a proposed shopping center complex. Plaintiffs alleged that the complex would cause significant deterioration of surrounding air quality and prevent maintenance of air quality standards. — F. Supp. —, 6 ERC at 1467-68. Note that under EPA's proposed NSD regulations, the source objected to would *not* be subject to review. See text accompanying notes 54-60, 66-69, *infra*; Comment, *V: Control of Complex Emissions Sources—A Step Toward Land Use Planning*, 4 *ECOLOGY L.Q.* 693 (1975) [hereinafter cited as *Complex Sources*]. The court denied jurisdiction, stating, among other reasons, that non-degradation regulations were subject to the same time guidelines for the submission of state implementation plans to EPA as established, and later revised, in the District of Columbia case of *NRDC v. EPA*, 475 F.2d 968, 4 ERC 1945 (D.C. Cir. 1973). Under this timetable, final submission of state plans was not yet required at the time the suit was filed. In the District of Columbia *NRDC v. EPA* case, EPA was required to submit substitute implementation plans which adequately provided for maintenance, as well as attainment, of air quality standards, in cases where state plans failed to so provide. No mention was made of NSD requirements in the decision. The court in *Highland Park* also stated, citing *U.S. v. Pink*, 315 U.S. 203, 216 (1942), that a conclusive determination that the Clean Air Act requires prevention of significant deterioration had not yet been made. —F. Supp. —, 6 ERC at 1474.

In *Sierra Club v. Morton*, — F. Supp. —, 6 ERC 1865 (D. Colo. 1974), a suit to prevent rights of way from being granted pursuant to construction of a power plant, the court ruled that it was premature to decide whether the plant would cause significant deterioration since EPA had not yet defined the term.

In *New Mexico Citizens v. Train*, — F. Supp. —, 6 ERC 206 (D.N.M. 1974), plaintiffs sought to enjoin construction of a copper smelter on the grounds that it would lead to violations of the secondary and primary standards, and would significantly worsen air quality. The court denied jurisdiction, stating that the existing non-degradation policy was not an emission standard which could be enforced by a citizens' suit under § 304(a)(1) of the Act. Further, it stated that since regulations had not yet been promulgated, no claim could be made against the smelting company. — F. Supp. —, 6 ERC at 2064.

23. 1973 Proposed Regulations, *supra* note 12, 38 *Fed. Reg.* 18986 (1973). For a thorough discussion of these plans, see Comment, *The Nondegradation Controversy: How Clean Will Our "Clean Air" Be?*, 1974 *U. ILL. L.F.* 314, 324-33. An economic analysis of each plan is contained in Comment: *Non-Degradation and Pollution Control Alternatives Under the Clean Air Act of 1970*, 9 *LAND AND WATER L. REV.* 507 (1974).

24. The preliminary injunction issued by Judge Pratt on May 31, 1972, required the regulations to be promulgated within six months of the order, or by Nov. 30, 1972.

Although EPA has shelved its earlier proposals, all of them shed significant light on how the agency has viewed its role in NSD implementation.

The earlier plans shared several common features. First, they applied to any area where air quality, as measured in 1972, was better than one or more of the secondary ambient air quality standards which EPA had promulgated.²⁵ The central element of each plan was that states were required to review any new or modified source of air pollution prior to construction in order to determine whether applicable NSD standards would be violated.²⁶ All sources which fell within one

EPA had not submitted proposed regulations by that time, although the D.C. Circuit Court had affirmed the judgment of the district court on Nov. 1, 1972, and had denied stays of the district court's order. On Dec. 4, 1972, Chief Justice Burger granted a temporary stay which later was extended by the full court. Sierra Club Brief, *supra* note 4, at 8. There was some indication that EPA was prepared to propose regulations at this time. *Nondegradation Hearings*, *supra* note 6, at 63. The EPA was thus apparently in direct violation of the court's order for a short period of time.

After the affirmance of the district court's order on June 11, 1973, by the Supreme Court, EPA took five more weeks to issue the first set of four alternative proposals on July 16, 1973. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18986 (1973). Assuming the preliminary injunction's time period restarted when the Supreme Court affirmed, regulations should have been promulgated by Dec. 11, 1973. *But see* City of Highland Park v. EPA, — F. Supp. —, 6 ERC 1464 (N.D. Ill. 1974). Nothing was forthcoming, although both EPA and congressional hearings had been held on the subject several months before.

By early February 1974, drafts of a new proposal were apparently circulating on a limited basis to state governors. Wall St. J., Feb. 14, 1973, at 3, col. 1. On Mar. 22, 1974, the disagreement within the administration concerning a policy of no significant deterioration, which may have been causing the delay, surfaced at a news conference. EPA Administrator Russell Train pointedly failed to support proposed administration changes in the Clean Air Act which would have deleted the NSD policy. 4 ENV. RPTR.—CURR. DEV. 1975 (1974). In April 1974, an EPA official indicated that regulations would be promulgated "hopefully within two weeks." 4 ENV. RPTR.—CURR. DEV. 2091 (1974). At the end of May 1974, new proposed regulations were ready and being circulated to state governors, 5 ENV. RPTR.—CURR. DEV. 131 (1974), only to be delayed by objections. See note 41 *infra*.

Finally, on July 25, 1974, the Sierra Club filed a motion with Judge Pratt to order the EPA to issue proposed regulations within a month and final regulations within 90 days thereafter. Judge Pratt granted the motion in early September 1974. Telephone Interview with Bruce Terris, Sierra Club attorney, Sept. 20, 1974. So far, EPA has complied with that order. Proposed regulations were announced Aug. 16, 1974, and published Aug. 27, 1974. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31000 (1974). Finally, nearly two and one-half years after the initial court order, final regulations were announced Nov. 27, 1974, and published Dec. 5, 1974. 1974 Final Regulations, *supra* note 12, 39 Fed. Reg. 42510 (1974).

25. 1973 Proposed Regulations, *supra* note 12, § 52.21(a), 38 Fed. Reg. 18995 (1973).

26. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18989 (1973). The 17 categories of sources are as follows: (1) Fossil-fuel Fired Steam Electric Plants of more than 1000 million B.T.U. per hour heat input, (2) Municipal Incinerators capable of charging more than 250 tons of refuse per day, (3) Portland Cement Plants, (4) Sulfuric Acid Plants, (5) Iron and Steel Metallurgical Furnaces, (6) Petroleum Refineries,

of seventeen categories were required to use "best available control technology" to control emissions of all pollutants for which secondary standards had been set, except for photochemical oxidants.²⁷ With the exception of fossil-fuel fired steam generating plants,²⁸ best available control technology for stationary sources was defined as that which would be sufficient to meet new source performance standards established pursuant to section 111 of the Act promulgated for each category.²⁹ Two pollutants, sulfur dioxide and particulates, were subject to specific standards set either by the state or by EPA. All the original plans would have allowed the states considerable leeway in delineating and implementing an NSD strategy.³⁰ All plans would have allowed

(7) Coal Cleaning Plants (thermal driers), (8) Kraft Pulp Mill Recovery Furnaces, (9) Primary Zinc Smelters, (10) Primary Aluminum Ore Reduction Plants, (11) Primary Copper Smelters, (12) Lime Plants, (13) Phosphate Rock Processing Plants, (14) By-product Coke Oven Batteries, (15) Sulfur Recovery Plants, (16) Carbon Black Plants (furnace process), and (17) Any new or modified source not covered above having a total annual potential emission rate on any premises equal to or greater than 4000 tons for any pollutant regulated by secondary standards with the exception of photochemical oxidants. These are excluded because they are almost exclusively the by-product of nitrogen oxides and hydrocarbons. *Id.* at 18996. The final regulations have deleted the 17th source on the original list and added two others: (a) Primary Lead Smelters, (b) Fuel Conversion Plants [*e.g.*, coal gasification and oil shale plants]. In addition, references to specific processes were deleted; *e.g.*, Iron and Steel Metallurgical Furnaces became Iron and Steel Mills. 1974 Final Regulations, *supra* note 12, §§ 52.21(d)(1) (i-xviii), 39 Fed. Reg. 42516 (1974).

The categories of sources subject to preconstruction review account for roughly 30 percent of the particulate matter and 75 percent of the sulfur dioxide emitted nationwide. EPA, *Technical Data in Support of Significant Deterioration Issue 1*, accompanying 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18985 (1973).

27. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18988 (1973).

28. For these plants, further controls, such as alternative fuels, were to be considered where needed. *Id.* § 52.21(c)(4)(iii), 38 Fed. Reg. 18996 (1973).

29. *Id.* at 18989. The criteria for determining new source performance standards are set out in text accompanying note 139 *infra*. The first six categories of sources on the list in note 26 *supra*, now have been made subject to new source performance standards. 40 C.F.R. § 60 (1973); Standards of Performance for New Stationary Sources, Additions and Miscellaneous Amendments, 39 Fed. Reg. 9308 (1974). For a discussion of new source performance standards generally, see Comment, III: *Direct Federal Control—New Source Performance Standards and Hazardous Emissions*, 4 *ECOLOGY* L.Q. 645 (1975) [hereinafter cited as *New and Hazardous Sources*]. For categories of sources for which new source performance standards have not been set, the Administrator must consider the following in determining best available control technology: (1) the process, fuels, and raw material available and intended to be employed; (2) the engineering aspects of the application of the various types of control techniques; (3) process and fuel changes; (4) the cost of the application of the control techniques, process changes, alternative fuels, etc.; (5) any applicable state and local emission limitations; and (6) locational and siting considerations. 1974 Proposed Regulations, *supra* note 12, § 52.21(d)(2)(ii)(a)-(f), 39 Fed. Reg. 31008 (1974). The first four items were contained in the original proposals; the last two were added by the newest proposed regulations and retained in the final regulations. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18998 (1974).

30. EPA has repeatedly justified affording states such leeway on the grounds that

pollution levels in some clean air areas to increase to the secondary standards.³¹

b. Plan IV: The Area Classification Plan

The last of the original proposals, the Area Classification Plan, retains special significance because it forms the basis for the newest set of proposed regulations. In the original plan, the states would have been required to classify all clean air areas into one of two zones. Initially, all clean areas would be considered to be Zone II. In this zone, increments would be set to allow development and growth in so far as "well developed air pollution control technologies are applied."³² Any area might be reclassified as Zone I after public hearings were held in the affected area. Zone I increments allowed only a small increase in pollution over existing levels.³³ EPA expects Zone I areas to remain relatively undeveloped and to include locations such as national and state forests, parks, and recreation areas, where little deterioration in air quality is desired.³⁴

In addition, under Plan IV, states could permit air quality in certain areas to deteriorate to the secondary standard levels, subject to public hearings and specific approval by the Administrator of EPA. These areas were suggested by EPA to be ones in which significant

it should be the prerogative of the states to define significant deterioration in light of competing policies such as land use, energy needs, and economic growth. See, e.g., 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18994 (1973); 4 ENV. RPTR.—CURR. DEV. 2091 (1974); 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31001. See text accompanying notes 97-101 and 182-88 *infra* for further discussion of EPA's position.

31. Plan I, the Air Quality Increment Plan, imposed a single, nationwide allowable increment in ambient air quality above existing 1972 air quality. This increment was the same as Class II increments allowed under the newest proposal. See note 40 *infra*.

Plan II, the Emissions Limitation Plan, imposed a nationwide limit on allowable increases in total emissions from the base level emissions for a clean air area. No additional ambient air quality standard was imposed, and the year 1972 was chosen as the time period from which total annual emissions would be measured. Such a plan would require an emissions inventory, and could lead to local violations of secondary air quality standards if the total allowed emissions increase were clustered in a relatively small area.

Plan III, the Local Definition Plan, would have given the states complete autonomy in establishing a definition for no significant deterioration in each clean air area. No baseline period would have been required, enabling the states to treat each new source on a case-by-case, *ad hoc* approach. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18990-92 (1973).

32. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18993 (1973).

33. There has been considerable debate over when the base period will be, from which "present emission levels" will be measured for comparison purposes under whatever NSD scheme is finally adopted. EPA's initial proposals favored a 1972 baseline, while some environmental groups have urged the adoption of a 1970 emissions level as the standard of comparison. See text accompanying notes 105-109 *infra*.

amounts of raw materials are available, where long-range development plans require greater levels of pollution, or situations in which the choice was between locating a pollution source in already highly polluted areas or in an unpolluted area.³⁶ Before approval for special designation, the state would be required to make a good faith showing that it had considered classifying as Zone I other clean air areas within the state.³⁶

c. *The 1974 Proposal*

After delaying for more than a year, EPA, acting under the threat of a court order,³⁷ proposed a new set of regulations modeled on the earlier Area Classification Plan (Plan IV).³⁸ The most significant change is the addition of a third zone, now called a "class,"³⁹ in which deterioration to the secondary standards is allowed.⁴⁰ This class is analogous to the special exception outlined in the earlier plan, but procedures for redesignation of an area as Class III require less stringent standards and are less subject to disapproval by the Administrator than the procedures for creating a special exemption area under the provisions of the predecessor plan.

35. EPA has consistently advocated decentralization of emission sources as a means of achieving and maintaining ambient air quality standards. See Environmental Protection Agency, Guidelines for Designation of Air Quality Maintenance Areas, OAQPS No. 1.2-016, at I-5 (1974). For further discussion of the desirability of this policy, see Comment VII: *Air Zoning—A Land Use Model For Air Quality*, 4 *Ecology L.Q.* 781 (1975) [hereinafter cited as *Air Zoning*].

36. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18993 (1973).

37. See note 24 *supra*.

38. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31000 (1974).

39. Under the newest, or 1974, proposal, the areas previously referred to as zones are renamed classes, so as to avoid confusion with conventional zoning ordinances. *Id.* at 31004.

40. The secondary standards and the NSD standards for the two zones of Plan IV and the three classes of the 1974 proposed regulations are set out in the following table. The values for Zones (Classes) I and II represent the allowable increments above existing air quality. The problems of defining the term "existing air quality" are discussed in text accompanying notes 105-114 *infra*.

	Particulate Matter		Sulfur Dioxide (all in $\mu\text{g}/\text{m}^3$)		
	Annual	24 hr.	Annual	24 hr.	3 hr.
Zone I	5	15	2	5	25
Class I	5	10	2	5	25
Zone II	10	30	15	100	300
Class II	10	30	15	100	700
Class III (Secondary standards)	60	150	60	260	1300

The twenty-four hour and three hour standards cannot be exceeded more than once per year. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18993 (1973). This requirement is deleted in the newest proposed regulations. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31007 (1974). Secondary standards shown in the above table are absolute ceilings rather than increments, and apply to Class III of EPA's newest proposal. *Id.* at 31004. Secondary standards are found in 40 C.F.R. §§ 50.5, 50.7 (1973).

In the 1974 plan, as under the earlier plan, all clean air areas are initially designated as Class II.⁴¹ Prior to any reclassification, public hearings must be held. But under the 1974 plan, the Administrator *must* approve a redesignation unless he finds procedural defects in the state's reclassification process, or he finds that the state has "arbitrarily and capriciously disregarded relevant environmental, social, or economic considerations" in the redesignation.⁴² There is no mention of a "good faith showing" by the states as required in the earlier plan. Finally, there is no requirement that new or expanded sources in a Class III area be subjected to preconstruction review.⁴³

A number of features common to all the original proposals have been altered. First, the year 1973 is chosen as the period for determining existing levels of pollution against which further increases in pollution are to be measured. This so-called baseline determination of air quality would include any expected pollution increases from new sources which have been granted approval or have commenced construction before the regulations become effective.⁴⁴ Review of new facilities would not start until six months after the regulations become effective.⁴⁵ Second, the application of "best available control technology" to reduce emission of pollutants other than sulfur dioxide and particulates is no

41. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31007 (1974). In an earlier draft submitted to state governors for review, areas not redesignated pursuant to public hearings within two years would have fallen automatically into Class I. This provision would have forced the states to publicly defend reasons for designating any area as Class II or Class III. 5 ENV. RPTR.—CURR. DEV. 131 (1974). Apparently this clause was objected to by some governors and ultimately deleted. 5 ENV. RPTR.—CURR. DEV. 475 (1974).

42. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31004 (1974). Under the final regulations, the states are required to consider, in addition to the factors cited, (1) growth anticipated in the area (2) the effect of social, environmental, and economic considerations on *other* areas and states, and (3) the impact of such redesignations upon regional or national interests. 1974 Final Regulations, *supra* note 12, 39 Fed. Reg. 42575 (1974).

43. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31004 (1974). The preamble to the final regulations presents a confused account of the application of NSD regulations to all sections of the country. In the 1974 proposed regulations, the redesignation procedure could have been construed to apply to areas already violating secondary standards, while pre-construction review of new or expanded sources was limited to areas designated as Class I or Class II. *Id.* In the final regulations, areas violating secondary standards for one or more pollutants are explicitly exempted from the redesignation procedure, as to the specific pollutant. 1974 Final Regulations, *supra* note 12, § 52.21(c), 39 Fed. Reg. 42515 (1974). But pre-construction review is extended to include sources located in *all* areas, regardless of existing air quality. *Id.* § 52.21(d), 39 Fed. Reg. 42116 (1974). See note 95 *infra* for further discussion.

44. 1974 Proposed Regulations, § 52.2(b)(1), 39 Fed. Reg. 31007 (1974). The final regulations change the baseline year to 1974. 1974 Final Regulations, *supra* note 12, § 52.21(b)(1), 39 Fed. Reg. 42514 (1974).

45. 1974 Proposed Regulations, *supra* note 12, § 52.21(d)(1), 39 Fed. Reg. 31008 (1974).

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longer required.⁴⁶ Any mention of controls stricter than new source performance standards (NSPS) for fossil-fuel fired steam generating plants is deleted.⁴⁷ Insofar as they are applicable, sources are still required to comply with NSPS under section 111 of the Clean Air Act.⁴⁸ Section 111 requires that NSPS be complied with whenever a source is constructed or modified which would significantly contribute to air pollution and thereby endanger public health and welfare.⁴⁹ Attempts to reach a precise definition of "modification" in this context have produced a great deal of frustration for EPA.⁵⁰ Partly to avoid this definitional problem in the NSD regulations, the proposed regulations are made to apply to new or "expanded" sources. Expanded sources are those which tend "to increase pollution through a major capital expenditure."⁵¹ A final change involves the classification of Indian or federal lands. Any redesignation of these areas requires the approval of the appropriate Indian governing body or the Federal Lands Manager.⁵²

B

A CRITIQUE OF THE PROPOSED REGULATIONS

Sierra Club and others have argued strenuously that the proposed rules fail to prevent significant deterioration as ordered by the court.⁵³ This section examines a number of reasons for these objections, as well as additional objections to the EPA proposal.

46. *Id.*, 39 Fed. Reg. 31005 (1974).

47. *Id.*

48. *Id.* See text accompanying notes 27-29 *supra*.

49. 42 U.S.C. § 1857c-6(b)(1) (1970). See text accompanying notes 137-143 *infra*.

50. See *Complex Sources*, *supra* note 22.

51. 1974 Proposed Regulations, *supra* note 12, § 52.21(b)(2), 39 Fed. Reg. 31007 (1974). In the final regulations, the terms "expansion" and "expanded source" have been replaced by "modification" and "modified source," which have been redefined by EPA. The term "modification" as defined in the Clean Air Act for the purpose of determining when new source performance standards apply, is a "change in the method of operation of a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted." Clean Air Amendments § 111(a)(4), 42 U.S.C. § 1857c-6 (1970). The final regulations do not consider the following as a change in the method of operation: (1) An increase in the production rate, if such increase does not exceed the operating design capacity of the source; (2) An increase in the hours of operation; or (3) Use of an alternative fuel or raw material, if prior to the effective date of a paragraph in this part [40 C.F.R. Part 50 (1974)] which imposes conditions or limits modifications, the source is designed to accommodate such alternative use. 1974 Final Regulations, *supra* note 12, § 52.01, 39 Fed. Reg. 42514 (1974). For further discussion, see notes 67 and 177 *infra*, and accompanying text.

52. *Id.* § 52.21(c)(3)(i), 39 Fed. Reg. 31007 (1974).

53. See, e.g., Terris Statement, *supra* note 18; NRDC Comments, *supra* note 13; Comments of the Environmental Defense Fund on the Proposed Environmental Protection Agency Plans for Non-Degradation of Air (Oct. 1973) [hereinafter cited as EDF Comments].

1. EPA's Failure to Regulate All Harmful Pollutants

The most glaring deficiency of the four original plans, as well as EPA's newest proposal, is their failure to regulate four of the six pollutants for which primary and secondary standards have been promulgated. Only two such pollutants, sulfur dioxide (SO₂) and particulates, will be controlled. Moreover, no provision is made for the control of substances regulated under sections 112 (hazardous pollutants)⁵⁴ or 211 (fuels and fuel additives).⁵⁵ The injunction in *Sierra Club* did not refer to specific pollutants, but spoke generally of "existing air quality."⁵⁶ The adequacy of the regulations in light of the court's broad mandate is thus questionable.

EPA's justification of its position rests largely on the fact that the four pollutants for which secondary standards have been set but which are not subject to NSD control are primarily auto-related. EPA suggests that current and anticipated vehicle emissions control technology will be sufficient to prevent significant deterioration of air quality with respect to these substances.⁵⁷ But this argument assumes that such emissions will be abated by application of new technology at a rate faster than the rate at which the number of emissions sources will increase in a given area. The validity of this assumption will vary from region to region.⁵⁸ In any area where the assumption proves false, deterioration, which may reach significant levels, will occur.⁵⁹ An

54. Clean Air Amendments § 112, 42 U.S.C. § 1857c-7 (1970). See also Terris Statement, *supra* note 18, at 4-8; NRDC Comments, *supra* note 13, at 3-4.

55. Clean Air Amendments § 211, 42 U.S.C. § 1857f-6c (1970).

56. The court required that the Administrator only approve a state implementation plan if he is sure that "it does 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." [emphasis added]. Preliminary Injunction, May 30, 1972, issued by District Judge J.H. Pratt, reprinted as part of *Nondegradation Hearings*, *supra* note 6, at 5. This would imply that, at a minimum, any pollutant for which a secondary standard has been set should be regulated.

57. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18998 (1973). The four so-called vehicular pollutants are hydrocarbons (HC), carbon monoxide (CO), nitrogen oxides (NO_x), and photochemical oxidants (O_x). This position is reiterated in the preamble to the latest proposed regulations. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31006 (1974).

58. For example, pristine areas, currently with few vehicular sources, are subject to no regulation with respect to the four vehicular pollutants. Unless a standard were set for these pollutants, or technology were developed to completely eliminate pollution from stationary as well as vehicular sources, deterioration up to the secondary standards could take place. This is because stationary sources *do* produce *some* of these emissions, and growth in the number of vehicular sources is likely. EPA suggests that complex source regulations help prevent such deterioration from occurring. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18988 (1973). But such regulations are only designed to maintain *existing* ambient air quality standards. See *Complex Sources*, *supra* note 22, at 717.

59. EPA further argues that it is difficult to relate nitrogen oxides (NO_x) and

adequate NSD plan should therefore establish a maximum allowable increment for vehicle-related emissions in order to guard against the possibility that higher emission levels from increased vehicle use or pollution from other sources of these unregulated pollutants will outstrip technological advances in emission control.⁶⁰

2. Failure to Prevent Deterioration to the Secondary Standards

The district court opinion provides little guidance as to what constitutes "significant" deterioration. The court did suggest, however, that its primary concern was to prevent degradation to the secondary standards.⁶¹ It is therefore possible to read the court order as requiring air quality in all clean air areas to remain higher than the secondary standards. A preoccupation with the secondary standards, however, is undesirable for two reasons. First, common sense would dictate that in an area which is only slightly better than the secondary standards deterioration to the secondary standard might be quite insignificant.

In addition, the structure of the Clean Air Act suggests that the meaning of "significant" should not depend on the secondary standards. The national primary and secondary ambient air quality standards are by definition *quantified* estimates of *measurable* effects of pollution on health and welfare.⁶² Therefore, one goal of an NSD policy might be to protect against undetected, unquantified, or unquantifiable effects of air pollution.⁶³ But the same logic would argue against permitting *any* pollution, since the posited goal is to guard against undetected or unquantified effects, and any amount of pollution may prove harmful.⁶⁴

hydrocarbon source (HC) emissions to ambient air standards for NO_x and photochemical oxidants in clean air areas. This process requires stable ambient HC levels which are lacking in clean air areas. This is referred to as the source-receptor relationship problem in the 1974 regulations. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31006 (1974). These stable levels are produced only by a combination of numerous HC sources. Thus, EPA maintains, no realistic standard could be set in pristine areas absent such sources, since states could not predict prior to construction whether or not a given source would violate such a standard. Nothing, however, prevents a percentage limitation on increases in vehicular emissions for an area from being imposed.

60. EPA suggests that it may eventually be desirable to control deterioration of air quality with respect to these pollutants as well as others. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31006 (1974). Therefore, at the very least, EPA's hypothesis concerning the expected reduction of vehicular pollutants should be tested by requiring the states to monitor them in clean air areas. This would provide a basis for an appropriate NSD standard.

61. See text accompanying note 8 *supra*.

62. See *State Plans and Enforcement*, *supra* note 1, text accompanying note 20.

63. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18987 (1973).

64. See, e.g., STAFF OF SUBCOMM. ON AIR AND WATER POLLUTION, SENATE COMM. ON PUBLIC WORKS, 90TH CONG., 2D SESS., REPORT ON AIR QUALITY CRITERIA (Comm. Print 1968) at (v), reprinted in *Nondegradation Hearings*, *supra* note 6, at 166; Sierra Club Brief, *supra* note 4, at 75-79.

The district court decision mandated neither enhancement of air quality in clean air areas nor zero pollution increase. As the Sierra Club has acknowledged, "*Fri v. Sierra Club* was not a non-degradation case." The district court explicitly ordered that only significant deterioration of air quality is prohibited. This obviously means that some non-significant deterioration is allowed.⁶⁵ Therefore, even though zero pollution or zero pollution increase (absolute non-degradation) might best protect against unknown or unquantified health and welfare effects, the court has not ordered that result; rather, it has authorized some allowable degradation relative to existing air quality. Between the limit of absolute nondegradation at one end and the secondary standards at the other there is room for considerable disagreement.

a. Insufficient Regulation of Possible Sources

Given these considerations, the court's opinion may properly be read as allowing deterioration to the secondary standards only in the dirtier of the clean air regions. However, the latest EPA proposal would allow pollution to increase to the secondary standards in any clean air area despite existing air quality. This would occur in two major ways, one indirect and one direct. First, EPA passively accepts possible deterioration to secondary standards by failing to establish regulations for sources which are not within the seventeen categories subject to preconstruction review.⁶⁶ These might include residential developments, shopping centers, freeways, and other new facilities which are characteristic of growth at the fringes of urban areas. Moreover, existing sources which increase pollution without making large capital expenditures are also not subject to review.⁶⁷

65. *Nondegradation Hearings*, *supra* note 6, Statement of Laurence I. Moss, Pres., Sierra Club, at 59.

66. See note 26 *supra*.

67. Such sources would have been subject to review under the original proposed regulations, which called for review of "new or modified sources" in the specified categories, rather than "expanded sources." See text accompanying note 51 *supra*. The change was apparently made to avoid interference with the policy of the Energy Supply and Environmental Coordination Act of 1974 (ESECA), Pub. L. 93-319. See text accompanying note 177 *infra*. But the term "large capital expenditures" gives the states discretion to prevent review of sources other than power plants required to burn coal which might have been reviewable as modified sources. For example, existing sources could increase pollution in clean air areas by gradually increasing plant size, changing production methods, or switching to a new product, all of which a state might conclude involve less than a "large capital expenditure." Largely due to such criticisms of the proposed regulations, the final regulations have reinserted the term "modified source" as outlined in note 51 *supra*. But the exceptions allowed by the new definition leave important ambiguities. For example, should preconstruction review of a new source consider only emission rates which would result from full capacity, or should expected emission rates be based on the level of production most likely to be achieved by the source during the first year of operation? If the latter method

The cumulative effect of such sources on pollution levels could lead to degradation to secondary standards in spite of NSD requirements. A proposed new source subject to review could find the allowed increase in pollution levels used up by sources for which no review was required, even though the proposed source by itself would not have exceeded the standard. As one possible solution, EPA suggested in its earlier proposal that clean air areas may in the future be required to make growth projections similar to those already required under complex source regulations.⁶⁸ However, the latest proposed regulations point out only that the states, in the NSD portions of their implementation plans, may augment the list of sources subject to review.⁶⁹ No mention is made of other types of direct review, such as emissions inventories.

b. Express Authorization to Pollute to Secondary Standards

EPA's newest proposed regulations permit pollution to the secondary standards not only indirectly, but also directly, by allowing the states to redesignate any clean air area as Class III. In these areas, new sources are not subject to preconstruction review.⁷⁰ Secondary standards can thus be enforced only after they have been violated. Since almost no concrete guidelines are provided for redesignation of an area as Class III, EPA's "arbitrary and capricious" standard of substantive administrative review⁷¹ is not likely to be used to upset many state redesignations. If a state felt that it would serve its interests, even currently pristine, unpolluted areas could be designated Class III.⁷² Thus, EPA has allowed the goal of protection of existing air quality to become secondary to other priorities.

EPA justifies this policy by claiming that no adequate criteria exist for determining what degree of deterioration from existing levels of pollution should be considered significant. This is especially true, EPA asserts, because the correlation between low levels of pollution

is chosen, subsequent increases in production to full capacity would increase emissions but would not qualify as a "modification" and would not be subject to further review. See *Complex Sources*, *supra* note 22.

68. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18994 (1973). This suggestion is notably absent from EPA's discussion of the newest proposed set of regulations, though such projections are being required as a part of complex source control strategies. See *Complex Sources*, *supra* note 22, text accompanying notes 55-60.

69. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31004 (1974).

70. *Id.* See note 43 *supra*.

71. *Id.* § 52.21(c)(3)(viii)(a)-(c), 39 Fed. Reg. 31008 (1973).

72. *Id.* 39 Fed. Reg. 31004 (1974). EPA suggests but does not require, that Class III areas be those expecting to experience "rapid and major industrial or commercial expansion (including areas in which extensive mineral development is desired)." *Id.*

and possible adverse effects has not yet been accurately determined.⁷³ Therefore, EPA contends that the public's interest will best be served if significant deterioration is defined by state and local agencies which have more information about local needs and priorities in clean air areas.⁷⁴ Such local control is unlikely, however, to protect the interest residents of other areas may have in preserving the area in question.⁷⁵

The Sierra Club has attempted to counter this argument by citing many examples of the adverse effects of air pollution where air quality is higher than secondary standards.⁷⁶ Information concerning such effects, some of which is contained in EPA's own studies,⁷⁷ should give EPA a sufficient basis on which to establish reasonable criteria for significant deterioration standards.⁷⁸ Thus, the Sierra Club asserts that the needed additional protection from the adverse effects of air pollution must be provided on a nationwide basis by allowing pollution to be increased proportionately by no more than a small amount from existing levels.⁷⁹

Neither the argument of EPA nor that of the Sierra Club is very persuasive. Once it is decided that NSD policy should seek to protect against unknown or suspected effects of air pollution at levels better than secondary standards, any standard of significance will be arbitrary with respect to protection against those effects, whether proposed on a national or local basis. Obviously, however, protection against such effects may be made impossible in all areas by regulations which allow pollution levels to reach secondary standards anywhere a state deems

73. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18987 (1973).

74. The justification summarized in the text is the same as the principal argument made in EPA's Supreme Court brief. There, EPA argued that since the primary and secondary standards were supposed to protect against any known or suspected adverse effects of air pollution on the public health and welfare, [Clean Air Act § 109 (b)(1)-(2), 42 U.S.C. § 1857c-4(b)(1)-(2) (1973)], no further protection of air quality under the Act was required. Thus, deterioration of air quality to secondary standards was acceptable. EPA Brief, *supra* note 14, at 8-9.

75. There has been considerable debate over whether, for example, the few hundred residents of a predominantly undeveloped county should have more say over future development patterns in the area than the thousands of nonresidents who may rely on the area as a recreational resource. For an economic analysis of the problem, see Zerbe, *Optimal Environmental Jurisdictions*, 4 *ECOLOGY L.Q.* 192 (1974).

76. See, e.g., *Nondegradation Hearings*, *supra* note 6, at 52-58, Statement of Laurence I. Moss, Pres., Sierra Club, Sierra Club Brief, *supra* note 4, at 75-86; Environmental Protection Agency, Hearings on Proposed Regulations for the Prevention of Significant Air Quality Deterioration, Washington, D.C., Aug. 27, 1973, Statement of Dr. Michael Williams [hereinafter cited as Williams Statement].

77. See Sierra Club Brief, *supra* note 4, at 81-86.

78. *Id.* at 88; *Nondegradation Hearings*, *supra* note 6, Statement of Laurence I. Moss, Pres., Sierra Club, at 65.

79. See text accompanying notes 115-130 *infra*, for a discussion of Sierra Club's proposed plan.

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it acceptable. Apparently, EPA has decided that the task of protecting existing air quality is too difficult for it to tackle seriously on a national level.⁸⁰ But this decision contrasts sharply with Judge Pratt's injunction which states with no qualification that significant deterioration of air quality should not be permitted in "any portion of any state."⁸¹

On the other hand, if secondary standards are as deficient in protecting the public welfare as Sierra Club claims, they should be challenged directly or changed by the Administrator under the appropriate provisions of the Clean Air Act.⁸² A decision favorable to more stringent standards would allow all persons to benefit from improvements in air quality, not just those living in clean air areas.

Hopefully, the above analysis has made it clear that within the terms of Judge Pratt's injunction, an NSD policy is not susceptible to a relatively simple "balancing of interests" test. While the ultimate decision concerning the acceptability of an NSD policy may be resolved by Congress, this does not leave EPA totally without a yardstick by which to determine significant deterioration. As one starting point, the Senate Report accompanying the Clean Air Act, cited favorably in *Sierra Club v. Ruckelshaus*,⁸³ says "in areas where current air pollution levels are already equal to or better than the air quality goals, the Administrator shall not approve any implementation plan which does not provide, *to the maximum extent practicable*, for the continued maintenance of such ambient air quality."⁸⁴ This suggests, at a minimum, the use of the following factors in policy formulation: (1) the existing levels of air pollution, if determinable; (2) the need to coordinate an NSD policy with the other goals of the Clean Air Act; and (3) the possible effects of an NSD policy on energy development, growth, and land use patterns. It is toward an analysis of some of these issues, along with suggested plans for their resolution, that the rest of this Comment is directed.

80. According to Alan G. Kirk II, EPA ass't administrator for enforcement and general counsel, EPA has attempted to reconcile public needs with the decision in *Sierra Club v. Ruckelshaus*. He conceded that the regulations proposed by EPA represent a shift from the significant deterioration concept embodied in the *Sierra Club* case, but predicted that a court decision to enforce a significant deterioration policy framed solely in terms of air quality would quickly be overturned by Congress. 5 ENV. RPTR.-CURR. DEV. 755 (1974). Such legislation has been introduced in the 93rd Congress in both the Senate, S.B. 2539, and the House, H.R. 17069.

81. Injunction reprinted in *Nondegradation Hearings*, *supra* note 6, at 5.

82. Direct challenge could come under § 307(b) of the Clean Air Act, 42 U.S.C. § 1857h-5(b) (1973). The Administrator is also required by § 108(c) of the Act to review from time to time the criteria on which secondary and primary standards are based. 42 U.S.C. § 1857c-3(c) (1973).

83. 344 F. Supp. at 255 (1972).

84. S. REP. NO. 1196, 91st Cong., 2d Sess. at 2 (1970) (emphasis supplied).

3. Prevention of Significant Deterioration In "Any Portion of any State"

a. Air As a Natural Resource

Perhaps the only pleasant thing to be said about air pollution is that even in the dirtiest of air regions there are days when pollution has subsided. There are many reasons for these occasions: rain may wash some pollutants out of the atmosphere; particulates, being heavier than air, gradually settle out; organisms in the ground absorb some pollutants; and, most importantly, an influx of relatively unpolluted air from other regions may disperse heavy concentrations of pollution throughout the atmosphere.

The atmosphere's capacity to disperse air pollution has long been relied upon to lower ambient pollution levels; coastal areas rely on ocean breezes, and inland areas may rely upon winds bringing in cleaner rural air. Since 80 percent of the nation's air is better than secondary standards for at least one pollutant,⁸⁵ sufficient quantities of clean air are generally available to disperse most air pollution from large inland urban areas. Thus, clean air areas, to the extent that they remain clean, may be relied on in lieu of increased technology or emission cutbacks as a means of attaining ambient air quality standards in dirty air areas.

However, the atmosphere's dispersive capacity is finite,⁸⁶ and this fact argues against an NSD policy which would allow degradation to secondary standards on a broad scale. If substantial resources of clean air were allowed to deteriorate to the secondary standards, the dispersal effect could be diminished to the point where dirty air areas violated the ambient standards as a matter of course.⁸⁷ Therefore, meteorological factors suggest that the absolute limit to degradation in most cases must be some ambient air quality level better than the secondary stand-

85. Wall St. J., Feb. 14, 1974, at 4, col. 1. Relatively few air quality control regions violate all six secondary standards. Thus most would come under a NSD plan which regulated all pollutants for which secondary standards have been set. See Sierra Club Brief, *supra* note 4, at 16 n.6.

86. One scale by which to measure "dispersive capacity" is the time it takes for the composition of the atmosphere to regain chemical equilibrium, or a so called "steady state." The fact that the large scale burning of fossil fuels, the principal source of air pollution, is gradually altering the composition of the atmosphere, thereby preventing the "steady state," is reflected in the relatively rapid increase in carbon dioxide levels in the atmosphere. Thus, carbon dioxide is being created faster than plants can absorb it. The possible long-term environmental effects of this increase are not well understood. See, COUNCIL ON ENVIRONMENTAL QUALITY, 4TH ANNUAL REPORT ON ENVIRONMENTAL QUALITY at 278 (1973) [hereinafter cited as 1973 ENVIRONMENTAL QUALITY REPORT].

87. See generally, *Nondegradation Hearings*, *supra* note 6, Statement of Laurence I. Moss, Pres., Sierra Club, at 44.

ards. That level will depend, *inter alia*, upon local weather patterns.⁸⁸ These factors suggest, in fact, that without a reservoir of clean air areas, dirty regions may be unable to attain and maintain the primary and secondary standards, and some clean air areas may be unable to enforce even a modest policy of NSD.

b. Interjurisdictional Problems

Just as clean air in one region may have beneficial effects on air quality in other regions, so dirty air in one region may spread over extremely wide areas, given proper weather conditions. Thus, few areas are free from the pollution caused by sources over which they have no direct control.⁸⁹

Both the Clean Air Act and EPA's regulations have left the resolution of this dilemma to the states. Generally, states have formed Air Quality Control Regions (AQCR) which divide states into regions, generally based on divisions between large cities and other areas.⁹⁰ AQCR boundaries typically correspond closely to political boundaries, even though, as former President Nixon once noted, "[A]ir is no respecter of political boundaries."⁹¹ The Clean Air Act requires state implementation plans to include

adequate provisions for intergovernmental cooperation, including measures necessary to insure that emissions . . . from any air quality control region will not interfere with the attainment or maintenance . . . of ambient standards in any portion of such region outside of such State or in any other air quality control region.⁹²

There is evidence that states have failed to include the adequate provisions for intergovernmental cooperation mandated by the Act.⁹³

EPA's proposed NSD regulations will do little to solve the potential problems stemming from inter-regional pollution. In the preamble to the 1973 proposed regulations, EPA suggests only that sources

88. For a NSD proposal which would take account of such meteorological patterns, see text accompanying notes 190-196 *infra*.

89. For examples of this phenomenon, see Sierra Club Brief, *supra* note 4, at 66-67. For a discussion of the political and administrative problems created by such interjurisdictional pollution, see Zerbe, *Optimal Environmental Jurisdictions*, 4 *ECOLOGY L.Q.* 192 (1974).

90. See Approval and Promulgation of Implementation Plans, 40 C.F.R. § 52.20 *et seq.* (1973) and Air Quality Control Regions, Criteria, and Control Techniques, 40 C.F.R. § 81.12 *et seq.* (1973), which give a breakdown of each state's implementation plan and AQCR organization.

91. President's Message on the Environment, 116 *CONG. REC.* 32909 (1970).

92. Clean Air Amendments § 110(a)(2)(E), 42 U.S.C. § 1857c-5(a)(2)(E) (1970).

93. See *State Plans and Enforcement*, *supra* note 1. See also, Hasset, *Enforcement Problems in the Air Quality Field: Some Intergovernmental Structural Aspects*, 4 *ECOLOGY L.Q.* 63 (1974).

should be approved on a "first come, first served" basis.⁹⁴ Thus, if a source built in one area caused a violation of an NSD standard in another region, further construction in the latter region would be prevented. Further, EPA's newest plan provides little guidance concerning the proper delineation of clean air regions. A state could, without fear of EPA intervention, designate an area as Class I, which would have the smallest allowable increment, immediately adjacent to an area designated as Class III, in which deterioration up to secondary standards would be allowed.⁹⁵ For example, a Class III area slated for oil-shale exploitation or construction of large coal-fired electric power plants may be located near a national park.⁹⁶ Under such circumstances, meteorological patterns could effectively prevent a Class I area from meeting its strict NSD requirement.

94. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18994 (1973). The preamble to the latest proposed regulations suggests that if EPA cannot satisfactorily help to resolve possible interstate conflicts in clean air designations, the judicial procedure outlined in *Illinois v. City of Milwaukee*, 406 U.S. 91, 4 ERC 1001 (1972) is an effective tool for resolution. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31005 (1974). The case involved cities in Wisconsin which were alleged to have polluted Lake Michigan, thereby violating Illinois water pollution regulations. Illinois sought to invoke the original jurisdiction of the Supreme Court by characterizing the dispute as one between two states. The court ruled that original jurisdiction was improperly invoked, and remanded. The opinion suggested use of the federal common law of nuisance in such cases, *pending new federal laws and regulations*. 406 U.S. at 106, 107.

But EPA was specifically directed by the injunction to draft regulations which would prevent deterioration in "any portion of any state." This would suggest, if not require, an NSD policy creating a nationwide allowable increment to current levels of air pollution, which would avoid many interstate conflicts. See text accompanying notes 197-200 *infra*. Furthermore, a pollution proceeding in the courts occurs only after a source has been constructed which causes pollution. A carefully drawn preconstruction review procedure coupled with interstate air quality control regions would not stop at state boundaries when considering pollution increases downwind caused by the source. For a discussion of the federal common law question, see Garton, *The State Versus Extraterritorial Pollution—States "Environmental Rights" Under Federal Common Law*, 2 *ECOLOGY L.Q.* 313 (1972).

95. See text accompanying notes 70-74 *supra*. Acting pursuant to criticisms such as those raised in this section, EPA in its final regulations *requires*, as part of the preconstruction review, a determination that the proposed source will not violate the air quality increment of any other area. A source may offset increased emissions against reductions in emissions achieved by other sources included in the baseline air quality determination. It must also include emissions cause by other "general commercial, residential, industrial, and other sources of emissions" whose growth has occurred since the baseline determination. 1974 Final Regulations, *supra* note 12, § 52.21(d)(2)(i), 39 Fed. Reg. 42516 (1974).

96. A typical example of this occurrence is the construction of large power plants in the southwestern U.S. "Even now a pall often exists over the Mesa Verde National Park in southwest Colorado." Burke, *Environmental Problems Related to the Development of Strippable Coal Reserves in the Rocky Mountain Region*—prepared for Rocky Mountain Center on Environment at 33, Feb. 1972, in *Sierra Club Brief*, *supra* note 4, at 21.

4. *Allowing States to Define "Significant": Problems of Interstate Rivalry*

It is commonly accepted that the Clean Air Amendments of 1970 vested the federal government with a stronger and more direct role in the national air pollution control effort because of the states' demonstrated inability to resist local interest groups who opposed stringent measures. Considerations of interstate competition for new industry exacerbated this problem. This observation is corroborated by the fact that 22 states, including the most industrialized, filed *amicus* briefs with the Supreme Court supporting Sierra Club's position.⁹⁷

Without the strong guiding hand of the federal government states may succumb to economic and political pressures to compete with other states for industry, by adopting a lax definition of "significant" deterioration, or by classifying as many clean air regions as possible as Class III.⁹⁸ Viewed in this light, EPA's permissiveness regarding state NSD policies may be the single most important factor endangering our remaining clean air resources.

From the inception of Sierra Club's suit, EPA has argued that section 116 of the Clean Air Act,⁹⁹ which allows the states to impose stricter standards than the federal government, is sufficient to assure the prevention of significant deterioration.¹⁰⁰ This assumes, of course, that the history of state inefficacy referred to above will somehow reverse itself. As has been noted elsewhere,

[I]t is not in the spirit of the 1970 Amendments to interpret section 116 as broadly as EPA has suggested—certainly not so broadly as to insulate from federal control such a major substantive policy as non-degradation. The real purpose of section 116 is to grant protection to those few states that may adopt stricter standards under their police power from attacks by affected industries based on a preemption rationale.¹⁰¹

In its newest proposal EPA argues that the states and local air pollution control agencies are in a better position than the federal government to determine what constitutes significant deterioration and

97. Those submitting *amicus* briefs are listed at 412 U.S. 541, 5 ERC 1417 (1973).

98. During congressional hearings on the Clean Air Act held in 1972, several Air Quality Program directors pointed out the difficulty of upholding state standards stricter than those of the federal government. *Hearings on Implementation of the Clean Air Act Amendments of 1970 before the Subcomm. on Air and Water Pollution of the Senate Public Works Comm.*, 92d Cong., 2d Sess. ser. 31, pt. 1, at 210-15 (1972). See also Sierra Club Brief, *supra* note 4, at 63-68; Note, *Non-Degradation*, *supra* note 5, at 814, n.73.

99. 42 U.S.C. § 1857d-1 (1970).

100. EPA Brief, *supra* note 14, at 13-14.

101. Note, *Non-Degradation*, *supra* note 5, at 814.

to make the appropriate designations of clean air areas required by the regulations.¹⁰² This argument suffers from the same flaws as EPA's reliance on section 116 of the Clean Air Act.¹⁰³ A classification scheme such as the one proposed would promote the same kind of jockeying for permissive clean air areas by industry as would EPA's broad interpretation of section 116. States fear the result of such regulation.¹⁰⁴ Thus, any development likely to cause pollution in a clean air area would put pressure on the state to designate the area Class III.

5. Determining the Base Level of Pollution

a. When Should "Existing" Air Quality Be Measured?

The district court injunction directed that "existing" air quality be protected against significant deterioration. Left unclear, however, is the time at which existing air quality should be measured to form a baseline against which to measure pollution increases. EPA, in its original proposals, maintained that the base year should be 1972, since that is the year by which state implementation plans were to have been approved and put into effect, and because it is the year of the district court decision. Included in the baseline air quality determination would be expected increases in pollution levels from sources approved but not yet in operation prior to the date on which the regulations were first proposed. Apparently, this policy is designed to avoid the inequitable result of preventing a plant from operating because of an NSD policy not formulated when the plant was first approved.¹⁰⁵

The Sierra Club has objected to this baseline on two grounds. First, it suggests that since the Clean Air Act has mandated a policy of NSD from the time it became law, the base year should be 1970, the year in which the Act was passed. Second, even if the base year is 1972, it should not include pollution from sources not yet under con-

102. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31001 (1974).

103. See note 98 *supra*.

104. California, in its *amicus* brief, stated the following:

[P]utting the onus upon individual states to establish policies more restrictive than the national ambient air quality standards contravenes economic realities. If any state imposed its own policy of "no significant deterioration," and was one of few states to adopt that policy, sources of significant pollution increases which would not be permitted would tend to migrate toward more permissive states—to the detriment of the economy of the very areas which demonstrated concern for environmental protection.

Brief of the Attorney General of California as *amicus curiae*, at 22, *Fri v. Sierra Club*, 412 U.S. 541, 5 ERC 1417 (1973). See also, State of Connecticut, Comments on U.S. Environmental Protection Agency Proposed Rulemaking to Prevent Significant Air Quality Deterioration, July 1973, at 1-2.

105. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18989 (1973).

struction during 1972, because they were put on notice by the district court decision that a policy of NSD was part of the Act.¹⁰⁶

The Sierra Club has suggested that an equitable rule could be fashioned which would require at a minimum the following: (1) new sources put into operation or substantially completed after the base year, but before the district court decision, should be required to comply with new source performance standards within a reasonable time; (2) emissions from such sources should not be included in the baseline determination; and (3) sources approved after the district court's decision should be subject to NSD review.¹⁰⁷

Choosing either year as the base period presents several practical problems. First, if a year in the past is chosen as the base period, air quality may have significantly deteriorated or improved by the time the NSD policy is implemented. If air quality had substantially deteriorated due to increased growth, the allowed increment in air pollution levels may already be exhausted or even exceeded. Unless air quality were restored to baseline levels, no further development could take place. Conversely, if air quality had improved from pollution levels at or worse than the secondary standards due to air pollution control, an NSD policy would provide no protection from degradation back to the secondary standards.¹⁰⁸ Second, the necessary data for a baseline determination may be unavailable or unreliable. Areas outside urban centers have engaged in only scattered monitoring of air quality. In addition, both NRDC and EPA have noted that low level measurements are inaccurate and subject to wide fluctuations.¹⁰⁹ Although technology is constantly improving in this field, the error factor imposes limits on the enforceability of any increment established.

b. Methods of New Source Review

EPA, in its final regulations, has proposed a baseline and a method of review which it feels substantially satisfies the practical objections raised above. Since EPA has delayed so long in issuing final regulations, the base year chosen is now 1974.¹¹⁰ In addition, the base

106. See Terris Statement, *supra* note 18, at 17. The 1970 Amendments were enacted on Dec. 31, 1970.

107. *Id.* at 17-18.

108. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18989 (1973).

109. *Id.* NRDC Comments, *supra* note 13, at 13. In addition, NRDC has noted that large errors are often present in the measurements themselves, because low level monitoring techniques have not been sufficiently developed. Moreover, even where careful and accurate measurements have been made, there is not always a good correlation between the measurements and ambient air quality. See 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31003 (1974).

110. It should be noted that the problem of baseline determination ("grandfathering") has reportedly been one of the main stumbling blocks to EPA's promulgating final NSD Regulations. 4 ENV. RPTR.-CURR. DEV. 2091 (1974).

includes all expected air pollution increases from new sources which were approved or which began operating prior to the effective date of the regulations.¹¹¹ This tends to minimize any problems caused by changes in air quality after the baseline period.

In order to eliminate problems caused by inaccurate or unavailable data EPA's determination of significant deterioration is founded entirely on the results of preconstruction review of new sources. There is no requirement that air pollution levels in clean air areas be monitored continuously and compared against pollution levels at some point in the past.¹¹² EPA expects that review of new sources would be accomplished in a two stage process. First, appropriate air pollution diffusion modeling techniques would determine the amount of air pollution expected from the new source. Then that amount, plus the estimated increases expected from other new sources and general development, would be compared with the allowed increment in pollution levels of the area in which the source is located. Thus, there would not be any need to examine actual air quality data.¹¹³

Aside from the Sierra Club's objections to the base year chosen, which, given EPA's delays, are constantly more substantial, EPA's new source review method is subject to several criticisms. The primary objection is that the review method relies heavily on air pollution modeling techniques which have not yet been shown to be accurate.¹¹⁴ Without continuous monitoring of air quality and total emissions as a check on the diffusion model, frequent violations of the increment allowed by an NSD plan can be expected. Furthermore, the increment may have been exhausted or exceeded by sources not subject to review long before a new source is proposed which *is* subject to review.

C

ALTERNATIVE PLANS: SIERRA CLUB, NRDC, AND EDF

As the preceding discussion has made clear, EPA's proposed NSD plans may not satisfy the court's injunction and could be challenged on

111. 1974 Final Regulations, *supra* note 12, § 52.21(b)(1), 39 Fed. Reg. 42514 (1974). Since review of new sources does not begin until six months after the effective date of the regulations, it is not clear whether pollution from sources which have been approved and begun construction after the effective date will be included in the base period.

112. This does not preclude a state from requiring an air quality monitoring system as part of its own state implementation system.

113. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31007 (1974).

114. EPA admits that diffusion modeling techniques are inaccurate, but argues that they at least produce consistent and reproducible results. *Id.* at 31003. See text accompanying notes 195-196 *infra*.

several grounds. Three environmental groups, however, have put forth suggestions for preventing significant deterioration which would be more likely to survive the court's scrutiny.

I. The Sierra Club Plan

The Sierra Club has proposed a "volumetric emissions" plan, the central element of which is a simplified model which relates total emissions to ambient air quality for particular stationary sources.¹¹⁵ Significant deterioration would be defined as a percentage of, or absolute increase in pollution levels (whichever is larger) in the 1970 or 1972 base year. Whether a particular source violated this standard would be determined by averaging the total emissions from the source for a particular time period over the volume of air within one kilometer of the source.¹¹⁶ If the calculated expected increase in concentration exceeded the allowable increment, significant deterioration would be found.¹¹⁷ The plan also includes a total emissions limitation for each AQCR for pollutants regulated by secondary standards.¹¹⁸ Finally, permits would be required of sources which emit more than certain amounts of pollutants within a one year period.¹¹⁹

The main advantage to the Sierra Club plan is that it prevents the use of tall stack and intermittent control strategies, currently used by some large sources as a means of complying with ambient air stand-

115. This plan was presented at the EPA Hearings on Proposed Regulations for the Prevention of Significant Air Quality Degradation, Washington, D.C., Aug. 27, 1973. Statement of Laurence I. Moss, Pres., Sierra Club [hereinafter cited as Moss Statement].

116. The formula first requires calculating the average "residence time" of a pollutant. Residence time is the average amount of time in a given period that a particle of a pollutant will remain suspended in air within a given distance of a source. It is dependent on the nature of the pollutant and on wind speed.

Residence time is then multiplied by the average emissions rate for the given time period to give the total average emissions present within the given radius of the source. Dividing this figure by the total volume of air gives the average pollutant concentration for any typical point in time.

The Sierra Club proposal calls for calculating residence times for one hour, 24 hour, and one year periods within a one kilometer radius of the source. All calculations must be completed before a new source could be approved. Moss statement, *supra* note 115, at 11-12.

117. The maximum increments allowed, in $\mu\text{g}/\text{m}^3$, are set forth in the following table. *Id.* at 12-13.

Pollutant	1 hr. Ave.	24 hr. Ave.	Annual Ave.
SO ₂ , NO _x , particulates, and HC	100	50	4
CO (not viewed as a substantial problem because no low level effects have yet been discovered)	2000	1000	80

118. *Id.* at 11-12. The allowable increase would be 10% of existing levels for all pollutants.

119. *Id.* at 12.

ards.¹²⁰ This is accomplished by averaging the emissions over such a small volume that large plants, even if they could satisfy the area-wide concentration standards or emission limitation, would violate the air quality standard in the vicinity of the source. Thus, they could not be approved without additional controls designed to reduce total emissions.¹²¹ The plan also has the advantage, inherent in any plan which applies a ceiling on total emissions for an area, in that such a provision is easier to enforce than one which focuses on area-wide ambient air quality.¹²²

EPA has raised several objections to this approach. It maintains that the increment required by the plan is too stringent and will restrict growth because large plants will not be allowed to build in clean air areas, given currently available technology.¹²³ However, large sources without controls produce more pollution and should be a primary target of an NSD policy.¹²⁴ In a more general vein EPA criticizes the plan because it makes air quality the "single overriding factor in land use decisions."¹²⁵

A more cogent criticism which EPA does not further develop is that the Sierra Club proposal overcomplicates the determination of whether a prospective source will violate proposed NSD standards.¹²⁶ The Sierra Club argues that its method is easier to apply than one requiring a diffusion model which relates ambient air quality to emissions—a requirement of most EPA proposals.¹²⁷ However, both approaches require a large amount of data concerning long-term weather patterns which is often unavailable. Unless new plant emissions would violate area-wide emission limitations (thereby yielding an absolute

120. Though such strategies are assigned no more than a minor role under the Clean Air Act, industry has been persistent in efforts to rely on tall stack and intermittent control measures. See *State Plans and Enforcement*, *supra* note 1.

121. Note that the height of the smoke stack does not affect the total amount of emissions from a given source. See note 190 *infra* for a description of one of the possible effects of increases in total emissions.

122. For a more complete discussion of the problems inherent in relating total emissions to ambient air quality, see text accompanying notes 190-96 *infra*.

123. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31006 (1974); 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18994 (1973).

124. It is curious for EPA to argue that because a source is so large that it will cause serious deterioration of air quality, it should not be subject to NSD controls.

Sierra Club has gone to great lengths to demonstrate that development would not be prohibited by this plan even in the most restrictive case. It maintains, for example, that with presently available SO₂ controls a city of 15,000 plus a coal fired generating plant of 220 megawatt capacity could be built in a pristine area under the Sierra Club proposal. Moss Statement, *supra* note 115, at 14.

125. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31006 (1974). For further discussion of this criticism, see text accompanying notes 182-188 *infra*.

126. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18994 (1973).

127. Moss Statement, *supra* note 115, at 11.

emissions limitation for the source), design of plants, given changing weather conditions, could be very difficult.¹²⁸

A simpler approach would be to retain area-wide total emissions limitations, yet require that total allowed emissions from each source be specified.¹²⁹ This would apply equally well to nonstationary sources, such as automobiles, and to complex sources, such as shopping centers and housing developments, which both EPA and Sierra Club have generally ignored.¹³⁰

2. The NRDC Plan

The Natural Resources Defense Council (NRDC) has proposed an NSD plan which would calculate a per capita emissions allotment based on the total emissions present in a clean air area.¹³¹ This scheme is predicated on the rationale that pollution should go where people go. First, the total base year emissions for an area would be calculated. The total would then be divided by the population of the area, which would yield a per capita emissions quota. For each area, a five percent increase in total emissions would be allowed. When a person moved into an area, emissions would be allowed to increase by his or her per capita quota. At each census, the quota would be adjusted in light of population changes so that in no area would the total emissions be allowed to exceed the base year emissions plus five percent.¹³² This emission allocation method has the advantage of preventing large pollution sources from relocation where there are no people.¹³³ In addition, maximum incentive is put on design of new developments that are essentially pollution free.¹³⁴

There are problems associated with the NRDC approach. For example, construction decisions may have to be made without knowing whether population would increase sufficiently to support the expected pollution from the new source.¹³⁵ This might tend to prevent develop-

128. For further discussion, see text accompanying notes 190-196 *infra*.

129. The distinction between this approach and new source performance standards is suggested in text accompanying notes 137-144 *supra*.

130. Further refinements in this plan are outlined in text accompanying footnotes 190-192 *infra*. See generally *Complex Sources*, *supra* note 22.

131. NRDC Comments, *supra* note 13, at 19-20.

132. *Id.*

133. *Id.* at 21. The argument is that only if the people who benefit from the activity which produces the emissions are forced to absorb the cost of those emissions will an adequate political consensus for cleaner air be developed. Thus, it is unfair to impose on the population of isolated rural areas, whose voice may not be effective in the political arena, the fallout costs of activities from which they derive little benefit.

134. *Id.*

135. This problem is exacerbated by the fact that construction of new large sources requires a substantial lead time. Even though population may have increased, the pollution quota may have been exhausted by the time the new source is finally constructed.

ment in clean air areas altogether. Furthermore, the NRDC approach accepts EPA's AQMA designations for clean air areas.¹³⁶ Thus, no new solutions are offered for possible inter-regional pollution problems.

3. *The Problem of Incentives for Technological Innovation: The EDF Plan*

One of industry's chief objections to an NSD policy has been that adequate pollution control technology does not exist to meet the requirements of proposed NSD regulations. At least one industry spokesman blames the lag in control technology on the Clean Air Act.¹³⁷ Critics have pointed to new source performance standards (NSPS), required under the Act, as a principal source of disincentives to the development of new technology.¹³⁸ Under section 111, NSPS are set to reflect "the degree of emission limitation achievable through the application of the best systems of emission reduction which . . . the Administrator determines has been adequately demonstrated."¹³⁹ Thus the Act puts the burden on EPA, rather than on the owner of the emission source in question, to demonstrate the availability of control devices needed to meet NSPS. But since EPA does not have a large-scale ongoing program for developing new control technology, it must depend on the private sector for such research and development. Industry may be deterred from using or developing new technology by the fear that the Administrator will conclude that any device developed has been "adequately demonstrated" and will require its use in new sources. "Adequate demonstration" thus has the effect of tightening the standards and requiring further expenditures by industry—a situation which industry, it is argued, will attempt to avoid.¹⁴⁰

In such cases, a completed source should be allowed to operate, perhaps under a variance scheme. In addition, it should be noted that NRDC has maintained that its NSD plan would enable EPA to avoid making the sorts of land use decisions which other plans would require. NRDC Comments, *supra* note 13, at 20.

136. In NRDC's opinion, any other arrangement would lead to the possibility of gerrymandering areas to maximize allowable increases, thereby making a state more attractive to industry. NRDC Comments, *supra* note 13, at 19-22.

137. *Nondegradation Hearings*, *supra* note 6, at 138, Statement of Carl E. Bagge, Pres. of the Nat'l Coal Assoc. See also Bagge, *Coal and Clean Air Law: A Case for Reconciliation*, 4 *ECOLOGY L.Q.* 479 (1975) [hereinafter cited as *Coal and Clean Air*].

138. For a general discussion of this problem, see, e.g., Note, *Non-Degradation*, *supra* note 5, at 817-18; *New and Hazardous Sources*, *supra* note 29.

139. Clean Air Amendments § 111(a)(1), 42 U.S.C. § 1857c-6(a)(1). For a definition of "reasonably available control technology" under section 111, see 40 C.F.R. § 51.1(o) and § 51, Appendix B (1973).

140. The most recent Administration proposals to alter the Clean Air Act seek to encourage new technological developments by allowing new sources to adopt control technologies which, it is thought, will probably satisfy applicable performance standards, but which have not yet been "adequately demonstrated" to the Administrator. Sources utilizing such devices would be allowed to violate secondary standards. Letter from Rus-

EPA's proposed regulations do little to remove this alleged disincentive. In general, satisfaction of NSPS is considered sufficient evidence that best available control technology has been applied to a source.¹⁴¹ The only new impetus for the development of new technologies is found in the requirement that certain categories of new or expanded sources be subject to a preconstruction review process. Sources producing sufficient emissions to violate applicable NSD regulations might be denied permits after such review, *even if* new source performance standards are met and best available control technology is applied. Owners wishing to locate facilities in clean air areas, but who were unable to meet applicable NSD new source review requirements, would have an incentive to seek new control technology to enable them to construct or expand their installations.¹⁴²

The basic effect of NSPS, however, remains a disincentive. The defect in these standards is that they *do not* limit total emissions from a source. Instead they limit emissions per unit of production, whether production be framed in terms of kilowatt hours or tons of steel.¹⁴³ Using such a standard, when the production of a plant is increased, the allowable emissions increase proportionately. This is very significant in terms of NSD strategy, for it creates an incentive, once the standards are achieved by a source, to increase production, hence emissions, to the maximum capacity of the plant.

Thus NSPS are a relatively poor device for achieving compliance with NSD regulations, since such regulations, to be effective, must be set so as to prevent emissions from a source from exceeding a specific increment in pollution levels. If a source is constructed, there seems to be little in EPA's loose definition of "expansion" which would guarantee that all steps which could result in increases in emissions would

sell Train, EPA Administrator, to U.S. House of Representatives, accompanying proposed Clean Air Act Amendments of 1974, reprinted in H.R. REP. 93-1013, 93rd Cong., 2d Sess. 33 (1974).

141. The criteria the Administrator must use in determining "best available control technology" are set out in note 29 and accompanying text *supra*.

142. EPA, throughout the nondegradation controversy, has consistently maintained that NSPS were sufficient to maintain existing air quality in clean air areas. See Note, *Non-Degradation*, *supra* note 5, at 817-18; EPA Brief, *supra* note 14, at 12-13.

143. For example, the SO₂ limitation set for a sulfuric acid plant is expressed as 4 lbs. of SO₂ per ton of sulfuric acid produced. 40 C.F.R. § 60.82 (1973). Other NSPS are expressed similarly. See 40 C.F.R. Part 60, subparts D, E, F, G (1974); 39 Fed. Reg. 9308 (1974). The final NSD regulations require the imposition of an emissions limit on new or modified sources "which represent[s] that level of emission reduction which would be achieved by the application of best available control technology. . ." 1974 Final Regulations, *supra* note 12, § 52.21(d)(2)(ii), 39 Fed. Reg. 42516 (1974). This leaves unclear whether, in the absence of established NSPS, states might impose absolute emission standards rather than production-oriented NSPS. An absolute emission standard would, of course, be required for a source which would prospectively violate the air quality increment of the NSD regulations.

be reviewed.¹⁴⁴ A single source, in this scenario, could thereby exhaust or exceed the entire allowed NSD increment for the area. Should such events come to pass, they would make the rational allocation of the increment among competing new projects impossible.

One alternative NSD proposal which would attempt to grapple with the technology issue has been proposed by the Environmental Defense Fund (EDF). The EDF has proposed the adoption of one form of an emissions charge plan.¹⁴⁵ EDF would, in effect, create a national tertiary ambient air quality standard for clean air areas which in no case could be violated.¹⁴⁶ A tax would then be imposed upon new polluters in areas to which the tertiary standard applied to discourage the growth of emissions. The EDF proposal does not differentiate among sources of different sizes for purposes of taxation—all sources, no matter how small, will be taxed,¹⁴⁷ including automobile emissions.¹⁴⁸ Typical rates would be ten cents per pound for sulfur dioxide and twenty cents per pound for all other pollutants.¹⁴⁹

Such a scheme would clearly provide an incentive and a source of funds for the development of new control technologies,¹⁵⁰ yet the disadvantages are numerous. Primarily, it is difficult to design an emissions charge scheme which is strong enough to encourage compliance with a tertiary standard without increasing source operating costs to the point that the ultimate cost of the product will be too high for the consumer.¹⁵¹ Or, if the tertiary standard is removed, significant deterioration may not be prevented if both polluter and consumer are willing to bear the added cost of the emissions charge. Finally, it does not reach all polluters. Many small sources of sulfur dioxide and particulates would necessarily be exempt from the system in order to keep the administrative costs of implementation of the plan low.¹⁵²

144. See note 67 *supra*.

145. EDF Comments, *supra* note 53, at 4-6.

146. *Id.* at 4.

147. *Id.* at 5-6.

148. *Id.* at 5.

149. *Id.* at 6.

150. The Nixon Administration at various times promoted an emissions charge system, at least for SO₂. See, e.g., The President's State of the Union Message on Natural Resources and the Environment, Feb. 15, 1973, in 1973 ENVIRONMENTAL QUALITY REPORT, *supra* note 86, at 443. Prominent economists have also long promoted emissions charges as the principal means of regulating the use of an otherwise free resource, namely, air. See, e.g., A. KNEESE, R. AYRES, AND R. D'ARGE, ECONOMICS AND THE ENVIRONMENT: A MATERIALS BALANCE APPROACH (1970). See also D. MACKINTOSH, THE ECONOMICS OF AIRBORNE EMISSIONS (1973).

151. Some of the theoretical problems in formulating a viable emissions charge system are discussed in Fishelson, *Taxing Emissions, a Theoretical Note*, 24 J. AIR POLL. CONTROL ASS'N 44 (1974).

152. On the subject of diminishing returns in air quality enforcement resulting from increases in administrative costs as the size of sources regulated decreases, see Zerbe, *Optimal Environmental Jurisdictions*, 4 ECOLOGY L.Q. 192 (1974).

D

NSD AND ENERGY

As has become apparent, the implications of NSD policy present some of the major issues which lie at the heart of any air pollution control strategy. NSD additionally serves to highlight the conflicts between the Clean Air Act's goals and the nation's need for energy. The air pollution problem has largely resulted from the burning of fossil fuels. Because most urban areas are presently violating, or close to violating, national primary and secondary air quality standards,¹⁵³ they have sometimes felt forced to export their pollution to clean air areas. The Four Corners power complex, now partially in operation, and the proposed North Central power project will pollute massive amounts of presently clean air while supplying power needs of urban areas hundreds of miles away.¹⁵⁴ An effective NSD policy would limit the use of this option, thus reducing the ability of some cities to meet anticipated energy demands while cleaning up their air. Such situations present obvious conflicts between NSD and anticipated energy needs.

Other conflicts are equally pressing. Without exporting pollution or changing to a completely new method of power generation, states and utilities have available four basic methods for reaching ambient air quality standards for sulfur dioxide and particulate matter: employing emissions control technology to reduce emissions;¹⁵⁵ adopting control strategies which disperse emissions rather than reduce them;¹⁵⁶ removing sulfur from the fuel before it is utilized;¹⁵⁷ or switching from high-sulfur to naturally low-sulfur fuels. Fuel switching has been the most common technique, and is the one most seriously affected by the energy shortage.¹⁵⁸

153. See 1973 ENVIRONMENTAL QUALITY REPORT, *supra* note 86, at 272-275.

154. See *Nondegradation Hearings*, *supra* note 6, at 52-53; Sierra Club Brief, *supra* note 4, at 20-22.

155. This would include use of devices which would improve combustion processes, as well as add-on devices, such as scrubbers, which seek to remove pollutants after they are formed. See text accompanying note 179 *infra*.

156. See note 120 *supra*.

157. The high sulfur content of much oil can be reduced relatively cheaply. At 1970 prices, reducing sulfur content to 0.5% would cost about 50-80 cents per barrel, which would increase energy costs by 0.7 mills per kilowatt hour. Some plants for sulfur removal have already been constructed. On the other hand, sulfur removal from coal has not yet been demonstrated to be commercially feasible. ENVIRONMENTAL POLICY DIVISION, LEGISLATIVE REFERENCE SERVICE, LIBRARY OF CONGRESS, THE ECONOMY, ENERGY, AND THE ENVIRONMENT, A BACKGROUND STUDY PREPARED FOR THE USE OF THE JOINT ECONOMIC COMMITTEE, 91st Cong., 2d Sess. 106 (1970).

158. Use of this method has become sufficiently widespread so that some cities have shown significant improvement in air quality for SO₂ in the last ten years. That this improvement has not been due solely to exporting pollution to clean air areas is shown by the fact that total national emissions of SO₂ have declined and can be expected to

Fuel switching generally has proven to be the cheapest short-term alternative, since it does not require expensive pollution control equipment. Prior to the fuel shortage, many states which had been using large quantities of high-sulfur coal or oil were gradually shifting to low-sulfur fuel oil or natural gas in order to meet the requirements of the Clean Air Amendments or stricter state standards.¹⁵⁹ Through the use of fuel switching, some formerly polluted areas have been able to achieve air quality better than that required by secondary standards and are thus subject to the newest NSD regulations.¹⁶⁰ Other areas have always been able to rely on their large supplies of low-sulfur fuels as one of the major ways of meeting air quality standards for sulfur dioxide.¹⁶¹

However, in recent months, supplies of clean fuel have become more expensive and at times unavailable.¹⁶² As the instability of supply increased, the Federal Energy Office (FEO), now the Federal Energy Administration (FEA),¹⁶³ established, as did EPA,¹⁶⁴ various allocation schemes to insure that areas with the worst pollution prob-

do so for the remainder of this decade, if clean air regulations are not relaxed and sufficient quantities of low sulfur fuel are obtained. 1973 ENVIRONMENTAL QUALITY REPORT, *supra* note 86, at 265-74; 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18988 (1973).

159. *Hearing on the Fuel Shortage and the Clean Air Act, S. 2680, Before the Subcomm. on Air and Water Pollution of the Senate Comm. on Public Works, 93rd Cong., 1st Sess., ser. 93-H26, Testimony of Russell E. Train, at 20, 23-24 (1973)* [hereinafter cited as the *Fuel Shortage Hearing*]; *Hearing on the Administration's Proposal for Relaxation of Air Pollution Standards Before the Subcomm. on Air and Water Pollution of the Senate Comm. on Public Works, 93rd Cong., 1st Sess., ser. 93-H19, Statement of John Love, (former) Director, Federal Energy Office, at 17-19 (1973)* [hereinafter cited as *Relaxation Hearing*].

160. 1973 Proposed Regulations, *supra* note 12, 38 Fed. Reg. 18986-87 (1973).

161. A typical example is the state of California. Public utilities in the state for many years have had a cheap supply of natural gas, which is almost sulfur free. This fact is reflected in a comparison of emission data from the San Francisco region and the nation. Nationally, the percentage of SO₂ emissions from fuel combustion by stationary sources is roughly 80 percent of the total. 1973 ENVIRONMENTAL QUALITY REPORT, *supra* note 86, at 266. In the San Francisco Bay area, based on 1972 figures, SO₂ from the same type source was only 10 percent of the total. At no time during 1972 was the 24 hour national secondary standard for SO₂ violated within the Bay Area Pollution Control District. BAY AREA AIR POLLUTION CONTROL DISTRICT, AIR POLLUTION AND THE SAN FRANCISCO BAY AREA 36, 40 (8th ed. 1973). Thus, even some large urban areas have been able to remain well within secondary standards for SO₂, and would be subject to NSD regulations.

162. *Relaxation Hearing, supra*, note 159, at 15. Unavailability was increased by the Arab oil embargo. Of course, the possibility of a future embargo continues to threaten energy supplies.

163. The Federal Energy Administration was created by the Federal Energy Administration Act of 1974, Pub. L. 93-275, 88 Stat. 96, 1974 *U.S. Code Cong. and Ad. News* 872.

164. *See Hearings on the Energy Emergency Act Before the House Comm. on Interstate and Foreign Commerce, 93rd Cong., 1st Sess., ser. 93-47, at 143-76.*

plants receive the lowest sulfur fuels.¹⁶⁶ But the trend to comply with the requirements of the Clean Air Act by switching from "dirty fuels" to "clean fuels" has been slowed or even reversed.¹⁶⁶ This has led to increased demands that air pollution standards and state implementation plan schedules be relaxed.¹⁶⁷ These demands have been partially satisfied by the passage of the Energy Supply and Environmental Coordination Act of 1974 (ESECA).¹⁶⁸

These developments clearly threaten NSD policy. First, the use of high-sulfur oil will cause significant air quality degradation in many clean air areas. The problems will be evident both in the case of existing sources and in the case of new and modified stationary sources subject to new source performance standards, which will be forced to burn high-polluting fuels.¹⁶⁹

Second, there is a conflict between NSD policy and the perceived need to further develop and utilize existing coal supplies. Coal producers have argued that unless air quality standards are relaxed, coal production will not increase, because industries which might otherwise use coal have found it more economical, or have been required by state implementation plans, to use less polluting fuels.¹⁷⁰ Several provisions of ESECA attempt to provide a short-term remedy for this problem, thereby making available additional energy sources.

165. The authority to promulgate allocation regulations was strengthened on a temporary basis by the Emergency Petroleum Allocation Act of 1973, Pub. L. 93-159, 15 U.S.C. §§ 751-56. Regulations under the Act expire in February 1975 unless amended or exempted by the President. *Id.*, § 753(g)(1). In addition, the FEO has relied on the authority of the Economic Stabilization Act of 1970, Pub. L. 91-379, 84 Stat. 796, and executive orders issued pursuant to it.

166. See *Fuel Shortage Hearing*, *supra* note 159. An example of an area expecting significant problems as a result of "reverse" fuel switching is Los Angeles County. If no relief from adverse natural gas allocation decisions is forthcoming, emissions of SO₂ in 1975 for the area are expected at a minimum to double those of the worst previous year, 1955, in which there were severe but localized sulfur smog episodes. L.A. Times, Jan. 6, 1974, pt. I, at 1, col. 4.

167. See, e.g., *Relaxation Hearing*, *supra* note 159, Statement of John Love, (former) Director, Federal Energy Office, at 13-21. At that hearing, Love was arguing for the temporary relaxation of state standards which are stricter than national secondary standards, thus clearing the way for increased use of fuel allocations of high sulfur oil to areas whose air quality was better than secondary standards. The same arguments made at that hearing work equally well against a policy of NSD. *Id.* *Fuel Shortage Hearing*, *supra* note 159, Statement of Robert V. Price, Exec. V. Pres., Nat'l Coal Ass'n, at 77-97; *Nondegradation Hearings*, *supra* note 6, Statement of Carl E. Bagge, Pres. Nat'l Coal Ass'n, at 96-140.

168. Pub. L. 93-319, 88 Stat. 246, 1974 U.S. Code Cong. and Ad. News 1663.

169. *Relaxation Hearing*, *supra* note 159, at 18.

170. See, e.g., *Nondegradation Hearings*, *supra* note 6, Statement of Carl E. Bagge, Pres., Nat'l Coal Ass'n, at 118-19, 125-26. Bagge also expressed the fear that power plants would be forced to remain in the already polluted cities rather than moving to clean air regions outside urban areas. *Id.* See text accompanying notes 182-86 *supra*. For further discussion of these problems, see *Coal and Clean Air*, *supra* note 137.

At the same time, however, these provisions prevent NSD policy from being fully implemented in all clean air areas, and, moreover, threaten the effectiveness of the entire Clean Air Act.

First, under section 2 of ESECA, existing power plants which have retained the capacity to use coal as a fuel will be, and other fuel burning sources with coal burning capacity may be, prohibited from burning natural gas or other petroleum products.¹⁷¹ Further, the FEA Administrator may require that plants still in the planning stage be designed so as to be capable of burning coal as their primary energy source.¹⁷²

Second, section 3 of ESECA adds section 119 to the Clean Air Act which (1) allows the EPA Administrator to suspend stationary source fuel or emission requirements for sources unable to comply with these requirements because of the unavailability of clean fuels or because the source was required to burn coal under section 2 of ESECA;¹⁷³ and (2) requires the EPA Administrator to grant a compliance date extension of applicable air pollution requirements to any source required to burn coal under section 2 of ESECA, or to any source which began conversion to coal between September 15, 1973 and March 15, 1974.¹⁷⁴ At a minimum most sources falling under these provisions must be able to comply with primary standards before a conversion order, suspension of air pollution requirements, or a compliance date extension will be granted.¹⁷⁵ In certain cases, however, the source may be allowed to violate primary standards if the Administrator determines that there is no "imminent and substantial endangerment to [the] health of persons."¹⁷⁶

EPA has attempted to prevent NSD review of sources falling under the provisions of ESECA by exempting sources which have in-

171. §§ 2(a)(1), (2), 1974 *U.S. Code Cong. and Ad. News* 1664.

172. *Id.* § 2(c). The authority to issue such orders expires on June 30, 1975. *Id.* § 2(f)(1). The authority to enforce such orders expires Dec. 31, 1978. *Id.* § 2(f)(2). The section of ESECA providing for conversion to coal could be less effective than its sponsors had hoped. EPA Deputy Administrator John Quarles recently stated that barring relaxation of state emission regulations, only four power plants could be converted from fuel oil to coal under ESECA. 5 *ENV. RPT. — CURR. DEV.* 476-77 (1974).

173. § 3 adding Clean Air Act, § 119(b)(1)(A), amending 42 U.S.C. § 1857 *et seq.* (1973), 1974 *U.S. Code Cong. and Ad. News* 1666. Such suspensions expire on June 30, 1975.

174. *Id.* § 119(c)(1). Compliance date extensions shall not extend beyond Jun. 1, 1979. *Id.* § 119(c)(1)(B).

175. *Id.* §§ 119(b)(1)(A)(ii), 119(d)(2)(A), 119(c)(2)(A)(ii).

176. *Id.* § 119(b)(3). The House Report accompanying H.R. 14368, the predecessor to ESECA, stated in connection with the short-term suspension authority granted by § 119(b)(1) of the Clean Air Act added by the bill: "What is intended is that some violation of the national primary ambient air quality standards may be permitted so long

creased pollution without making "major capital expenditures."¹⁷⁷ In light of the broad powers granted to the EPA Administrator by ESECA to suspend otherwise applicable standards imposed by the Clean Air Act, deleting such sources from NSD regulations appears to be unnecessary. For example, suppose EPA issues a compliance date extension which states that a source required to convert to coal fuel may delay meeting emission limitations imposed by a state implementation plan until Jan. 1, 1979. EPA has not adequately explained why the same source could not also be expected to satisfy NSD requirements to which it otherwise might have been subject at the time the compliance extension was issued.¹⁷⁸

Use of ESECA provisions to delay implementation of clean air standards adds to the apparent lack of interest influential government and industry spokesman have shown in developing new technology needed to provide both alternative energy sources and improved air pollution control systems. An example of this resistance to new technology is the firm stand of the coal industry and several power companies against the use of stack scrubbers, which remove as much as 90 percent of the sulfur dioxide and a substantial portion of particulate matter from exhaust gases in fossil-fuel-fired facilities.¹⁷⁹ Installation of such systems, which coal suppliers insist are "not available,"¹⁸⁰ is ad-

as any of the public would not be exposed to significant health risks." H.R. REP. NO. 93-1013, 93rd Cong., 2d Sess., 1974 *U.S. Code Cong. and Ad. News* 1807.

177. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31003-04. In the final regulations, this exemption is provided for in the redefinition of the words "modification" and "modified source." No modification has taken place when a source uses "an alternative fuel or raw material, if prior to the effective date of a paragraph in this part which imposes conditions on or limits modifications, the source is designed to accommodate such alternative use." 1974 Final Regulations, *supra* note 12, § 52.01(d)(2) (iii), 39 Fed. Reg. 42514 (1974). See notes 51 and 67 *supra*.

178. This approach is foreshadowed in testimony given at the *Fuel Shortage Hearing*, *supra* note 159, Testimony of David Hawkins, Natural Resources Defense Council, at 73.

179. Most stack scrubbers present the additional problem of disposal of the waste slurry created by the removal of the SO₂. There is as yet no economic use for this material. For a review of the problems involved in stack scrubbing, see Nannen *et al.*, *Removal of SO₂ from Low Sulfur Coal Combustion Gases by Limestone Scrubbing*, 24 J. AIR POLL. CONTROL ASS'N 29 (1974); *Coal and Clean Air*, *supra* note 137. Ayres, *Stationary Sources, Sulfur Dioxide, and Supplementary Control Systems*, 4 *ECOLOGICAL* L.Q. 441 (1975).

180. *Nondegradation Hearing*, *supra* note 6, Statement of Carl Bagge, Pres., Nat'l Coal Ass'n, at 85. However, the EPA recently declared "that recent experience demonstrated conclusively that the so-called 'scrubbing' technique for removing sulfur gases from smokestacks was effective and reliable." EPA supported its claim by citing the fact that in the last 11 months the number of scrubbers in use had climbed from 44 to 93. Release of the statement coincided with the announcement that Philadelphia Electric had purchased scrubbers for three generating plants at a cost of \$67 million. This would allow the use of nearby high-sulfur eastern coal, rather than western low-

mittedly time consuming and may be costly.¹⁸¹ However, a strictly applied NSD policy, coupled with additional government financial support, could act as an incentive to further development of adequate sulfur dioxide control technology. In addition, continued oil and natural gas shortages, along with rising prices and increased energy demands, will certainly make coal more attractive, even if stack scrubbers are required.

E

NSD AND LIMITED GROWTH

The belief has become increasingly widespread that air pollution control and perceived socioeconomic needs are mutually incompatible. Since much of the undeveloped part of the nation's land contains air which is cleaner than required by the secondary standards,¹⁸² future growth may of necessity be pushed to areas subject to an NSD policy. Given a strictly applied NSD policy, growth and development will occur only in certain situations. If present urban dirty air areas improved their air quality to levels higher than the secondary standards, development could be allowed until the secondary standards were reached. Alternatively, if a clean air area having some pollution improved its air quality, new sources could be allowed to pollute up to the standard set under NSD. Little development would be possible in areas whose air quality is nearly pristine.

In light of the indeterminate benefits to the public health and welfare of a strict NSD policy, EPA seriously questions whether making air quality the "single overriding criterion" in planning of future growth and development is desirable. This problem is cited by EPA as the chief conceptual drawback to NSD regulations.¹⁸³ In order to make NSD planning less disruptive of existing programs, EPA encourages coordination among all agencies with control over land use and consideration of other planning requirements in the designation of clean air areas under the proposed rules.¹⁸⁴

sulfur, thereby eventually resulting in a decrease in electricity rates. N.Y. Times, Sept. 26, 1974, at 39, col. 7; 5 ENV. RPT. — CURR. DEV. 793 (1974).

181. See *Fuel Shortage Hearing*, *supra* note 159, statement of Russell Train, Administrator of EPA at 32-33.

182. See note 13, *supra*.

183. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31001 (1974).

184. *Id.* at 31001-02. For coordinating review of land use decisions, EPA suggests use of the following management units and procedural guides: Air Quality Maintenance Plans, discussed in note 200 *infra*; areawide waste treatment management units which may be required by § 208 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. §§ 1251 *et seq.*; the intergovernmental and review coordination process outlined in Office of Management and Budget Circular A-95 (latest revisions and the complete text of OMB Circular A-95 are contained in 38 Fed. Reg. 32873 (1973));

The key assumption EPA makes in raising these planning objections is that air pollution control technology has not become economically feasible for relatively pollution-free growth to take place in clean air areas. As previously pointed out, the Sierra Club has vigorously disputed this assumption.¹⁸⁵ EPA itself suggests that Class II increments, which are substantially smaller than secondary standards, would allow the construction of a 1000 megawatt fossil-fuel-fired electric generating plant with presently available control technology. The capacity of an average size plant currently in use is only 300 megawatts, according to EPA figures.¹⁸⁶ Given this possibility of development, and assuming that Class II increments are applied nationwide, it is conceivable that other factors, such as limited natural resources, community growth restrictions, and adverse economic conditions could operate to limit growth in clean air areas before the theoretical NSD limits are reached. Thus, NSD limitations may more properly be seen as but one of many factors to be taken into account in planning development in clean air areas.

In addition, technology is improving rapidly, to the point where new source and resource development may be possible in pristine air areas without sacrificing existing air quality. Further, a strict NSD policy could serve as a catalyst to the development of technology at a faster pace.

Admittedly, the development of new control techniques will not be inexpensive. Also, to the extent that an NSD policy does operate to limit growth, some economic dislocations might result. This raises a second, perhaps more serious, objection to an NSD policy. Where will the burden of increased pollution control costs ultimately fall? In a recent comment to EPA concerning the proposed regulations, the Department of Health, Education and Welfare suggested that a disproportionate share of these costs will be borne by those least able to afford them, such as the poor, the elderly, and others living on fixed incomes. Due to the fact that any increased costs to industry will simply

a good critique of the value of the A-95 review process in air quality management is given in G. HAGEVIK, D. MANDELKER, & R. BRIL, *AIR QUALITY MANAGEMENT AND LAND USE PLANNING* 107-115 (1974)); and Environmental Impact Statements (EIS) which may be required by the National Environmental Policy Act, 42 U.S.C. §§ 4321 *et seq.* (1970). 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. at 31001-02. It should be noted that § 7(c)(1) of the Energy Supply and Environmental Coordination Act of 1974, Pub. L. 93-319, 88 Stat. 246, 1974 *U.S. Code Cong. and Ad. News* 1663, exempts actions taken under the Clean Air Act from the requirements of NEPA. However, an EIS might still be required on other grounds for individual sources subject to NSD review, and there is nothing to prevent statewide acts similar to NEPA from being applied where appropriate in the designation of clean air areas and the new source review process.

185. See note 124 *supra*.

186. 1974 Proposed Regulations, *supra* note 12, 39 Fed. Reg. 31002 (1974).

be passed on to consumers in the form of higher prices for energy and manufactured goods.¹⁸⁷ This would be particularly true if government did not partially subsidize the costs of developing new technology, thus distributing these costs to those better able to afford them.

However, this is an issue which will have to be faced even in the absence of an NSD policy. A recent court decision has interpreted the Clean Air Act as mandating maintenance of the national ambient air quality standards once they are attained.¹⁸⁸ At the time of attainment, new development will be limited to the air quality margin permitted by improved control technology. Thus, an NSD policy may be viewed as simply moving the time for resolution of this social issue forward for clean air areas, hopefully before deterioration to the secondary standards has taken place. In addition, a stringent policy of NSD would serve to focus attention on the nation's dependence on highly polluting forms of transportation, power generation, and industrial production, thereby suggesting the need for land use planning, alternative energy research and resource conservation programs to address these problems. There is every reason to believe that NSD policy, properly formulated and implemented, could be the catalyst, rather than the obstacle, to the necessary reversal of current land use patterns.¹⁸⁹

F

TOWARD AN NSD STRATEGY

1. *Ambient Opposed to Emissions Limitations*

It has been argued above that "significant deterioration" should in most cases be defined relative to existing pollution levels rather than the national secondary standards. But the question remains whether the base level should be measured in terms of total emissions or ambient air quality. For several reasons, it is submitted that the definition of "significant" should be formulated in terms of emission increases, rather than in terms of increases in the ambient levels of pollutants.

First, in many cases the harmful effects of a particular pollutant may occur at relatively low levels of ambient air pollution—levels at which it is difficult both accurately to quantify the amount of pollution

187. *Id.* at 31002-03.

188. *Natural Resources Defense Council v. Environmental Protection Agency*, 475 F.2d 968, 4 ERC 1945 (D.C. Cir. 1973).

189. See Comment, VII: *Air Zoning—A Land Use Model for Air Quality*, 4 ECOLOGY L.Q. 781 (1975); Mandelker & Rothschild, *The Role of Land Use Controls in Combating Air Pollution Under the Clean Air Act of 1970*, 3 ECOLOGY L.Q. 235 (1973).

and to determine the deleterious effects.¹⁹⁰ Assuming that it is a proper goal of NSD to guard against effects which are as yet unknown or unquantified,¹⁹¹ the adoption of an NSD plan which includes, at a minimum, regulation of total emissions would best respond to this concern.

Once the health and welfare effects of low level concentrations are better quantified, it may be proper to recast primary and/or secondary standards accordingly. But until such time as each of those effects is adequately identified and quantified, the use of ambient air standards is inappropriate, for such standards should not be subject to change with each newly discovered effect upon health or welfare. Although section 109 of the Clean Air Act provides for periodic revision of secondary standards as the need arises,¹⁹² effective enforcement requires that standards be revised only after sufficient information is available to set a stable standard. If they were, the resulting instability of standards would discourage industry from attempting to comply.

The second reason for preferring emission limitations is that they are easier to enforce and provide precise notice of the standard which the prospective source will be required to meet. Under such a system engineers will be able to design plants in advance that will be certain to comply with the law. On the other hand, with an ambient air standard, plant designers must not only calculate the pollution which their plants will produce, but must also attempt to estimate the pollution from all other sources in the area, both present and future. Additionally, they must take into account natural factors which will affect the pollution levels, such as weather patterns. The end result of all this uncertainty may be that a plant designed in good faith to meet an ambient air standard would later have to be changed or even closed

190. A common example of a hazard of this type is acid rain. The "acid rain" effect of low level pollution is well documented but it is not adequately controlled by secondary standards. Acid rains are caused by the conversion of sulfur and nitrogen oxides into acids as rainfall removes them from the atmosphere. Their harmful effects are not yet clear, but they may leach nutrients out of the soil, have toxic effects on plants, and substantially increase water pollution. These effects occur at quite low ambient pollution levels. See Williams Statement, *supra* note 76. In addition, the effects of acid rains are dependent upon total emissions rather than upon ambient air quality levels. These factors point towards the adoption of an emissions, rather than an ambient NSD strategy. Other examples of low level pollution effects which are directly related to total emissions rather than ambient air quality are visibility, and cumulative effects of various hazardous air pollutants. On the other hand, potential health effects associated with long term exposure to air pollution are more easily correlated to ambient air quality. For examples and case studies, see *Nondegradation Hearings*, *supra* note 6, Statement of Laurence I. Moss, Pres., Sierra Club, at 55-57; Sierra Club Brief, *supra* note 4, at 15; Williams Statement, *supra* note 76.

191. See text accompanying notes 62-65 *supra*.

192. Clean Air Amendments § 109(b)(1), 42 U.S.C. § 1857c-4(b)(1) (1970).

down because of factors beyond the control of its owner. Considering the alternatives, potential polluters as well as their regulators may prefer the certainty of emission limitations even if such limitations are more stringent than necessary to meet a given ambient standard.

On the other hand, it has been noted above¹⁹³ that the dispersive capacities of air are frequently relied upon to prevent violation of primary or secondary standards in some AQCR's. Thus, meteorological factors suggest that an absolute limit to degradation must be, in most cases, an ambient air quality level cleaner than that required by the secondary standards—in effect, a tertiary standard—that will vary with location depending on local weather patterns.¹⁹⁴ Without such a tertiary standard, emissions originating in one state or AQCR may drift into another, causing secondary standard violations in the latter *even though applicable emissions limitations have been met in each region*.

Implementation of this type of ambient air quality control would require regions to design a model of the relevant meteorological conditions and emission source inventories. It would also require that even the most unfavorable weather conditions could not create pollutant concentrations which would violate secondary standards. To assure that adverse weather conditions do not cause ambient standard violations, a margin of safety could be included in the local air quality standard, such as that which has been included in the primary ambient air quality standards.¹⁹⁵ Although modeling techniques sufficiently sophisticated for this proposed system are still a few years from completion,¹⁹⁶ rough approximations can be made in the interim to guard against inadvertent laxity or severity in the standards adopted.

2. *Interjurisdictional Cooperation and AQCR Delineation*

As previously noted,¹⁹⁷ Air Quality Control Regions as presently delineated do not bear any relation to meteorological or topographical patterns. Moreover, the necessary degree of interregional coopera-

193. See text accompanying notes 85-88 *supra*.

194. It is with respect to this issue that the plan advocated herein differs from such emission schemes as the Sierra Club's. The Sierra Club Plan, discussed in text accompanying notes 115-130 *supra*, would apply a uniform definition of "significant," thereby failing to take account of the fact that local variations in weather conditions could produce violations of standards in one area while adequately protecting another. Further, the Sierra Club's failure to consider meteorological effects could result in violations of standards in small air pockets with peculiar weather patterns, even though over a large area standards would appear to have been met.

195. Clean Air Amendments § 109(b)(1), 42 U.S.C. § 1857c-4(b)(1) (1970).

196. Telephone interview with Richard I. Pollack, Lawrence Livermore Laboratory, May 8, 1974. See, e.g., LAWRENCE LIVERMORE LABORATORY, DEVELOPMENT OF AN AIR POLLUTION MODEL FOR THE SAN FRANCISCO BAY AREA—FIRST ANNUAL REPORT TO THE NATIONAL SCIENCE FOUNDATION (1973).

197. See text accompanying note 91 *supra*.

tion which has been demonstrated to date has been less than adequate.¹⁹⁸ An effective NSD policy would require EPA to insure that AQCR's or equivalent regional structures created to implement NSD policy conform better to this need.

This is not to suggest, however, that correlating AQCR's or NSD regions to pollution patterns will always be a simple task. Factors such as seasonal changes in weather patterns make it difficult to discover well-defined boundaries. In addition, the use of an emissions limitation standard could mean that in a very large control region, the allowed percentage increment of emissions might be great enough to accommodate one large polluting source which would seriously degrade the the immediately surrounding air quality.

Given these problems, it might be sound practice to establish sub-basins within a central region defined according to localized pollution conditions. Such sub-units might also be drawn consistent with local land use planning goals, but in any event would be subject to the percentage emission limitations applicable to that sub-area as well as the local tertiary standard.¹⁹⁹ The authority of the control region should be broad enough to include the power to require relocation of a source which would seriously impinge upon the ability of adjacent subareas to maintain the secondary or tertiary standards.²⁰⁰

198. See note 93 *supra*.

199. Exactly such a proposal has been made by the Comprehensive Planning Organization (CPO) of San Diego County, which is an association of the County Board of Supervisors and incorporated cities, including the City of San Diego. CPO functions as a regional land use and transportation planning agency for the county, and sees itself as having a strong role in implementing efforts to improve air quality. It has suggested that air basins be subdivided and that emission limitations be set in proportion to existing air levels in each of the subareas. This would limit, CPO maintains, the extent to which development would be directed away from existing urban areas to underdeveloped areas. Furthermore, CPO asserts, this mechanism is consistent with NSD requirements and with long range efforts to improve air quality. Statement of Richard Rypinski, Chairman of the Comprehensive Planning Organization of San Diego County, EPA Region X, Indirect Source Regulation Hearings, San Francisco at 10 (Dec. 7, 1973).

200. One obvious way of integrating an NSD policy into the rest of the Clean Air Act would be to use the concept of Air Quality Maintenance Areas (AQMA's) as proposed by EPA. See *Complex Sources*, *supra* note 22, text accompanying notes 134-52. AQMA's are to be established by the states for the purpose of maintaining secondary standards until 1985. EPA, Guidelines for Designation of AQMA's, OAQP's No. 1.2-016, Jan. 11, 1974. Any area expected to come close to violation of the secondary standards is to be designated an AQMA. All others should therefore be subject to NSD regulations. *Id.* at II-3. The criteria for the designation of AQMA's include, *inter alia*, consideration of projected growth rates and meteorological effects on air pollution patterns. Careful consideration of these factors would lead naturally to the recognition that some areas will need to be kept cleaner than secondary standards to permit maintenance of those standards in other areas. Thus, an NSD policy could be an effective supplement to the goal of air quality maintenance.

However, the states may choose to be less sophisticated in their designation pro-

CONCLUSION

The controversy over NSD has accentuated a number of central issues raised by air pollution control in general. Issues such as how best to spur pollution control technology development, how to achieve interregional cooperation in the fight against pollution, and how to insure that the air's finite capacities are not overloaded—all these problems were lurking in the Clean Air Act. They have been brought to the forefront more immediately as a result of *Fri v. Sierra Club*. It is certain that when Congress addresses itself to possible amendments to the Clean Air Act, the issue of NSD will be one of the most hotly debated.

From the beginning, EPA has shown little inclination to forge a thoughtful and effective scheme for preventing significant deterioration. The initial regulations which it proposed, as well as the plan it is preparing to promulgate, are remarkable in their avoidance of definition or implementation of a serious NSD policy. EPA has repeatedly referred to the Clean Air Act's intent to give states primary responsibility for controlling air pollution. Yet it is apparent that few states can be expected to adopt a strong NSD policy on their own initiative. Further, it is EPA which is under court order to insure that such a policy is formulated.

It is nearly certain that when EPA promulgates its final NSD regulations, Sierra Club will challenge their adequacy in court.²⁰¹ It would appear to be EPA's strategy to promulgate the least effective regulations which can withstand judicial challenge. That may indeed give the agency quite a bit of leeway. This time around, the question for determination will not be one of statutory construction, but one of administrative implementation. The relative expertise of court and agency will likely, therefore, swing the decision more in EPA's favor.

Thomas M. Disselhorst

cedure. The designation guidelines allow the states to proceed simply by defining any Standard Metropolitan Statistical Area (SMSA) as an AQMA. SMSA are defined by the Bureau of the Census with regard to population density and do not necessarily reflect air pollution patterns. Considerable pressure will be put on the states to designate clean air areas as AQMA's in order to accommodate future growth and development, and this less sophisticated designation procedure may allow it. Such AQMA's would be equivalent to Class III areas in which deterioration to secondary standards is allowed under EPA's 1974 NSD proposal. See text accompanying notes 97-100 *supra*. As growth on the fringes of urban areas increases, which it will, maintenance of secondary standards can be expected to be hampered in the absence of a more stringent NSD policy than the one proposed by EPA. For a discussion of the fringe growth phenomenon and some of the problems it presents, see Comment, *VII: Air Zoning—A Land Use Model for Air Quality*, 4 *ECOLOGY L.Q.* 781 (1974).

201. Interview with Bruce Terris, Sierra Club Attorney, Sept. 20, 1974. See also 4 *ENV. RPTR.—CURR. DEV.* 1705 (1974).

August 19, 1975

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED

AUG 20 1975

OFFICE OF THE DIRECTOR

Mr. Joe B. Richards
300 Forum Building
777 High Street
P.O. Box 10747
Eugene, Oregon 97401

Dear Mr. Richards:

Re: Agenda Item E, August 22, 1975
EQC Meeting

The staff of the DEQ is requesting that the EQC adopt three sets of rules as agenda item E at your meeting August 22, 1975. The first of these, significant deterioration rules, presents perhaps the most complex and technically difficult issues ever to come before the EQC. The staff requests you to adopt the rules it presents, on an emergency basis, without hearing, and without any opportunity for any person in the state outside the staff to offer any input on the basic conceptual shape of the rules, let alone the finer details of the specific numbers proposed or matters of draftsmanship and specific application.

I. Agenda Items E2 and E3

On the latter two sets of rules, standards for new stationary sources and emissions standards for hazardous pollutants, the staff has conducted a public hearing, at which I, among others, was allowed to participate. My views on those issues are accurately represented by the reports of Mr. McSwain, the Hearings Officer. The staff has amended the stationary source rules since the public hearing, and have, by addition of §25-000.30, answered my primary objections to the earlier proposals.

A. New Source Performance Standards

The newer version of the stationary sources rules suffers from a new malady: wordiness and

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overexplicitness. Since 40 CFR part 60 was first promulgated in 1971, it has been amended on July 26, 1972, May 23, October 15, and November 14, 1973, March 8, April 17, May 3, June 14, October 25, and November 12, 1974, and January 16, April 25, and June 25, 1975. EPA will probably continue to amend it frequently. Staff now proposes to incorporate the substantive provisions as of August 1975 into OAR. How long will CFR and OAR remain congruent? To avoid public confusion, I urge the Commission to adopt only Sections 25.000.10 through 25.000.50, and the first paragraph of Section 25.000.60, of these rules.

B. Hazardous Contaminants

The hazardous contaminant rules suffer from a parallel excess of verbosity. I urge the Commission to adopt only Sections 25-450 (first and third sentences only) and 25-460 (substituting "regional air quality control authority established under provisions of ORS 468.505" for "Regional Authority") of the staff's proposed rules, and substitute for the staff's Section 25-455 new language which accomplishes the same purpose in a small fraction of the words used by the staff:

"25-455 DECLARATION OF POLICY AND ESTABLISHMENT OF STANDARDS. The Environmental Quality Commission hereby establishes as a policy for the operation of the Department of Environmental Quality that the Director shall not permit the emission of any Hazardous Contaminant in quantities in excess of those 'hazardous air pollutants' allowed to be emitted under the federal Clean Air Act, 42 USC §1857c-7, as amended or renumbered from time to time, and all regulations promulgated thereunder. The federal standards adopted herein by reference are minimum standards and, as technology advances or circumstances warrant, the Department of Environmental Quality or regional air quality control

shall
may apply more stringent limitations. Nothing in this section shall prohibit the adoption of Hazardous Contaminant standards for an air contaminant which has not been declared a 'hazardous air pollutant' by the United States Environmental Protection Agency."

II. Significant Deterioration Rules

The significant deterioration rules present more serious problems. The staff asks that you "find that failure to act promptly will result in serious prejudice to the public interest" (staff report, p. 5). The specific reason the staff offers for this finding does not support the finding. EPA would retain concurrent control over preconstruction review even if the temporary rule were adopted (staff report, p. 3). There is no allegation that any source application subject to the proposed temporary rule will require action prior to the next regularly scheduled meeting of the Commission, and thus no need to adopt a rule prior to the September EQC meeting. There is no allegation that the Commission is prevented from reclassifying areas of the State (which it could do under the EPA rules even if EPA did not delegate authority to conduct preconstruction review of new sources to the State), since there are presently no reclassification proposals before the Commission. Since the substantive limitations upon new sources are identical under the EPA and proposed temporary rules, neither air quality nor the owners or operators of new sources would be protected by adoption of the temporary rule.

A temporary rule will expire inevitably in 120 days. Unless you are presently convinced that you wish to adopt a rule flashed before you by the staff in the context of an emergency proceeding, there may well not be time to give this enormously complex issue the depth of consideration a rational decision would require. Three months from now, you will be faced with the dilemma of either adopting on a permanent basis a

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rule you don't now understand and which has serious weaknesses (see the enclosed article), or allowing all state authority over significant deterioration to expire in the following month. You cannot re-adopt a temporary rule for an additional 120-day period.

The staff report (bottom of p. 3) states that modification of the state implementation plan takes several months. While the complexity of the issue demands deliberate consideration of a course of action, there is no legal requirement that the process take so long. If you are now satisfied that the proposed staff rule is that which you wish (subject to evaluation of public testimony) to adopt, you could give notice, hold public hearings, and consider a permanent rule by the regularly scheduled September EQC meeting. That course would be foolhardy, because new ideas which might be presented in public testimony could not receive a fair evaluation in 30 days. A public hearing on the proposed rule in the next 30 days would, however, reveal to you why you should never adopt the proposed rule as a temporary rule, even at a future EQC meeting.

Your agenda for the August 22 meeting is extraordinarily full. Do not let an air quality rule which affects more than 90 percent of Oregon's land area receive cursory consideration due to constraints of time at a rushed meeting. I respectfully request that the Commission take the following actions this Friday on Agenda Item E-1:

1. Vote "nay" on the Director's recommendation.
2. Direct the Department to solicit proposals on the conceptual shape of proposed rules by a letter to AOI, OEC, OSPIRG, NEDC, AGC, 1000 Friends of Oregon, and other interested parties. The letter should be sent not later than September 1, and should not contain a DEQ prejudgment of what the shape should be. Responses should be requested to be submitted by September 30.
3. Direct the Department to summarize and report to the Commission on the concepts suggested from

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outside the DEQ at the regularly scheduled EQC meeting in October, and take oral public testimony at that time.

4. Direct the Department to prepare to conduct hearings on its proposal for a permanent significant deterioration rule to become part of the state implementation plan in early November, and report the results of the hearings to the EQC at its regularly scheduled meeting in November.

5. Resolve to make best efforts to adopt a permanent rule at the December EQC meeting.

As an enclosure with this letter, I have included a copy of an article I wrote last September on the then-proposed EPA rules which, with only minor changes, were adopted by EPA in December and which the staff now proposes to adopt. I call your attention especially to the discussion beginning on the right side of page 50040. Adoption of the rules proposed by the staff will give you political battles even greater than you have experienced with subsurface sewage regulations.

I should be happy to meet with the Commission or any individual member on this topic at any time.

Very truly yours,

THOMAS GUILBERT

Thomas Guilbert .

TG:jg

Enclosure

cc: EQC Commissioners, w/ encl.
Director of DEQ, w/ encl.

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. 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 . . ."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 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 [*Siena 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. §1857e-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. 31001 (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.

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at concentration.

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August 22, 1975

Mr. Joe Richards, Chairman
Environmental Quality Commission
1234 S.W. Morrison
Portland, Oregon

RE: Agenda Item E, August 22, 1975 EQC Meeting
Proposed Temporary Rule--Prevention of Significant
Air Quality Determination

Dear Mr. Richards:

Environmental Disciplines Inc. are environmental and engineering consultants to Cascade Energy, Inc., who propose to build one of three oil refineries issued air contaminant discharge permits in March, 1975. The following comments are offered on behalf of Cascade Energy, and also on our own behalf as consultants who will be working frequently with your staff and clients under any new rule that may be adopted.

As a matter of context, it should be noted that DEQ's review of Cascade Energy, and the conditions imposed in its permit, were for the most part based on assuring compliance with the degradation limits for Class II areas as given in the rule before you today. Our client went to considerable expense to provide a rather detailed air quality analysis to enable your staff to assess the project's degradation impact. Cascade Energy is still in the process of determining the economic feasibility of building and operating the refinery under the stringent permit conditions resulting from DEQ's evaluation under the degradation standards.

In other words, you have been enforcing this rule on an ad hoc basis since January, 1975 when the parent EPA rule went into effect.

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We would endorse the adoption of an EQC rule after the EPA regulation if and only if the delegation of authority from EPA is certain, final, and absolute. Like any sensible person, we would rather deal with State government than Federal government; but it would be intolerable to have to deal both. Cascade Energy is currently being subjected to this very kind of bureaucratic duplication with respect to its water discharge permit in which DEQ's lengthy review process has been followed by an even lengthier EPA procedure.

So if you can have the first and last word on issuance of permits, we prefer adoption of the rule. But if you only have the first word and EPA has final review and approval, or a parallel program, let's forget the matter and let industry deal directly with the Feds.

Assuming a decision to adopt a state rule, we would offer the following suggestions in order to improve and clarify the regulation:

1. 38.005(9)(b)(c) should be kept intact both in the temporary and permanent rule. Otherwise DEQ will be in the position of doing deterioration studies on every dual-fuel boiler in the state next winter when gas is curtailed and they switch to oil as they always do.
2. The deletion of the phrase in 38.020 as suggested in the staff report would be appropriate, since it speaks to the physical modification not to the use of the alternative fuel.
3. 38.020(2) on page 4 is new language not taken from the federal rule, and is redundant with 3(a) and 3(b) on the same page, and with general permit issuing provisions. It can be deleted without significant damage to the rule. Most importantly however, the word "probably" has no place in regulatory language and must be deleted.
4. We note with horror the three discretionary time extensions of 30 days each allowed the Director in 38.025(1)(f). Conceding they are taken intact from the EPA rule, we nevertheless urge the Commission to explore means of specifying in the rule some criteria for time extensions by DEQ, to minimize the possibility of a 110 day process routinely becoming a 200 day process.

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5. In 38.025(4), the EPA/DEQ jargon term "the control strategy" has no context in the OAR's and can be deleted without damage to the substance of the rule. All elements of Oregon's Implementation Plan control strategy have been and will be incorporated in local, state and federal regulations, so that mention of compliance with the control strategy is redundant and will only cause confusion in the future.
6. Add to 38.025(5) a sentence along the following lines:

"Such consultation shall occur and be concluded within the time periods specified in part (1)(b), (d) or (e) of this section"

In other words, provide some assurance that the input from an indecisive or non-responsive planning agency will not extend the DEQ review process.

We thank you for the opportunity to present these comments and trust they will receive your thoughtful consideration.

Yours very truly,



F. Glen Odell, P.E.

cc: Mr. Loren Kramer
Mr. Larry Schreiber

STATEMENT OF MULTNOMAH COUNTY COMMISSIONER MEL GORDON

REGARDING PROPOSED ADOPTION OF A TEMPORARY RULE

ON SIGNIFICANT DETERIORATION OF AIR QUALITY

Environmental Quality Commission August 22, 1975

Mr. Chairman and members of the Commission. Thank you for the opportunity to make several comments on this important item.

I believe that the Environmental Quality Commission, as a matter of policy, should decide to hold open public hearings on all non-emergency proposals which come before you for adoption. I believe that adoption of a temporary rule, which prevents an open public debate about the pros and cons of an issue, should only take place where authority is lacking to deal with a matter of immediate concern affecting the public health, safety, or welfare.

By these tests, the proposed rule on significant deterioration should not be adopted today. Instead, I recommend that your Commission instruct the D.E.Q. staff to draft a proposed permanent rule on significant deterioration for consideration at a public hearing at your October meeting.

As President of the Association of Oregon Counties, and as chairman of a national committee on environment and energy, I have been concerned about air quality matters.

Here are the four specific concerns I have about the proposed rule, and about the proposal to adopt it at this time.

1. Adoption of a temporary rule prejudices the content of permanent rule, by putting the E.Q.C. "stamp of approval"

on that temporary rule. This proposal essentially entails adoption by Oregon of the E.P.A. rules on significant deterioration. Across the Nation there has been much criticism of the E.P.A. rules by responsible groups, and I feel that Oregon's rules on significant deterioration of air quality should be drawn up and adopted in a way which is not prejudiced by the E.P.A. policy.

2. Multnomah County did not receive a copy of the proposed temporary rule until early this week. Concerned jurisdictions, groups and citizens have not had a chance to study this proposal in sufficient detail and the proposal has not received wide distribution, as a matter of this importance should.

3. I share the D.E.Q. staff's concern for cutting red tape and halting unnecessary delays. If E.P.A. review of the air quality impact of certain industrial plants or expansion projects in the Portland Metropolitan Area is the only thing holding up construction schedules, then I would be inclined to reconsider my position. However, it appears entirely possible, given only the information provided in the written staff report, that E.P.A. review of the air quality impact of these projects could go on concurrently with other permit processes or planning that the companies may be involved in. There was no evidence presented in the written staff report to justify a decision to preclude full and open, unprejudiced, public discussion of this important matter.

I want to add that it appears that the E.P.A. could use D.E.Q. air quality data in their review, and that the D.E.Q. Director, Mr. Kramer, should ask E.P.A. to speed up their review process for these projects.

And, 4. If a temporary rule is adopted, any applicant who applies for an air quality permit prior to the expiration of the temporary rule will come under the procedures of the temporary rule. If the permanent rule is significantly different than the temporary rule, this may cause unforeseen problems.

In conclusion, unless the staff can prove to you that there is some reason of overriding importance for adoption of this rule today, I urge you to table this temporary rule and instruct D.E.Q. staff to prepare a permanent rule by the end of September, so that it can receive wide distribution prior to your October meeting, at which there should be a public hearing. In addition, I recommend that the D.E.Q. staff work closely with the Community Development Committee at CRAG in drafting the proposed permanent rule.

Thank you for the opportunity to present my views.

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 ...*"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 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 Ports, 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 [*Siena 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. §1857e-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. 31(X)5 (Aug. 27, 1974).

29. 42 U.S.C. §1857(h) (1), ELR 41202.

30. 42 U.S.C. §1857c-4(a)(1)(A), ELR 41205.

31. 2 ELR 20263.

32. 39 Fed. Reg. 31(X)6 (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. 31001 (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.

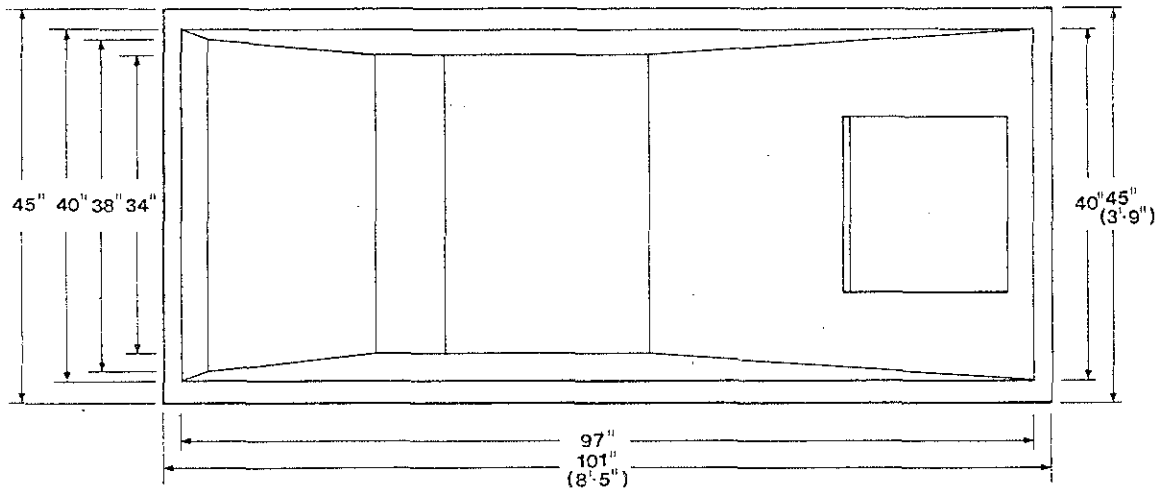
Eighth, the burden of proof is placed upon every applicant who must obtain any air pollution permit to show that he can comply with the regulations.

Ninth, permittees are required to continuously monitor

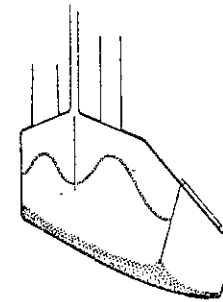
the effects of their emissions on ambient air quality.

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.



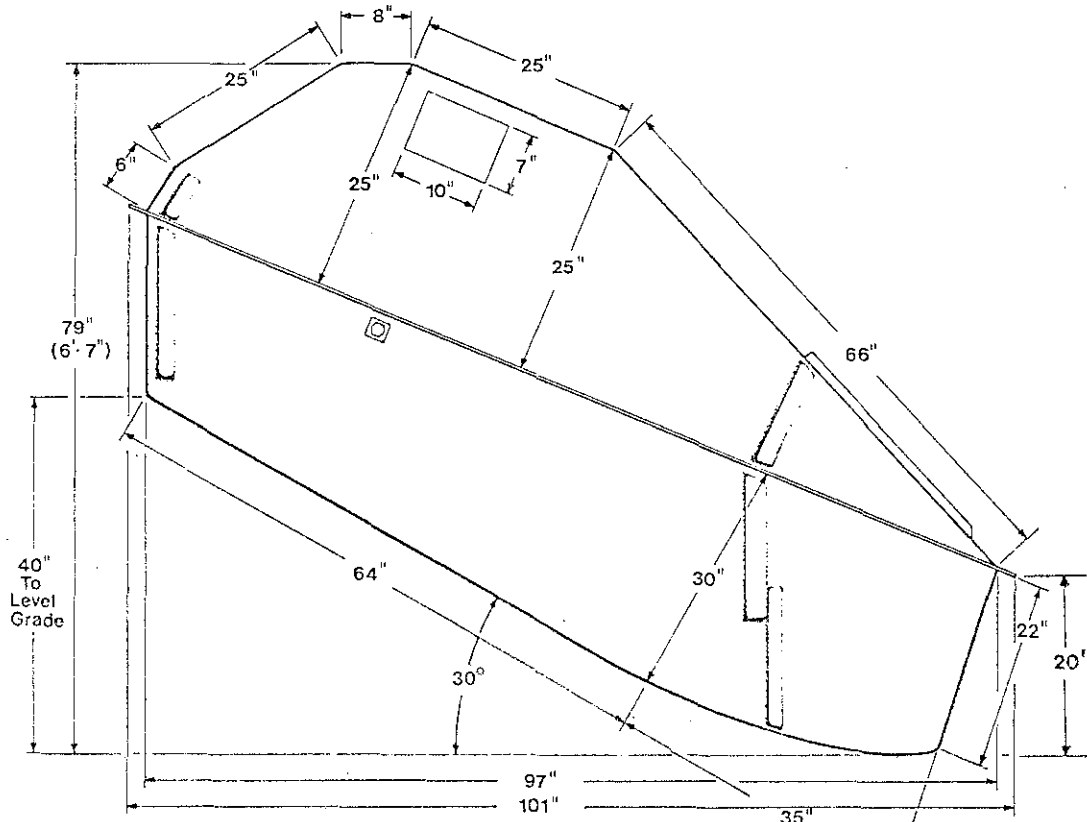
Top View



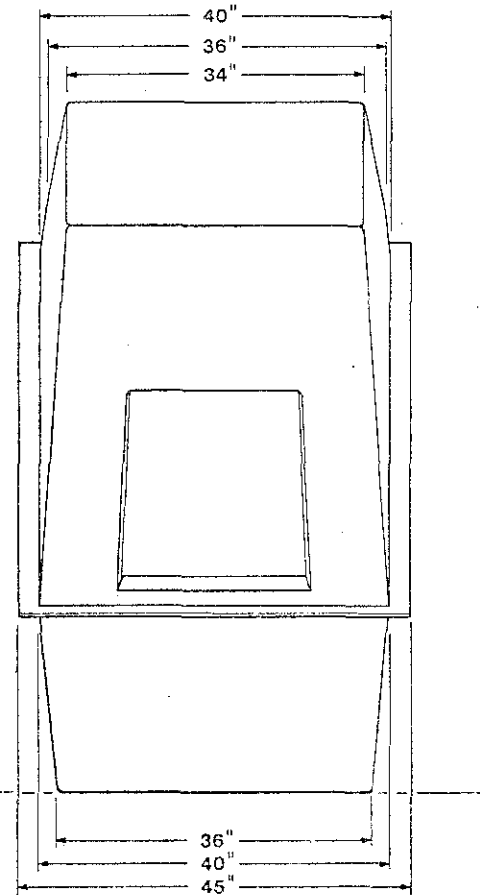
Clivus Multrum USA
 14A Eliot Street
 Cambridge, Massachusetts 02138
 617 • 491 • 5821

Item 01 Container, without midsection

Dimensions ± 1" Do Not Scale Dwg.



Side View



Front View

INSTALLATION INSTRUCTIONS

Proper installation of the Multrum is critical to its proper functioning.

This is especially true with respect to the vent, as the draft, like that in a chimney flue, depends on a rather delicate balance in the relationship between differences of air pressure, heat and height. Therefore, FOLLOW THESE INSTRUCTIONS CAREFULLY. If for some reason you are not able to achieve any of the recommended standards (such as the proper height of the vent pipe, etc.), contact us and we can help work out compensatory arrangements.

Receiving the Multrum

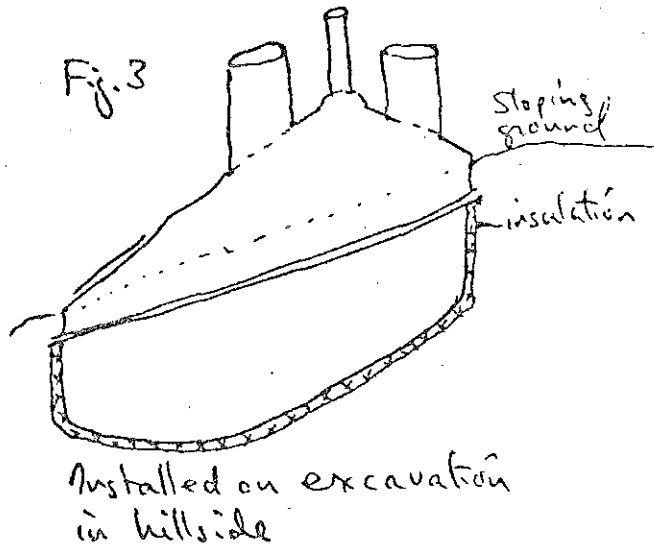
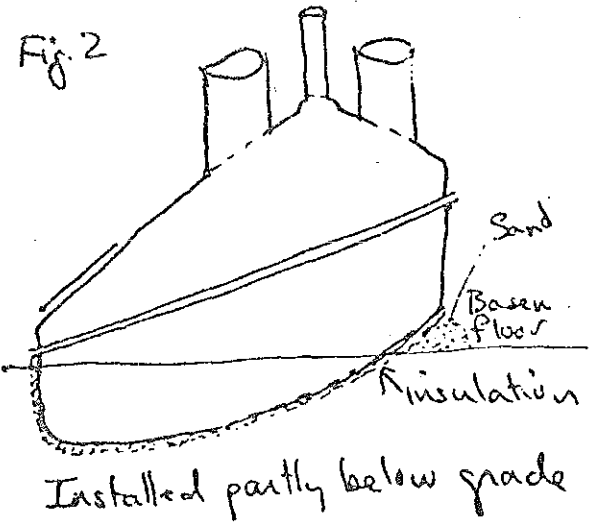
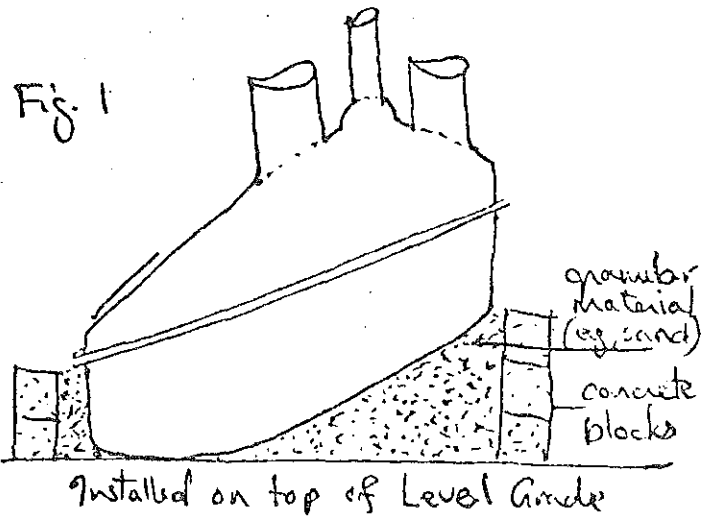
The container will arrive with the upper, lower (and middle, if you ordered one) sections fastened together by a few bolts for convenience in shipping. Two 16" (inside diameter) tube connectors with flanges and one vent outlet saddle come automatically with every model. Other parts which you may have ordered are listed separately.

CLIVUS MULTRUM USA, INC.
13A ELIOT STREET
CAMBRIDGE, MASS. 02138
617 491-5830

THE SWEDISH COMPOSTING
WASTE TREATMENT SYSTEM

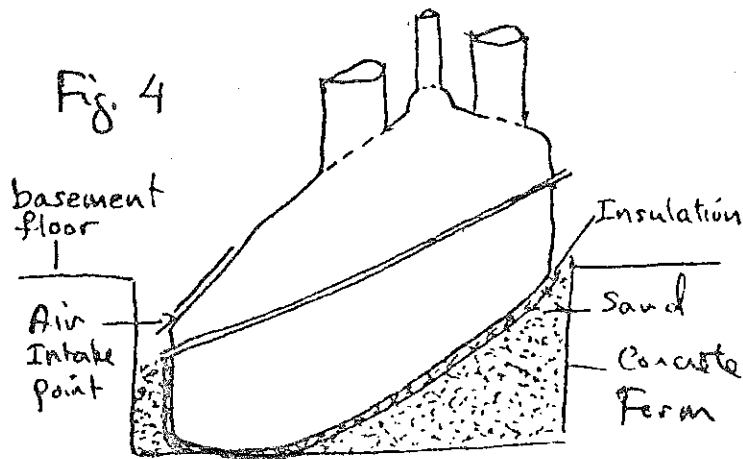
Foundation Preparation

The foundation must be designed to support the bottom of the container along its entire length at the proper angle. It may consist of wooden planking and frame, concrete, sand, concrete blocks, or the ground itself if the container is set into a partial excavation. (See Figures 1, 2, and 3).



Foundation Preparation (cont.)

If for some reason the container must be set in an excavation which is deeper than 21" (32" with mid-section), it will be necessary to build a concrete form in order to protect the air-intake point from ground water as well as from any blockage by the earth. (See Figure 4).



Working drawings for a wooden cradle for installation on grade are available on request.

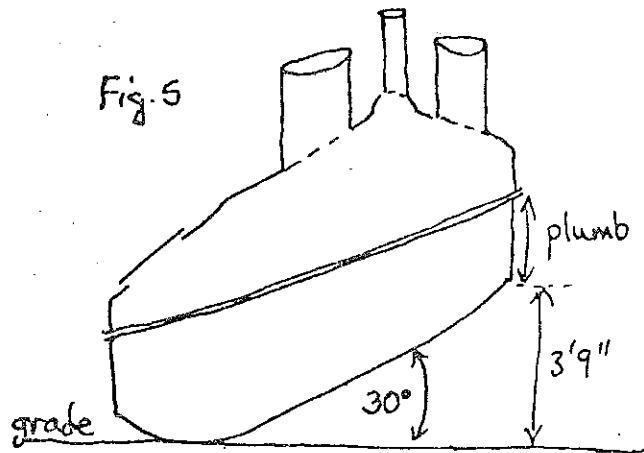
Some provision should be made in the construction of the foundation to support the container against a tendency to slide forward, especially as it gets heavier. Be sure that there are no rough or sharp edges in the foundation material which might puncture the container.

Establishing the Proper Angle of Inclination

The proper angle of inclination can be established by satisfying one (or all, depending on location) of three criteria:

- a) the line of the floor of the container should form a 30° angle with level ground if the container is set on, or partially in, level ground.
- b) the uppermost wall of the lower section of the container should be plumb.
- c) if the Multrum is sitting on top of a level grade, the heel of the container should be 3'9" above the grade.

See Figure 5.

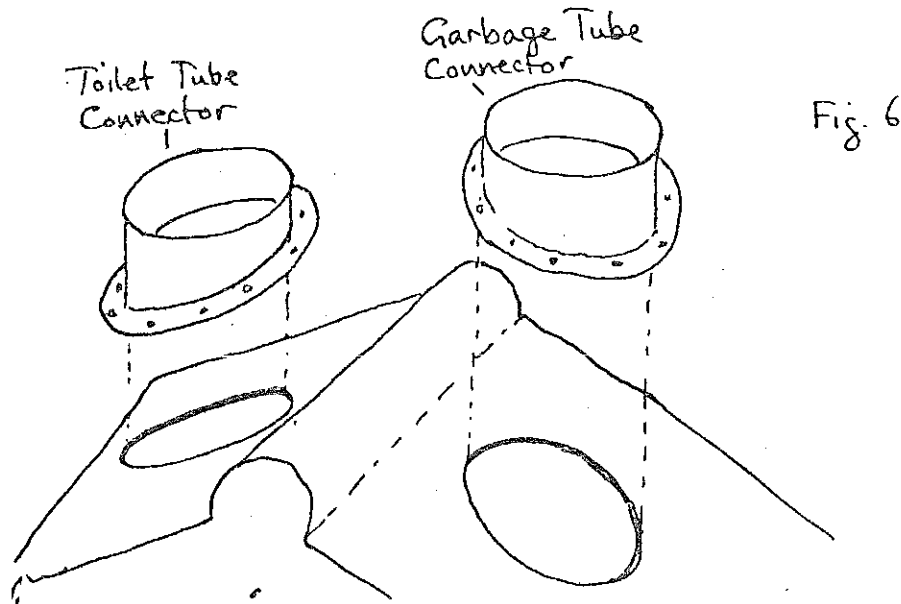


Installation

1. Cutting the holes for the tubes and vent pipe:

Once the position of the container has been established with respect to angle of inclination, location of the garbage and toilet inlet points, and having taken into account the appropriate angle of the vent, the holes for these three openings may be cut in the top section of the container. Openings in the floor for the toilet stool and garbage inlet point should have been prepared in advance with the whole container temporarily in place so that their exact centers can be transferred to the top of the container by means of a plumb bob.

Care must be taken when establishing the outline of the tube connector flange on the surface of the upper half of the container to ensure that these connectors will be vertical. Note that the tubes form an ellyptical shape, not a circle. (See Figure 6).



The hole for the vent pipe must also be established and cut at this point since there may not be enough room to do so once the whole container is permanently in place and bolted together. If there will be room, this can be done later.

The top of the container may be removed from the bottom for convenience in cutting the holes once their outlines have been established.

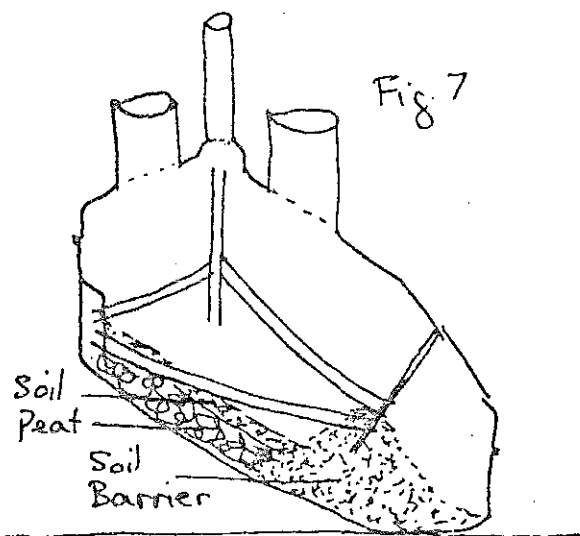
2. Insulation

The bottom of the container should be insulated with some material that will not compact under the weight of the container (blue urethane pad is suitable). In especially cold climates or in an unheated basement it would be wise to insulate the sides of the tank as well.

The bottom section of the container may now be set permanently in place on the foundation.

3. Preparing the earth and peat bed

a) Earth barrier: in order to prevent undecomposed material from tumbling into the storage chamber from the garbage chamber in the first year or two, it is necessary to tightly pack a bank of soil against the bottom edge of the lower partition. (See Figure 7).



On the garbage chamber side of this partition, this earth bank should be built up above the point at which the lower air ducts are connected to the partition. This is essential.

b) Peat: spread a 6" layer of peat moss along the bottom of the upper 2 chambers of the container. The purpose of this is to absorb the large quantities of liquid in the urine and garbage during the first years when there will be insufficient absorbant organic matter to do this. This is essential.

c) Soil: spread a 2-3" layer of topsoil or humus on top of the peat. The purpose of this is to inoculate the container with a ready supply of the microorganisms. It is not essential, but it will ensure a quick start up of the decomposition process.

4. Attaching the upper and lower sections

First coat the seam (along the bolt holes) of the lower half of the container with some kind of water-tight, airtight sealant (e.g., neoprene gasket, plumber's stainless putty, caulking compound, etc.).

Then place the top of the container (or the mid-section if you have one) on the bottom. The bolts should be self-aligning due to the lip on the seam of the bottom section.

The sections may then be bolted together, tightening the screws just enough to ensure an airtight seal.

The upper and lower parts of the two partitions separating the interior chambers must at this point also be joined. The four bolts for the upper partition can be affixed through the windows in the sides of the container; those for the lower partition can be put in place through the hatch in the storage chamber.

5. Attaching the tube connectors and vent outlet saddle

This may be done either before the top and bottom sections of the container are bolted together, or after, depending on convenience. Some sort of sealant must also be used along with bolts to attach these connector parts to the container.

6. Attaching the tubes to the tube connectors

The outside diameter of the tubes must be 16" in order to fit snugly in the tube connectors. These tubes will rest on the bolts protruding through the inside surface of the tube connectors. If the tubes have been purchased from Clivus Multrum USA, they will be fiberglass, so an air-tight seal can be achieved by fiberglass roving or mat painted with resin at the outside seam. If any other type of tube is used, be sure in advance that the fiberglass tube connectors can be joined to the tubes with a material that will form a bond with both.

7. The Vent

The vent outlet saddle may be attached at any point along the hump which runs across the top of the container at its highest point. The same sealant used for the seams and flanges should be used here along with bolts.

If the vent is installed properly, it will operate entirely with a natural draft.

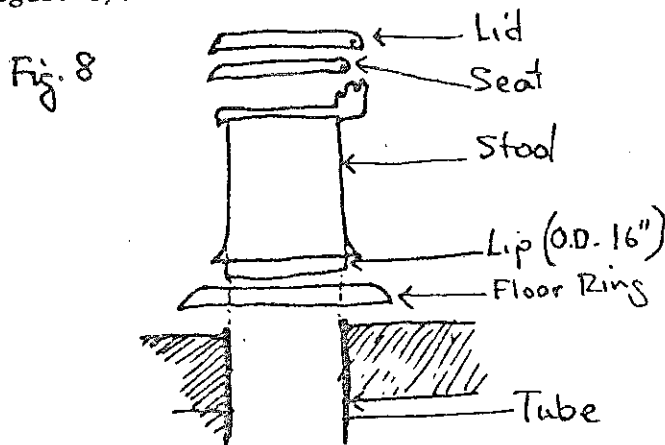
Rules for installing the vent:

- a) it should be straight and as nearly vertical as possible.
- b) unavoidable turns should be made by slow curves rather than sharp angles.
- c) the vent pipe (not provided by CM) should have a smooth interior surface and should not be a good conductor of heat and cold.
- d) the vent opening above the roof should be a minimum of 18 feet above the container.
- e) the vent opening should be at least 3 feet above the peak of the roof.
If there are trees or buildings interfering with cross winds, it should be higher.
- f) the vent pipe should be insulated at all points which are not always warm inside or outside the building.
- g) the vent pipe must be at least 6 inches inside diameter. (The vent saddle provided with each unit has a diameter of 6").

If these rules cannot all be followed, it may be necessary to install a small fan at the top of the vent in order to maintain the draft. This can be done at any time after the Multrum is installed if it is found that due to inadequate can taken, there are odors coming from garbage or toilet openings.

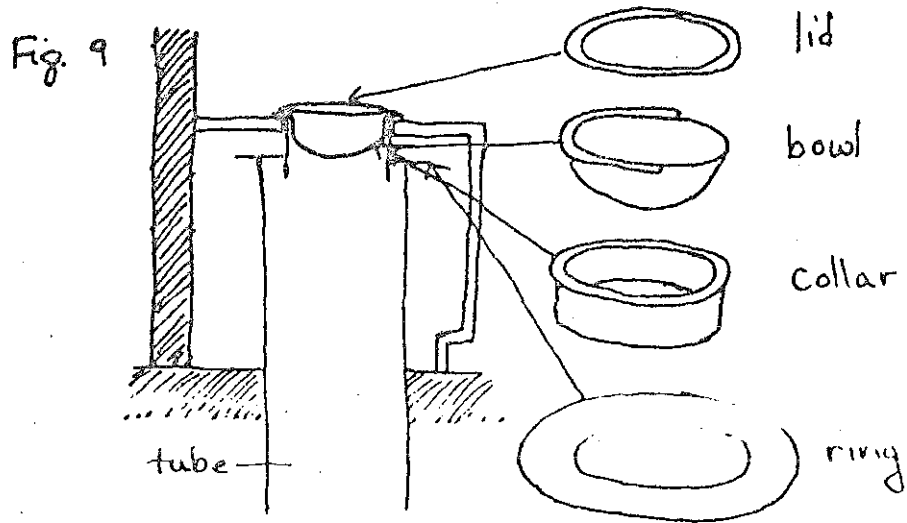
Toilet stool, garbage lid and ventilator

1. Toilet stool: the model provided by CM is designed so that it can simply rest on the floor of the bathroom. It has a lip at its base which protrudes below the floor level and into the 16" tube which should protrude 1/4 to 1/2" above the floor at its top. (See Figure 8).



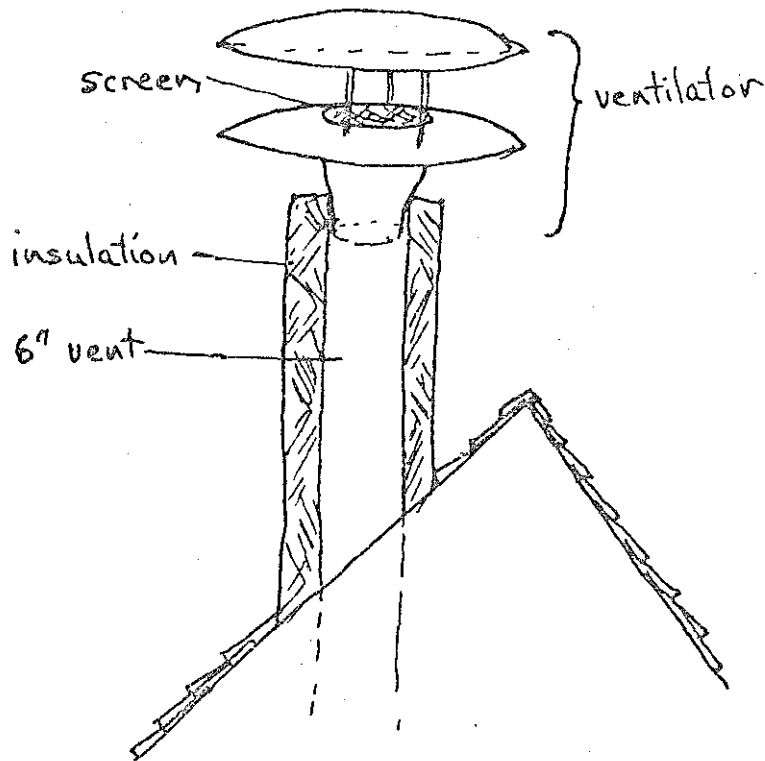
2. Garbage lid assembly: this consists of four parts: the ring (this can sit on top of the tube; the outside diameter is larger than the 16" tube, the inside diameter is the size of the collar, approximately 12"); collar (this piece fits through the ring and into the tube. It has a lip which extends over the counter); bowl (this may or may not be used. It sits inside the collar and, having a lip around half of its perimeter which extends over the edge of the collar, can be swivelled so that its contents may be dumped after they have collected); lid (this is to be used with or without the bowl). See Figure 9.

Garbage Lid Assembly



3. Ventilator: this piece is designed to help increase the draft. It fits into the top opening of the vent pipe. (See Figure 10).

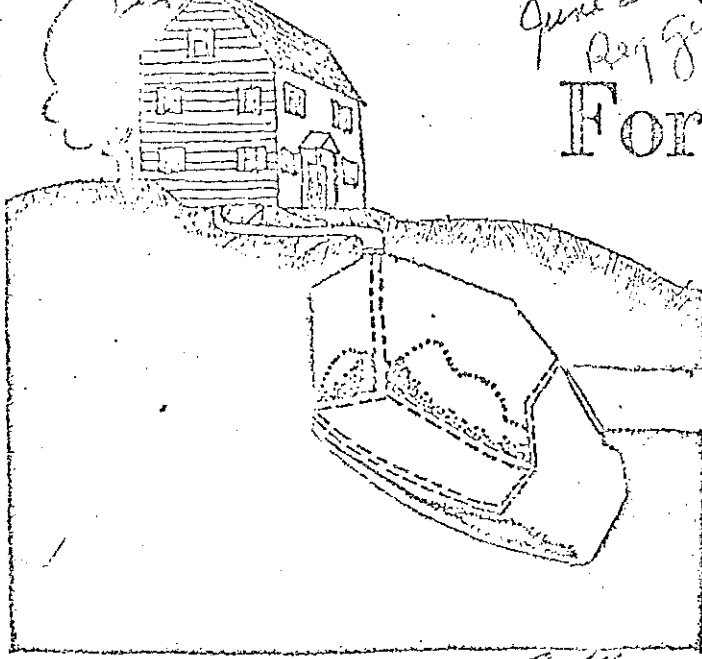
Fig. 10



For Instant Pollution

Just Add Water

By ROBERT RODALE



When Thomas Crapper invented the first practical flush toilet back in the 1870s, he was hailed far and wide as a great savior of the environment. Thanks to Crapper, the smell of human wastes began to disappear from the streets and infectious diseases declined sharply. Convenient indoor plumbing finally became a reality.

A hundred years later, though, the water toilet is not looking so good. Environmental engineers now see the folly of mixing one part human wastes with 99 parts of pure water to make sewage. Billions of gallons of that noxious fluid are churned out every day, all because we are so profligate in our use of water to dilute toilet wastes.

Sewage is truly a problem fluid. In addition to human wastes, it contains such contaminants as industrial chemicals and the high-powered cleaners poured down the drain by housewives. The muck that gets to the sewage treatment plant is loaded with toxic elements of many types, including some heavy metals like lead and mercury.

Unfortunately, even the most modern and expensive plants are not able to separate completely all the components of sewage. Water released into streams is still high in nitrogen and phosphates. And the sludge is mixed with heavy metals and other elements that can contaminate soils unless precautions are taken.

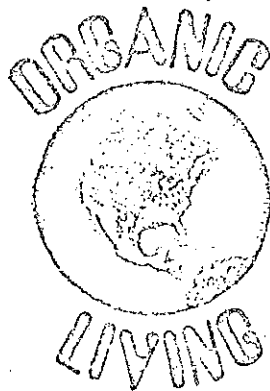
Realizing all these problems, environmentalists are now going back to the drawing board to try to develop entirely new systems for handling human wastes. Some companies are advocating chemical toilets similar to those on airplanes. They use only tiny amounts of water. Others are working on toilets that incinerate wastes into ash.

One of the most promising new systems was developed in Sweden several years ago, and is now in wide use there for vacation homes. Called the Clivus, it is an enclosed fiberglass chamber which receives both table scraps and human

wastes. The chamber is installed in the basement and has two hatches - one in the kitchen and the other in the bathroom.

Wastes put into the Clivus compost gradually, and after six months a safe, odorless humus is shoveled out and used for fertilizer. The Swedish Department of Health has given its stamp of approval to the system, saying that it creates no health hazards. There is no smell inside the house, because an ingenious vent system creates a downdraft whenever one of the hatches is opened.

The Swedes use Clivus system toilets mainly in farms and vacation homes, where a hookup to sewage lines would



be impossible. However, expanded systems able to handle the wastes produced by apartment houses are now under development. The Clivus system is not yet available in the United States, but it probably will be sold soon where building codes and other regulations permit.

The best feature of the Clivus is that it returns human waste to the soil, which is where it belongs. Valuable minerals, trace elements and humus are removed from topsoil by crop production and must be returned as organic fertilizer if fertility is to be maintained. Simply "disposing" of sewage in rivers or the ocean is destructive to the long-term health of our land.

Soil is also a natural purifying medi-

um for manure of all kinds. Soil organisms rapidly go to work converting the nutrients in wastes into forms that can be used by plants. Disease organisms are also killed eventually in the soil environment.

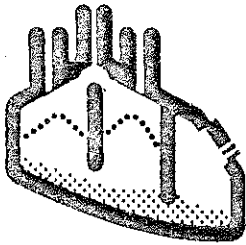
Problems arise only when human wastes are applied to the soil before being composted. Spreading raw "night soil" on the land is extremely unsanitary, and leads to problems with intestinal parasites and more-serious diseases.

But our revulsion against that practice has allowed us to place too strong a reliance on the water-dilution toilet and the "sanitary" sewers to which it is connected. We now see that those extensive networks of pipes are not the ultimate solution to human waste problems. Sewers merely transport that offensive stuff to a place where only partly successful efforts can be made to unscramble the weird mixture we have created.

The panic reaction that accompanies suggestions that human wastes be spread on the land is incomprehensible to some scientists working on ecological sewage systems. They point out that much raw sewage is poured into rivers, lakes and the ocean with only an occasional public outcry. But a suggestion for recycling composted wastes to the soil, where it will be neutralized quickly, is greeted with frowns.

There are many approaches that can be used to recycle organic wastes, and when all factors are considered they can be far safer than the present system of centralized, water-borne sewage. But they require that the water closet not be looked on as the last word in indoor plumbing.

Imagination doesn't hurt either. Another Swedish company, PE-BE-Electro-produkte, is making a toilet that freezes wastes the instant they are deposited in a plastic bag. The package is then picked up and deposited in a special composting unit.



**CLIVUS MULTRUM
USA**

Public Health Approvals

status at May 10, 1975

Since the Multrum was introduced into the United States in July 1974, units have now been installed in nineteen states and three Canadian provinces, (see list below). In the upper New England States approval has been general (Maine), or easily obtained under state codes (Vermont, New Hampshire); and in these states approximately 40% of U.S. Multrum sales have been made.

Outside of New England, public health acceptance has not been sought in any formal manner by Clivus Multrum. Generally, those states have approved single installations, for experimental purposes, and in most cases only one Multrum has been installed.

The company now has over seventy local distributors located in 27 states, a majority of whom either already have installed demonstration units, or will soon do so. It is expected that with demonstrator/experimental units widely dispersed throughout the states and Canadian provinces, the company will be better able to seek and obtain public health approvals.

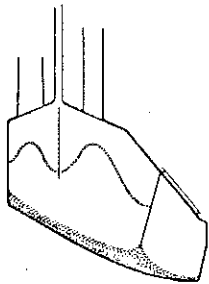
The Multrum is now under study at Washington University, St. Louis (Center for the Biology of Natural Systems), at San Dimas California (US Department of Agriculture, Forest Service), at Danby, Vermont and Laconia, New Hampshire, (Forest Service also). At St. Louis, experimental units are being subjected to tests of performance, stack gas sampling and analysis, and eventually, chemical analysis of compost material. The three U.S. Forest Service locations are testing Multrums under operational conditions in public facilities. Test results are expected in late summer 1975 from St. Louis, and in late fall 1975 from the U.S. Forest Service.

To date, Multrums have been installed in the following states and provinces:

Maine	Virginia	Colorado
Vermont	Arkansas	Montana
New Hampshire	Mississippi	California
Connecticut	North Carolina	Oregon
New York	Minnesota	Washington
Pennsylvania	Wisconsin	British Columbia
Ohio	Indiana	Quebec
		Manitoba

**CLIVUS MULTRUM USA, INC.
14A ELIOT STREET
CAMBRIDGE, MASS. 03122
617 891-5930**

**THE SWEDISH COMPOSTING
WASTE TREATMENT SYSTEM**



Price List / Order Form

Clivus Multrum USA
 14A Eliot Street
 Cambridge, Massachusetts 02138
 617 • 491 • 5821

Fill out in duplicate, send both copies to Clivus Multrum USA Inc, 14A Eliot Street, Cambridge, Ma. 02138. A signed copy will be returned to you when order is accepted.

Item No.	Description of Item	Price	Number of Items that I am ordering
01	<u>Small container without mid-section</u> necessary nuts and bolts included	\$ 975.00	_____
05	<u>Small container with one mid-section</u> necessary nuts and bolts	1075.00	_____
06	<u>Small container with two mid-sections</u> necessary nuts and bolts	1175.00	_____
02	<u>Large container without mid-section</u> necessary nuts and bolts included	1300.00	_____
03	<u>Large container with one mid-section</u> necessary nuts and bolts included	1400.00	_____
04	<u>Large container with two mid-sections</u> necessary nuts and bolts included	1500.00	_____
11	<u>Toilet Stool</u> , solid hard wood, 12-sided, polyethylene liner, seat and cover	97.00	_____
15	<u>Toilet Stool</u> , Rectangular, hard wood exterior, polyethylene liner and seat, solid birch seat cover	118.00	_____
17	<u>Toilet liner</u> , polyethylene (separate)	10.00	_____
12	<u>Simple Garbage Lid Assembly</u> (polyethylene bowl and cover)	49.00	_____
14	<u>Garbage Lid Assembly</u> with stainless steel cover. Suitable for installation into top of kitchen cabinet	75.00	_____
	<u> Tubes for garbage and toilet chambers</u> <u>and ventilation system</u>		
20	length 3', inside diameter 16"	24.00	_____
22	length 5', inside diameter 10 1/2 "	27.00	_____
23	length 5', inside diameter 6"	15.00	_____
41	<u>Tube connector</u> for 10 1/2" tube	12.00	_____
42	<u>Tube connector</u> for 16" tube	12.00	_____
25	<u>Elbow</u> for 6" vent tube, 15° degrees (fits with item #23)	12.00	_____
26	<u>Elbow</u> for 6" vent tube, 30° " (fits with item #23)	12.00	_____
30	<u>Ventilator</u>	46.00	_____

Effective June 20, 1975. Subject to change without notice.

Terms of sale. \$ 400.00 deposit with order, net prior to shipment. Prices are F.O.B. Manchester, N.J. Containers are shipped by common carrier, parts by United Parcel Service or common carrier.

PURCHASE ORDER AGREEMENT

Thank you for your order for the purchase of a Clivus Multrum home waste disposal system. This is intended to state our understanding with you concerning the arrangements for the purchase of this unit.

(1) We agree to ship to you one complete Clivus Multrum as listed by you on the order form (over) provided for you to complete. The costs of Installation, additional materials or attachments, or of freight charges, is not included.

(2) The prices are FOB Manchester, New Hampshire, with all freight costs to be borne by you. As a convenience, we will make arrangements for the shipping unless you request otherwise.

(3) A deposit of \$400.00 is due when the order for the unit is placed. The balance of the purchase price will be payable prior to shipping. We will send you an invoice.

(4) You understand that governmental approvals may be required under your local health, plumbing or building codes. We can make no warranty or representation that such approvals can be obtained. However, we will use our best efforts to aid you in obtaining such approvals by providing technical information.

✓ (5) Although this unit has been successfully used and tested in Sweden for many years, only a few are yet in operation in this country, and no guarantee of product performance can be provided. However, we do agree to work with you in helping to resolve any technical or other problems which might arise.

If you agree to the conditions of purchase as expressed above, please sign the enclosed copy in the space below and return it together with your deposit. When signed by you and accepted by an officer of Clivus Multrum USA, this becomes a contract. We will return a copy to you when signed by us.

Agreed: _____
Purchaser

Address: _____ Telephone # _____

City/State/Zip: _____

Date Signed: _____

Accepted: _____ Date: _____
For Clivus Multrum USA

Please do not ship my order earlier than _____ 1975,
nor later than _____ 1975.

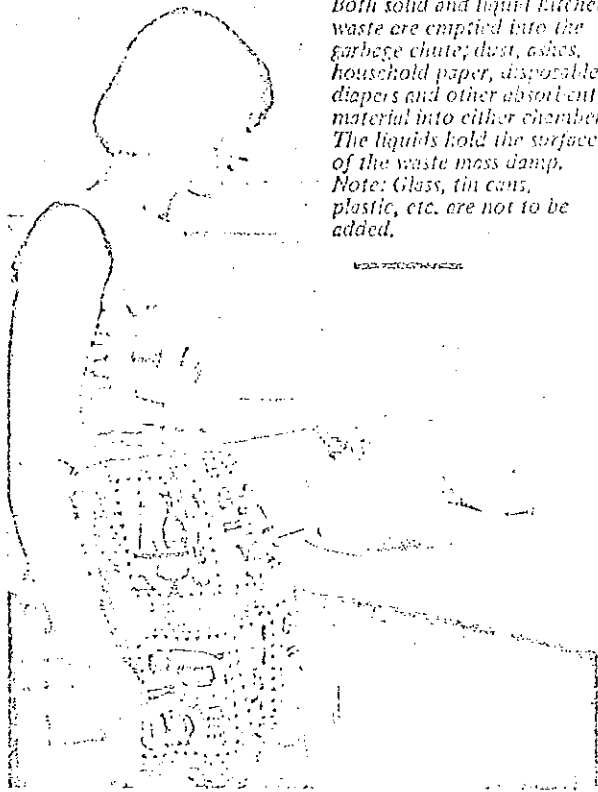
The shipment should be freighted to: _____

Purchaser's Signature: _____

CLIVUS (Mulum) -- System for biological decomposition of organic waste, with built-in garbage chute and toilet

Construction intended for single-family houses, cottages, etc. as well as camp and recreation sites.

air
tight
seal

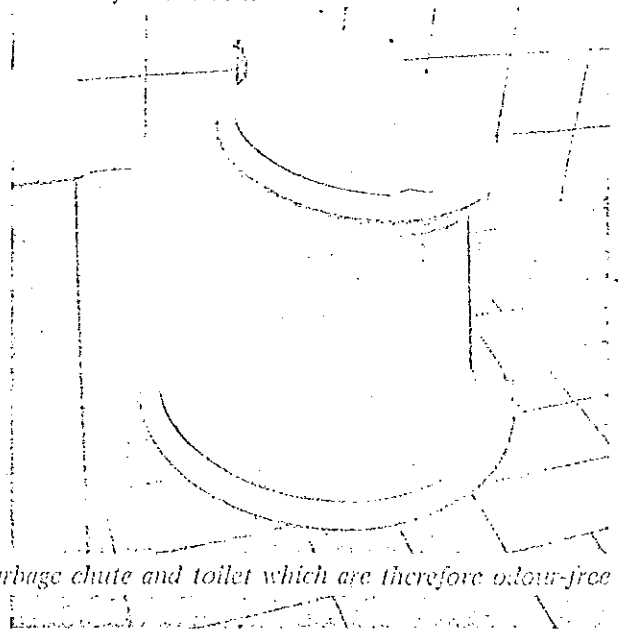


Both solid and liquid kitchen waste are emptied into the garbage chute; dust, ashes, household paper, disposable diapers and other absorbent material into either chamber. The liquids hold the surface of the waste mass damp. Note: Glass, tin cans, plastic, etc. are not to be added.

Built of glass-fibre-reinforced plastic parts.

Cleaning refuse, for example from the vacuum cleaner, ashes and other moisture absorbant wastes may be emptied into the toilet. Babies' diapers (paper) are bulky and can also be emptied into the garbage chute. NOTE: Chemicals must not be added. The toilet seat is sider at the bottom to prevent interior soiling.

A special seat for attachment directly on the container is available for outhouses.



The ventilation system causes a downward draft in the garbage chute and toilet which are therefore odour-free

Convenient garbage chute placed for ex. in kitchen cabinet

Toilet requires no flushing

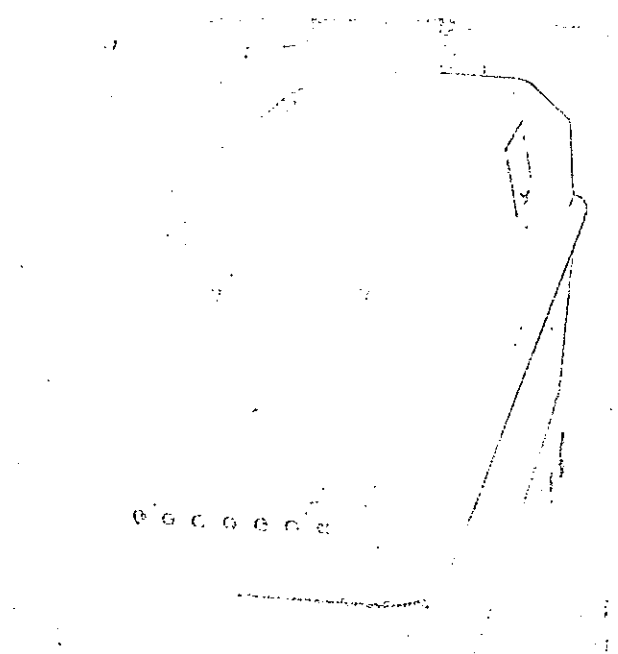
CLIVUS IS NOT TO BE CONNECTED TO WATER OR SEWER SYSTEMS

The waste decomposes added by the supply of air and the inherent moisture (urine, wet garbage, etc.). Water vapour and carbon dioxide rise through the exhaust duct after leaving the waste mass which decreases considerably in volume and moves slowly towards the lowest chamber where the final products (soil, humus, nutritive salts) accumulate. They can be utilized as fertilizer -- normally first after about 2 years and with intervals e.g. of 1-2 years.

Clivus is designed to meet the need for convenience and a hygienic and natural means of diminishing household waste and converting remains to soil restorer on the site.

A household with Clivus needs drainage for bath, dish and laundry water only (purification separately by method suited to local conditions -- information concerning valid regulations can be obtained from the health authorities). Since Clivus takes kitchen waste normally poured down the drain, the sewer is relieved of such matter.

Through purification on site: transportation (vehicles, sewers, etc.) of refuse can be reduced or eliminated; outflow and spreading of contaminated matter in ground and water is prevented; the quantity of pure water used solely for the transport of excrement and refuse in the sewage network can be cut to matter

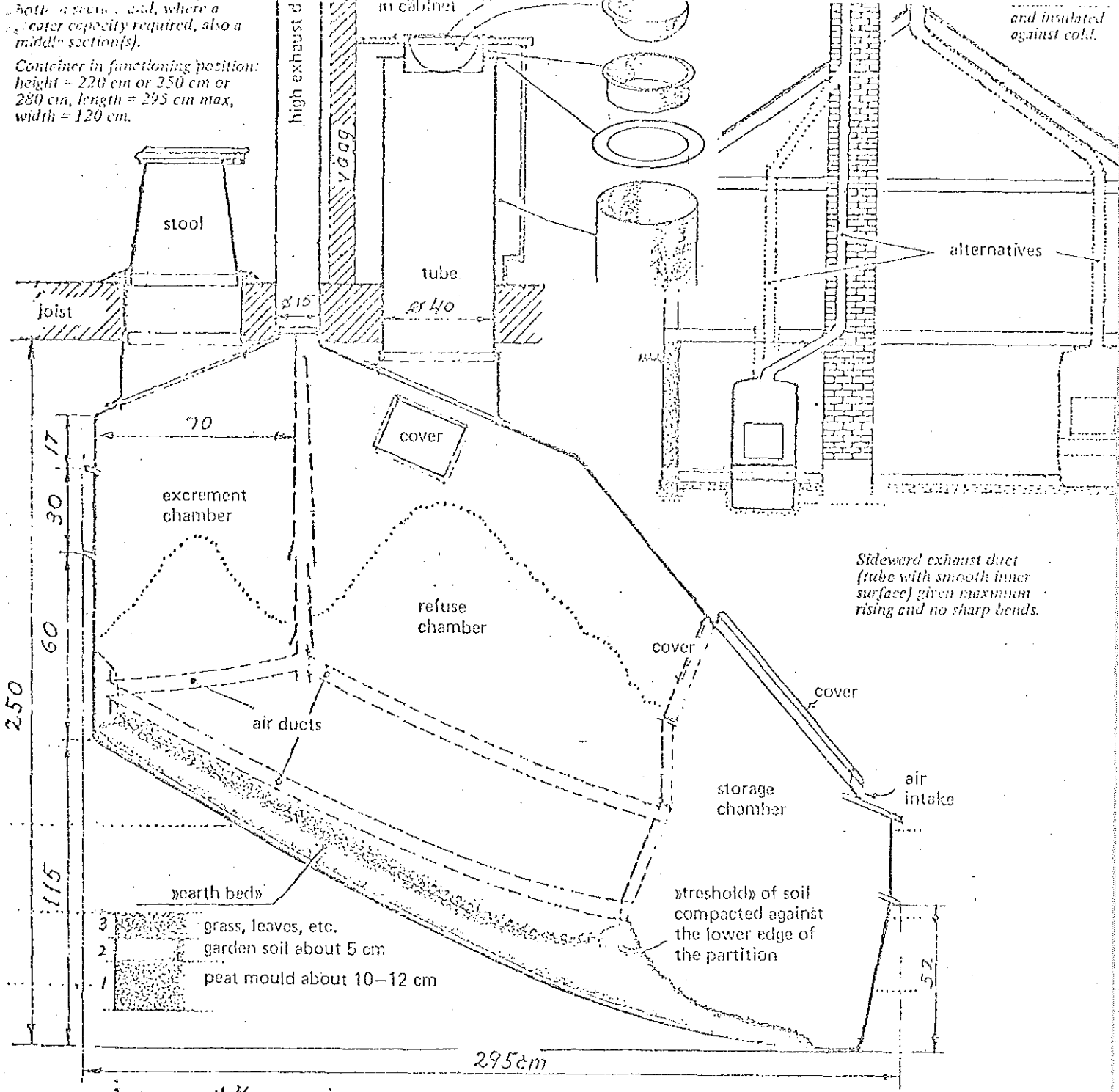


During installation the container bottom is lined with peat mould topped with garden soil and plant wastes (grass, leaves, etc.)

The container is placed in the cellar or in the ground

both sides, and, where a greater capacity required, also a middle section(s).

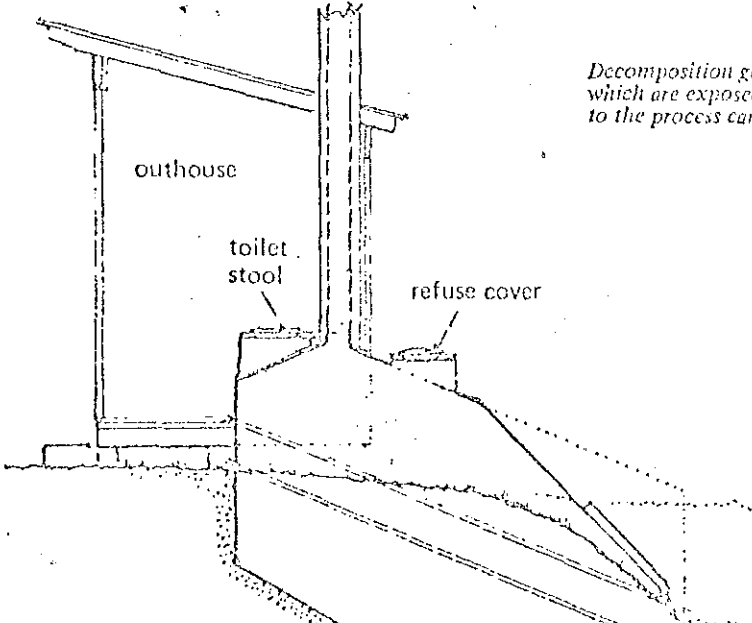
Container in functioning position: height = 220 cm or 250 cm or 280 cm, length = 295 cm max, width = 120 cm.



Sideward exhaust duct (tube with smooth inner surface) given maximum rising and no sharp bends.

- 3 grass, leaves, etc.
- 2 garden soil about 5 cm
- 1 peat mould about 10-12 cm

Decomposition generates a certain amount of heat. The container and the parts of the exhaust duct which are exposed to cold air should be insulated so that a temperature favourable to ventilation of the process can be maintained.



For further particulars concerning design, information or sales please write to:

AB CLIVUS · Tonstigen G · S-135 00 · Ty
Phone 08/770 04 33 (770 12 07 · 717 05 59)

WEEKLY STATUS REPORT
FIELD BURNING PROGRAM

NORTH VALLEY	Acres Burned	Acres	SOUTH VALLEY	Acres Burned	Acres
71349	thru <u>16 Aug</u>	Remaining	162746	thru <u>16 Aug</u>	Remaining

CLACKAMAS - 4124

34	Beavercreek	0	
279	Canby	146	
709	Clackamas	590	
1531	Estecada	974	
162	Molalla	0	
699	Monitor	134	
711	Scotts Mills	287	
	Total	<u>2131=52%</u>	<u>1993</u>

BENTON - 17307

7264	Benton Open	2213	
2643	Corvallis	893	
4920	Monroe	1420	
1734	Philomath	583	
1246	W.O. S.F.	70	
	Total	<u>5179=29%</u>	<u>12628</u>

MARION - 36091

1090	Aumsville	376	
954	Aurora	375	
1363	Drakes Crossing	951	
251	Hubbard	0	
5510	Jefferson	509	
3510	Marion #2	871 (9 Aug)	
161	Mt. Angel	25	
2016	St. Paul	766	
1098	Salem Sub.	704	
6895	Silverton	2044	
3126	Stayton	902	
5710	Sublimity	2434	
964	Turner	0	
3443	Woodburn	1061	
	Total	<u>11018=31%</u>	<u>25073</u>

LANE - 20429

3291	Coburg	706	
1181	Creswell	0	
789	Zumwald	288	
6133	Junction City	1089	
6842	Lane #1	2379	
1640	Lane Non.		
103	Santa Clara		
450	W. Lane	127	
	Total	<u>4589=22%</u>	<u>15840</u>

POLK 17,123

327	Polk Non	0	
13683	S. E. Polk	2853 (EST)	
3108	S. W. Polk	405	
	Total	<u>3258=19%</u>	<u>13865</u>

LINN - 124,510

12419	Albany	4102	
14335	Brownsville	5665	
38274	Halsey	13356	
26500	Harrisburg	4077	
10299	Lebanon	6172	
408	Lyons	106	
4824	Scio	1123	
17451	Tangent	6828	
	Total	<u>41429=33%</u>	<u>83081</u>

WASHINGTON - 3,493

240	Cornelius	0	
955	Forest Grove	0	
743	Wash. #1	0	
1555	Wash. #2	0 (9 Aug)	
	Total	<u>0</u>	<u>3493</u>

Subtotal 51197=31% 111549

YAMHILL - 10,518

2150	Amity	1067	
25	Banks		
1118	Carlton	71	
1423	Dayton	902	
70	Gaston		
3441	McMinnville	59	
407	Newberg		
1605	Sheridan	560	
279	Yamhill	42	
	Total	<u>2701=26%</u>	<u>7817</u>

TOTAL N + S 70305=30% 163790

Subtotal 19108=27% 52241

PETITION TO AMEND REGULATION 35-000
(VEHICLE NOISE EMISSIONS)
AS ADOPTED JULY 19, 1975

before the
ENVIRONMENTAL QUALITY COMMISSION
STATE OF OREGON
AUGUST 22, 1975

by the
FREIGHTLINER CORPORATION
PORTLAND, OREGON

RAY W. MURPHY
DIRECTOR
RESEARCH AND DEVELOPMENT

REQUEST FOR AMENDMENT TO PETITION

Before beginning my presentation, I would like to point out that there is a typographical error on page 4, line 3, of our petition.

The Oregon Revised Statute cited should be ORS 467.010, not ORS 471.010. I request that the petition be amended by interlineation of the proper citation.

Freightliner Corporation, a Portland based firm, founded some 27 years ago, is a manufacturer of heavy duty highway trucks and truck tractors. Since many of the vehicles we manufacture are operated in the state of Oregon, they are subject to regulation by the DEQ. In my remarks this morning, I would like to cover very briefly the following items discussed in our petition:

- . Current DEQ Noise Regulations for Heavy Duty Trucks
- . Changes in the regulations for which Freightliner is petitioning
- . Reasons for the petition

CURRENT REGULATIONS

MOVING TEST AT 50 FEET (35 MPH DRIVE-BY TEST) (NEW VEHICLES)

<u>VEHICLE TYPE</u>	<u>MODEL YEAR</u>	<u>MAXIMUM NOISE LEVEL, DB(A)</u>
TRUCK AND BUS AS DEFINED UNDER ORS 481.030 AND 481.035	AFTER 1975	86
	1976 - 1978	83
	AFTER 1978	80

STATIONARY TEST AT 25 FEET OR GREATER (VEHICLES IN USE)

<u>VEHICLE TYPE</u>	<u>MODEL YEAR</u>	<u>MAXIMUM NOISE LEVEL, DB(A)</u>
TRUCK AND BUS AS DEFINED UNDER ORS 481.030 AND 481.035	BEFORE 1976	94
	1976 - 1978	91
	AFTER 1978	88

MOVING TEST AT 50 FEET OR GREATER AT VEHICLE SPEED (VEHICLES IN USE)

<u>VEHICLE TYPE</u>	<u>MODEL YEAR</u>	<u>MAXIMUM NOISE LEVEL, DB(A)</u>	
		<u>35 MPH OR LESS</u>	<u>GREATER THAN 35 MPH</u>
TRUCK AND BUS AS DEFINED UNDER ORS 481.030 AND 481.035	BEFORE 1976	86	90
	1976 - 1978	85	87
	AFTER 1978	82	84

FREIGHTLINER'S PETITION

MOVING TEST AT 50 FEET (35 MPH DRIVE-BY TEST) (NEW VEHICLES)

<u>VEHICLE TYPE</u>	<u>MODEL YEAR</u>	<u>MAXIMUM NOISE LEVEL, DB(A)</u>
TRUCK AND BUS AS DEFINED UNDER ORS 481.030 AND 481.035	AFTER 1975	86
	1976 / 1978	87
	AFTER 1978	88

STATIONARY TEST AT 25 FEET OR GREATER (VEHICLES IN USE)

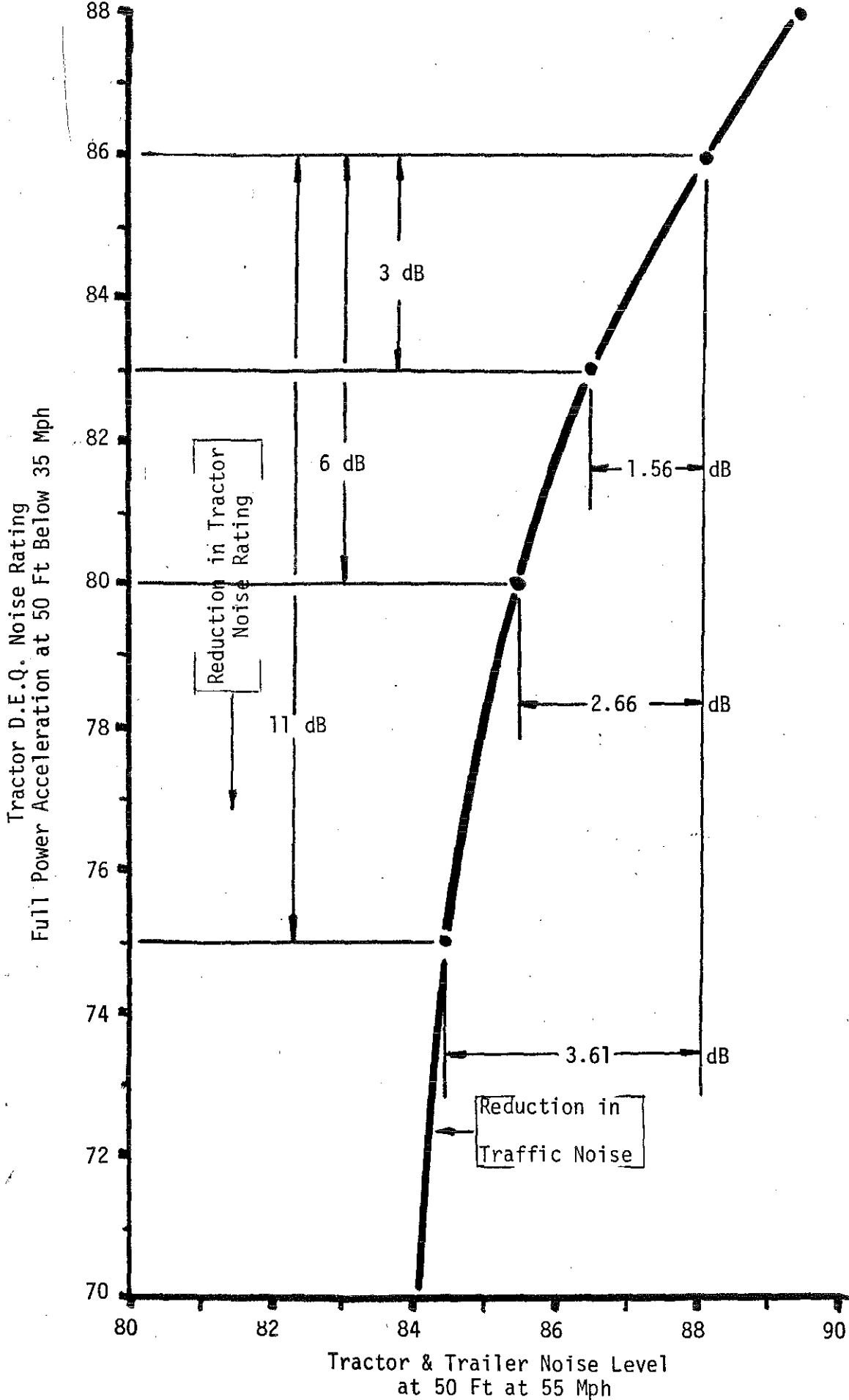
<u>VEHICLE TYPE</u>	<u>MODEL YEAR</u>	<u>MAXIMUM NOISE LEVEL, DB(A)</u>
TRUCK AND BUS AS DEFINED UNDER ORS 481.030 AND 482.035	BEFORE 1976 ALL	94
	1976 / 1978	91
	AFTER 1978	88

MOVING TEST AT 50 FEET OR GREATER AT VEHICLE SPEED (VEHICLES IN USE)

<u>VEHICLE TYPE</u>	<u>MODEL YEAR</u>	<u>MAXIMUM NOISE LEVEL DB(A)</u>	
		<u>35 MPH OR LESS</u>	<u>GREATER THAN 35 MPH</u>
TRUCK AND BUS AS DEFINED UNDER ORS 481.030 AND 481.035	BEFORE 1976 ALL	86	90
	1976 / 1978	87	87
	AFTER 1978	82	84

REASONS FOR PETITION

1. REDUCING ALLOWABLE NOISE EMISSION LEVELS BELOW THOSE PROPOSED IN THIS PETITION WILL HAVE NO APPRECIABLE EFFECT ON THE OVERALL NOISE HEARD BY THE PUBLIC.
2. THE INCREASED INITIAL COST AND THE INCREASED COST OF OPERATING A VEHICLE MEETING THE REGULATIONS IS DISPROPORTIONATE TO ANY PUBLIC BENEFIT.
3. SINCE IMPACT ON THE NOISE THE PUBLIC HEARS IS NEGLIBLE, THE INCREASED COST WITHOUT A CORRESPONDING INCREASE IN PRODUCTIVITY IS CLEARLY INFLATIONARY.
4. SINCE INITIAL ADOPTION OF THE DEPARTMENT OF ENVIRONMENTAL QUALITY REGULATIONS, THE ENVIRONMENTAL PROTECTION AGENCY UNDER THE PROVISIONS OF THE NOISE CONTROL ACT OF 1972 HAS
 - a) ESTABLISHED REGULATIONS FOR VEHICLES IN-USE WHICH ARE EFFECTIVE OCTOBER 15, 1975 AND WHICH WILL PRE-EMPT THE MORE STRINGENT DEQ REGULATIONS SCHEDULED FOR 1976 AND LATER.
 - b) PROPOSED REGULATIONS FOR NEW VEHICLES WHICH WOULD ALSO PRE-EMPT DEQ REGULATIONS.
5. THE EFFECT OF AN AGGRESSIVE ENFORCEMENT PROGRAM FOR CURRENT DEQ REGULATIONS HAS NOT BEEN ADEQUATELY CONSIDERED AND, IF DEVELOPED AND IMPLEMENTED, WOULD ACCOMPLISH THE OBJECTIVES OF THE NOISE ABATEMENT PROGRAM AT A LOWER COST.



EFFECT OF 83 DB (A) REGULATION
ON
OVERALL HIGHWAY NOISE

LOST CARGO REVENUE

THE ADDED WEIGHT OF NOISE CONTROL EQUIPMENT DECREASES
ALLOWABLE PAYLOAD

WEIGHT IS INCREASED BY UP TO 285 LBS.

GENERAL FREIGHT - \$1.95 PER LB. PER MILLION MILES
UP TO \$69 PER YEAR PER TRUCK

BULK COMMODITIES- \$12.50 PER LB. PER MILLION MILES
UP TO \$445 PER YEAR PER TRUCK

INCREASED INITIAL COST FOR NOISE CONTROL EQUIPMENT

<u>FREIGHTLINER ENGINE/VEHICLE CONFIGURATION</u>	<u>COST INCREASE</u>
MOST POPULAR ENGINE/VEHICLE 30% OF PRODUCTION	\$580
2ND MOST POPULAR 26% OF PRODUCTION	568
3RD MOST POPULAR 15% OF PRODUCTION	<u>743</u>
COMPOSITE AVERAGE COST INCREASE PER VEHICLE	\$458

ANNUAL CAPITAL COST TO OREGON BUYERS
FOR FREIGHTLINER TRUCKS

BASED UPON REGISTRATION OF 872 NEW FREIGHTLINERS IN 1974, ON AN AVERAGE COMPOSITE COST INCREASE OF \$458, AN ADDITIONAL \$399,376 WILL BE PAID FOR FREIGHTLINER TRUCKS FOR COMPLIANCE WITH THE D.E.Q.'s 83 DB(A) NOISE LIMIT.

ANNUAL CAPITAL COST TO OREGON BUYERS
FOR ALL HEAVY DUTY TRUCKS

BASED UPON REGISTRATION OF 6,725 HEAVY DUTY TRUCKS IN OREGON IN 1974, AND AN AVERAGE CAPITAL COST INCREASE OF \$458 PER TRUCK, AN ADDITIONAL \$3,080,050 WILL BE PAID ANNUALLY BY OREGON TRUCK BUYERS AND ULTIMATELY THE PUBLIC FOR COMPLIANCE WITH THE D.E.Q.'s 83 DB(A) NOISE LIMIT.

FEDERAL REGULATIONS

<u>VEHICLES IN USE</u>	<u>MAXIMUM NOISE LEVEL, 50 FT.</u>	
	<u>35 MPH OR LESS</u>	<u>ABOVE 35 MPH</u>
EFFECTIVE OCTOBER 15, 1975 EPA - BMCS	86 dB(A)	90 dB(A)
STATIONARY RUN-UP IDLE-MAX-IDLE	88 dB(A) @ 50 FT.	

PROPOSED EPA REGULATIONS FOR NEW VEHICLES*

<u>EFFECTIVE DATE</u>	<u>MAXIMUM NOISE LEVEL, 50 FT.</u>
	<u>35 MPH OR LESS</u>
1977	83 dB(A)
1981	80 dB(A)
1983	75 dB(A)

*NOTE: THESE PROPOSED REGULATIONS HAVE BEEN THE SUBJECT OF CONSIDERABLE WRITTEN AND ORAL COMMENTS AND ARE CURRENTLY UNDER REVIEW BY EPA.

FEDERAL PRE-EMPTION

In the past, we have supported noise control regulations based upon both the level and time frame of the state of California. These regulations have been used as a model by the state of Oregon. Now, however, the Federal Environmental Protection Agency has established noise emission standards for vehicles in-use by interstate motor carriers and has also proposed noise standards for new motor vehicles. The noise emissions of in-use vehicles having a gross combination weight rating in excess of 10,000 lbs. operated by motor carriers engaged in interstate commerce will, on October 15, 1975, be regulated by Federal Environmental Protection Agency Noise Emission Standard Part 202 of Title 40 of the Code of Federal Regulations.

Under Section 18(c) (1) of the Noise Control Act of 1972, the federal noise emission standards will pre-empt those of the states and their political subdivisions. After the effective date of the federal regulations, no state or political subdivision thereof may adopt or enforce any noise emission standard unless it is identical to the federal standard.

The E.P.A. regulations for in-use vehicles engaged in interstate commerce specifies a noise level of 86 dB(A) at 50 feet for 35 mph or less and 90 dB(A) for speeds greater than 35 mph. These are the same levels we seek, for in-use trucks, in our petition. It hardly seems reasonable for the state of Oregon to penalize truckers engaged in intrastate commerce to lower noise emission levels than those engaged in interstate commerce. This anomaly is corrected by our petition.

We are further concerned that the Oregon 83 dB (A) noise level at 50 feet for 1976 model year trucks will result in Oregon having a substantially lower noise level requirement than most of the other states, as federal

E.P.A. standards for new vehicles are not apt to be enacted by then because of serious deficiencies in their original proposal. This could result in the residents of the state of Oregon paying more for nearly everything they purchase to offset increased shipping costs as the truck operators must obtain an increase in freight rates to comply with the 83 dB(A) noise level.

ENFORCEMENT

Unless an effective program is implemented to enforce noise emission standards, we will continue to be faced with public pressure to have unrealistically stringent standards. Without strong local enforcement, there is continued public clamor for lower limits to solve the problem, while the vehicles most complained about already violate existing regulations.

An effective statewide enforcement program (utilizing existing personnel in the D.E.Q., Permits Section of the State Highway Division, and/or the State Highway Patrol) at the level we are petitioning for will drastically reduce the public complaints about truck noise without imposing undue economic penalty on the motor carrier or the public.

CONCLUSION

In summary, we believe that environmental improvement is possible, at lower total cost, by enforcement of petitioned-for noise levels. In view of the marginal difference in sound levels impacting the public, we believe the cost to the residents of Oregon for noise standards lower than those for which we have petitioned are grossly out of proportion to the benefits. We do not believe that we the people of Oregon can afford to squander our resources to achieve a benefit that will be barely perceived, if at all, since it is the people of Oregon who will ultimately have to pay for it. This pitfall is avoided at the sound levels we recommend, levels which we believe will provide for optimum public benefit.

Morton Spence
229-5327

Department of Environmental Quality
1234 SW Morrison Street
Portland, OR 97205

August 14, 1975: For Immediate Release

Changes in subsurface sewage regulations, a policy for handling logs in Oregon waters, and proposed adoption of rules to prevent "significant deterioration" of air quality are among items to be considered by the Environmental Quality Commission (EQC) at its meeting in Portland Friday, Aug. 22.

The meeting will be held in room 602 of the Multnomah County courthouse, 1021 SW 4th Ave. beginning at 9 a.m.

The EQC will consider revisions and additions to administrative rules on subsurface sewage and alternative on-site sewage disposal systems. The changes are based on recommendations of a Citizens Task Force on Subsurface Sewage, proposals made during statewide public hearings, and mandates by the 1975 Oregon legislature.

The proposed permanent rules would regulate experimental alternative systems including non-water carried waste disposal systems, and provide for regional differences and variance procedures.

The EQC will consider a proposed policy on log handling and storage in Oregon waters which would guide the Department of Environmental Quality (DEQ) and the timber industry to solutions of water quality problems related to such practices. DEQ permits to timber operations using waterways for log handling would specify procedures to protect water quality on a case-by-case basis.

A proposal for adoption of a temporary state rule to provide protection

of air quality against "significant deterioration" will be considered. Air quality control provisions in the federal Clean Air Act give special protection to areas which have especially high air quality.

Adoption of the Oregon rule would make possible delegation of authority by EPA to DEQ for administration of the significant deterioration prevention program. The program includes review of proposed new air contaminant sources such as industrial construction -- or expansion -- in relation to significant deterioration of air quality in presently clean air areas.

At a public hearing scheduled for 11 a.m., the EQC will hear testimony on proposed amendments to the civil penalty rules relating to noise standards. The amendments would allow the DEQ director to assess fines ranging from \$10 to \$500 for noise violations. The penalties would apply to violation of standards for new and used motor vehicles and for commercial and industrial noise sources, and to refusals to comply with the standards.

Other items on the EQC agenda:

-- A petition protesting Oregon noise standards for deisel vehicles of 1976 and subsequent model years.

-- Adoption of rules setting standards for performance of new stationary air contaminant sources, and emissions standards for hazardous air contaminants.

-- A request by Union Oil Co. to continue until Dec. 1, 1975, its variance from limitations on the sulfur content of residual fuel oils.

-- Authorization for a public hearing on proposed regulations for the management of hazardous wastes.

-- A status report from the Metropolitan Service District on state loan requirements for regional solid waste management plans in the Portland area.

July 17, 1975

Mr. Joe B. Richards, Esq.
Chairman, Environmental Quality
Commission
777 High Street
P.O. Box 10747
Eugene, Oregon 97401

Re: subsurface sewage variances

Dear Mr. Richards:

I am sorry that I was not able to get to the July 10 EQC meeting in time to comment on the proposed rules for variances from the subsurface sewage rules. Because I believe that the variance rules adopted at that meeting are very poorly drafted and need to be thoroughly reworked, I am encouraged that they were adopted only as a temporary rule.

During the 1975 legislative session, SB 34, granting variance authority on subsurface sewage regulations was one of the most hotly debated environmental bills. It was the only legislative issue on which the OEC has ever taken a position opposite to that of DEQ. Because the chairman of the Ways & Means committee threatened to hold up DEQ's budget until SB 34 was passed, DEQ accepted and lobbied for a bill which could only cause it future problems, we believed.

The OEC opposed SB 34 primarily because it provided a vehicle for turning over variance authority to county governments, who prior to 1973 established such a bad record in managing septic tank permits that the legislature saw fit to give the entire program to DEQ. We felt SB 34 should be opposed because:

- 1) The regular DEQ subsurface sewage rules are highly objective "design standards" of what a subsurface system should look like. Variances, on the other hand, are generally granted on anticipated "performance" standards, which are inevitably subjective. We feel that there is too much discretion involved in judging compliance with subjective performance standards to allow non-DEQ personnel to be variance officers. In any event, having non-DEQ personnel granting variances from DEQ rules would be anomalous and unprecedented.

Joe B. Richards, Esq.
July 17, 1975

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2) The judgement about which counties are capable of fairly administering a variance program is also dangerously subjective. Obviously, DEQ will not want to give this authority to every county, because it will not trust every county to be resistant to the political pressures of those who want septic tank permits, and it will not be able to give counties a program which can be easily monitored by DEQ personnel. Under present DEQ subsurface sewage rules, monitoring is relatively easy (despite the recent Jackson County example) because DEQ personnel can simply check the county-issued permits against the objective standards set out in the DEQ rules. However, in the case of variances granted on subjective grounds, DEQ personnel would have no easy objective test by which to measure county performance. Therefore, DEQ's decision whether to grant a county a variance program would depend primarily on whether it is "trusted" for it could not expect to guarantee the success of the program through its monitoring. Making such subjective discriminations between counties is politically extremely difficult, and we feared that if variance power is given to one county, it will be given to all.

In reply to these arguments, DEQ said to the legislature that:

1) The variance standards would not be subjective performance standards but would be as close to objective design standards as possible. Both Director Cannon and Legislative Liaison Germond said that the DEQ staff regarded the drawing up of tight but workable variance standards as a "challenge."

2) The DEQ would not need to discriminate between counties, because the DEQ would retain control over the county variance officer and the contracts with the DEQ would be written under very stringent criteria.

The temporary rules do not fulfill these pledges of the department.

First, the criteria for a variance set out in the new rules are entirely subjective performance standards. The variance officer need only to find to allow a variance that:

1) The subsurface sewage disposal system will function in a satisfactory manner so as not to create a public health hazard, or to cause water pollution; and

2) Special physical conditions exist which render strict compliance unreasonable, burdensome or impractical.

Joe B. Richards, Esq.
July 17, 1975

Page 3.

These criteria are barely more than a repetition of the language of SB 34. In addition, the rules set no limitations whatsoever on the discretion of the variance officer. The variance officer could grant any variance regardless of the physical limitations of the site. There are in essence no variance criteria beyond the vague standards quoted above. Paragraph IV of the temporary rules refers to "Variance Criteria," but these standards are only a restatement of the conditions under which a variance would be required. If they are meant to be criteria, the DEQ is saying essentially, "You may have a variance if you need a variance." Some other limitation on the discretion of the variance officer is surely needed.

Second, beyond being informed of who the county proposes to name as variance officer, DEQ would have no apparent control over a county variance program under the new rules. It is not clear whether DEQ could remove the county variance officer and most importantly, whether the county contract remains in force if the variance officer is replaced. It is essential if the pre-1973 situation is to be avoided that county level personnel be insulated from the pressures of the political process. Yet the rules do not require DEQ approval before removal of a variance officer. It appears that under the temporary rules once a county gets approval of its variance program it will continue until expiration of the contract.

Third, no criteria for county variances have been spelled out in accordance with Section 5 of SB 34. No provisions for inspections and monitoring by DEQ have been made. It appears that once a county gets approval of its variance program, it will be operating totally independently of DEQ monitoring or control. It was fear of this condition that led State Senator Tony Meeker, the principal proponent of SB 34, to advise against granting counties variance authority under the bill, even though the power for DEQ to grant that authority is in the bill.

Aside from not answering these original problems with the variance process, the temporary rules present other difficulties.

Under Paragraph V, it is very unclear whether a variance officer is to be a DEQ employe. These mandatory variance officers under Section 3 of SB 34 were never spoken of as anything but DEQ employes during the legislature, in contrast with the Section 5 county variance officers, whose contracts are a discretionary act of the Department. We have outlined above the problems we see in having variance officers who are not in some direct relationship with DEQ.

Joe B. Richards, Esq.
July 17, 1975

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~~Also, no~~
~~Explicit~~ provision for consumer disclosure is made. The public has come to rely on DEQ to make sure that installed septic tank systems will work. Now that there are to be two classes of DEQ septic tank permits--regular and variance--the homebuilder should have an obligation to report to the home buyer that the permit was granted under the looser variance standards.

Finally, the rules do not detail in any way the nature of the relationship between the department and the county operating a variance program. What records must be submitted to DEQ? How are disputes under the contract to be resolved? At the very least, contracts with counties should have to be approved by the commission, and the variance criteria under which counties are supposed to operate pursuant to section 5 of the act should be approved by the commission.

Thank you for your consideration of this matter. I will be out of town until the last week of August; if you wish to discuss this matter before then, please contact Larry Williams, OEC Executive Director.

Very truly yours,

Roy Hemmingway
Legislative Director

cc: Loren Kramer
Tony Neeker

RH:alh

bcc: Jackie Hallock

FROHNMAYER & DEATHERAGE

ATTORNEYS AT LAW

P. O. BOX 1726 - 39 SOUTH CENTRAL
MEDFORD, OREGON 97501

OTTO J. FROHNMAYER
W. V. DEATHERAGE
STUART E. FOSTER
WILLIAM B. PURDY
DOUGLAS P. CUSHING
JAMES L. SUTHERLAND

TELEPHONE
A/C 503 773-8425

August 1, 1975

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

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AUG 5 1975

OFFICE OF THE DIRECTOR

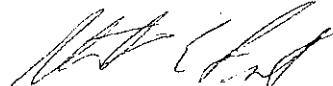
Environmental Quality Commission
State of Oregon
2637 S. W. Water Street
Portland, Oregon

Gentlemen:

This office represents Faydrex, Inc. which has substantial holdings of land within the state of Oregon.

On behalf of Faydrex, Inc. we hereby request that the period of time in which to file for construction permits on prior approvals be extended until September 1, 1976. Said period, which is scheduled to expire on September 1, 1975, is not adequate due to the fact that the application procedures of the DEQ on prior approvals and the DEQ's contracting agencies are not being handled in an expeditious manner. In addition the DEQ has challenged a number of permits issued pursuant to your regulations on prior approvals and the issue as to what are valid prior approvals should be resolved before our client, Faydrex, and other property owners pay the non-refundable fee required on applications for permits issued pursuant to your regulations on prior approvals.

Yours very truly,



Stuart E. Foster

SEF:jmc

cc: Governor Robert Straub
cc: Loren Kramer
cc: Norman Levenson

RECEIVED
AUG 6 - 1975

Dept. of Environmental Quality
Superior Sewage Division

BRYANT, EDMONDS & ERICKSON
ATTORNEYS AT LAW
888 WEST EVERGREEN AVENUE
P. O. BOX 457
REDMOND, OREGON 97756
TELEPHONE [503] 548-2151

RONALD L. BRYANT
WALTER I. EDMONDS, JR.
KEITH L. ERICKSON
DAVID M. JAQUA

CUNNING & BREWSTER
1925-1955
COPENHAVER, LARKIN & BRYANT
1965-1969

August 14, 1975

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
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OFFICE OF THE DIRECTOR

Mr. Loren Kramer
Director
Department of Environmental
Quality
1234 S. W. Morrison Street
Portland, OR 97205

Re: Prior approval of septic tank and drain field

Dear Bud:

This letter is to confirm our conversation of Monday, August 11, 1975, in which I said I would write to you and advise you with regard to our position on the septic tank and drain field depth requirements and the termination of the prior approvals. I will try to cover each of the matters separately and as follows:

1. Drain Field Depth Requirements: The current temporary rules, as I understand them, provide that drain fields being installed must meet the following criteria: (1) be 18 inches below the surface of the ground, and (2) be 4 feet from the bottom of the drain field line to water table. A consideration has been given that has allowed a drain field to be placed at surface level with a 4 foot depth to an aquifer (an impenetrable subsurface) and thereafter, the top of the drain field to be covered with 18 inches of soil in accordance with the drawings contained in the temporary rules.

We have been advised that this provision of having the drain field at surface level and covering it with 18 inches of soil applies only to those levels where it is 4 feet to an aquifer and not 4 feet to a water table. It seems to me that if this rule would apply under those circumstances, it should also be applied to those areas where it is only 4 feet from the top of the surface to the water table.

Mr. Loren Kramer

Re: Prior approval of septic tank and drain field

August 14, 1975

Page 2

I see no difference in placing the drain field at surface level with 4 feet to the water table below, and then covering it with 18 inches of soil, than placing the drain field 18 inches below the surface with 4 feet below that to the water table. It seems to me that if covering is allowed in one case, it should also be allowed in the other case, and as a practical matter no difference actually results since, in either case, the drain field is 4 feet above the water table, and that is the apparent goal of the Department.

2. Prior Approvals: In regard to prior approvals, it is my understanding that all prior approvals will terminate on September 1, 1975, and that up until September 1, 1975, every lot and every subdivision which had a prior approval could go in and apply for a septic tank and drain field permit which would then be granted because of that prior approval. Of course, the septic tank and drain field would then have to be installed prior to September 1, 1976.

There seems to be very little difference between everyone going in prior to September 1st, and obtaining the permits for septic tank and drain fields, as opposed to allowing those same people who have lot by lot approvals to be able to apply at any time in the future. As a matter of fact, it would appear to me that more damage would be done if everyone with prior approvals did apply for the septic tank permits prior to September 1st. I think that the problems that would be created by such action are easy to see and could result in real problems.

I think an equitable solution would be that every purchaser of a lot which had prior approval at the time of their purchase would be entitled to have that prior approval recognized at any time they wished to apply for it, and that any subdivision that had a lot by lot check and approval, or purchase of subdivisions totally with those lot by lot approvals on them also be allowed to continue with those approvals. There is a real constitutional issue involved in the terminating of an approval to put in a septic tank and drain field which was relied upon by the person purchasing the property. I really believe that there are thousands of people who are in that exact position, and that, without question, there would be litigation over this issue because of the damage done to a purchaser who bought with an approval only to discover when he gets ready to build on the property that the prior approval had been taken away.

With regard to prior approvals, and I speak of prior approvals only on lots which have been purchased by individuals with the understanding and reliance that the septic tank and drain fields could be installed on that lot, and those subdivisions with a lot by lot approval for septic tank and drain field, should be

Mr. Loren Kramer
Re: Prior approval of septic tank and drain field
August 14, 1975

Page 3

continued in effect past September 1, 1975, without reservation. Those commitments were made, people relied upon them, and it seems to me to be an inequitable position to place those people in to declare that the prior approvals are rescinded.

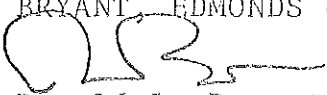
With regard to controls and checks by the Department of Environmental Quality, I think the termination of blanket approvals and the institution of the new rules for all future approval of septic tank and drain fields will accomplish the desired results of the Commission.

3. Immediate Action: I believe that the prior approval issue is such a basic constitutional and legal right that further consideration by the Commission is necessary. To make it effective September 1, 1975 without that consideration and study, and only upon the advise and recommendation of planners who do not recognize the legal issue involved would be a mistake. In order for the Commission to be able to fairly consider the permanent continuation of the prior approvals, they need to remove the termination of prior approvals effective September 1, 1975, permanently, or in the alternative, delay that action for a period of one year in order that all the consequences can be considered in this vitally crucial issue.

If I can be of any further assistance to you, or supply you with further information, please advise me.

Very truly yours,

BRYANT, EDMONDS & ERICKSON


Ronald L. Bryant

RLB:bk

cc: Mr. Tom Burton, Engineer

RECEIVED

AUG 15 1975

OFFICE OF THE DIRECTOR

IN THE MATTER OF SUBSURFACE)
SEWAGE PRIOR APPROVALS IN)
CERTAIN SUBDIVISIONS OF)
JACKSON COUNTY)

PETITION FOR RELIEF

The Board of Commissioners of Jackson County, your contract agent for administration of subsurface sewage disposal rules, on behalf of persons unknown with similar situations, and certain known purchasers of properties within Vista View Subdivision (Section 10, Township 36 S, Range 4 W, W.M.) petition the Commission for relief from actions by the Department staff which are causing unequal treatment to persons within a class and have resulted in arbitrary revocation of promised permits without full investigation of facts or provision for proper hearing, said actions being correctable either by order of the Director or issuance by the Commission of variances from appropriate rules.

STATEMENT OF FACTS

The Developer, David Kirkwood of 8560 Rogue River Highway, Rogue River, Oregon, did lay out a proposal for Vista View Subdivision, and on July 16, 1970 make available for testing 25 percolation holes identified by his engineer at specific locations on a topographic map (Exhibit C). Following their current standards for investigating proposed subdivisions by inspecting 40 percent of the lots to determine suitability of the entire subdivision for subsurface disposal, the Sanitarian did make his inspection on July 16, 1970 and subsequently filed a report (Exhibit B) giving approval. All other legal steps for placing the development on sale were accomplished and sales did occur as shown (Exhibit A) in a listing furnished by the developer August 7, 1975. Records of the County (Exhibit D) indicate that of 20 applications for subsurface disposal permits, 12 systems are now installed with no complaints of failures. A visual inspection shows what appear to be occupied dwellings on 10 lots, a new home nearing completion and ground broken for a 12th site on Laurelwood Drive.

Following the Commission issuance of the prior approval rule, now section 71-015 of OAR Chapter 340, land sales were made based upon assurances that these regulations applied and that test holes identified location of the approvals. Investigation of this case now discloses that final plat mapping (red overlay, Exhibit C) does not fully agree with the 1974 research on relation of all lots to test holes. A real estate salesman, Walter R. Archer, has documented in Exhibit E three transactions and the assurances upon which those sales were based. The developer has furnished copies of undated letters (Exhibit F) which were filed with the lending institution.

When the three purchasers sought construction permits, the Department's District Sanitarian (Exhibit G) apparently caused a review of only Exhibit B to be made and issued a departmental policy that no prior approvals exist within the entire development. This action left your contract agent with no option but to deny the site approvals already issued since current standards would not allow the permits to issue.

FIRST REQUEST FOR RELIEF

Your petitioners request immediate relief by directing permits to issue for subdivision lots 15, 16 and 32, now known as tax lots 216, 217, and 233, each lot being subject to a sale based upon a good faith interpretation of rule 71-015 of the Commission that where specific approved tests have occurred, specific approval attaches.

SECOND REQUEST FOR RELIEF

Your petitioners request immediate relief by directing a hearings officer to review Departmental action which resulted in Exhibit "G", a letter which cast doubt upon the marketability of the remaining undeveloped lots in this subdivision, and which appears to be an action taken without adequate notice of hearing "to suspend or revoke the right or privileges" of several persons within the meaning of Chapter 183 of Oregon Revised Statutes, and

we further petition the hearings officer be directed to examine the applicability of the prior approval rule to any and all lots within this subdivision and report to the Commission what remedies exist to insure that equal treatment is given all affected property owners.

THIRD REQUEST FOR RELIEF

Your petitioners request immediate relief by directing a hearings officer to review the application of the prior approval rule on all eligible lands within Jackson County, since investigation of this matter has disclosed the presence of in place, functioning subsurface systems on subdivision land which neither qualifies for current permits nor meets the lot-by-lot prior approval standard due to application of a less than lot-by-lot examination policy at the time of creation of subdivisions, a practice which it now seems may be as valid a cause for prior approval as the individual lot testing which has formed the basis for granting permits to certain separate lots since your temporary order of June 26, 1974, and that the hearings officer be directed to make a finding and if it be as pleaded to recommend the appropriate remedies by which equal treatment can be given to this class of land owners.

DATED this 14th day of August, 1975, Medford, Oregon.

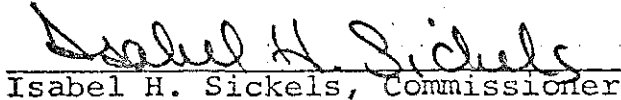
JACKSON COUNTY BOARD OF COMMISSIONERS



Tam Moore, Chairman



Jon Deason, Commissioner



Isabel H. Sickels, Commissioner

EXHIBITS:

- A - Developer's list of Sales
- B - Sanitarian's Report
- C - Preliminary Plat plan w/Final overlay
- D - County Summary of Permit Activity
- E - Archer Reports
- F - Undated Letters Furnished by Developer
- G - DEQ letter of Denial

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AUG 21 1975

OFFICE OF THE DIRECTOR

August 20, 1975

Mr. Joe B. Richards
777 High Street
P.O. Box 1047
Eugene, Oregon 97401

Dear Mr. Richards:

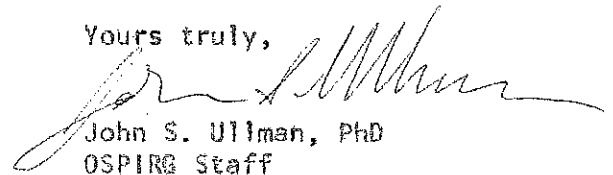
OSPIRG urges you not to adopt the Prevention of Significant Air Quality Deterioration (PSD) regulations at your August 22nd meeting. As you may recall, the Commission at its November 22, 1974 meeting asked the department to initiate making PSD rules with the cooperation of other interested parties, including OSPIRG, AOI, OEC, NEDC, etc. OSPIRG was presented with the proposed regulations late last week. We had no input into the process of writing the proposed rules and we now have insufficient time to comment on them in depth.

We see no need to rush into adopting regulations which are essentially the same as the current federal regulations.

One aspect of the proposed PSD which we find particularly alarming is the lack of any Class I designated areas. Until we received the proposed regulations, we thought that the DEQ agreed with OSPIRG and NEDC that state and national parks, wildlife refuges, wilderness areas, and scenic rivers should be designated Class I.

OSPIRG feels that Oregon deserves a better set of regulations than those which will be proposed on August 22nd. We hope, therefore, that you will reject the proposed PSD regulations and direct more stringent and detailed regulations to be prepared in the near future.

Yours truly,



John S. Ullman, PhD
OSPIRG Staff

JSU:slc
cc: Loren Kramer

Testimony 8/22/75 on Item K
I have had contact with the KLAMATH RIVER PROTECTION AGENCY.
They requested that their feelings be voiced here.

The membership of this organization, which includes several ranchers in the area, are opposed to the floating and storage of logs in the Klamath River and on Lake Ewauna.

Before 1965 this problem was very bad. Cullings and bark from the many logs stored on the water at that time settled to the bottom of the river and lake. Irrigation ~~xyz~~ systems were plugged up. The oxygen content of the water was greatly reduced, killing the fish. The methane bubbles rising from the bottom were potent enough to be lit afire.

Lake Ewauna is above Keno Dam. The Klamath is a slow-moving river, and, because of the dam, moves even more slowly. Consequently, it does not readily wash away debris that piles up on the river bottom.

Much improvement in these problems has been made since regulations were enacted and enforcement begun in 1965.

To increase the number of logs stored on these waters would be a step backward., recreating problems that many persons have worked hard to solve.

Anne Nolte
Sierra Club
Representing the Klamath River
Protection Agency

AL PEIRCE LUMBER Co.

HIGHLAND BUILDING 375 NORTH FOURTH STREET

P. O. BOX 300 COOS BAY, OREGON 97420

TELEPHONE 503-267-4113



Statement
of
Al Peirce Lumber Co.
on
Log Handling in Oregon's Public Waters
before
Oregon Environmental Quality Commission
Portland, Oregon
August 22, 1975

Mr. Chairman and gentlemen, I am Miles S. Munson, Vice President and General Manager of Al Peirce Lumber Co. in Coos Bay, Oregon.

Al Peirce Lumber Co. consists of a sawmill, planing mill, and two deep-water shipping docks located on the Coos Bay estuary. Al Peirce Lumber Co. has been in business for twenty-seven years, and has contributed substantially to the economy of the City of Coos Bay, Coos County, and a substantial number of taxpayers and businesses located in Coos County. Al Peirce Lumber Co. directly employes approximately 140 people, and materially contributes to the support of perhaps five times that number in various contracts, sub-contracts, purchases of services and materials and supplies in Coos Bay.

Al Peirce Lumber Co.'s mill is located on a narrow strip of land on Isthmus Slough and, as is common with tidewater mills constructed in the late 1940s and '50s, was constructed in such a manner as to utilize the surrounding waters for transportation of logs to the mill as well as for sorting logs and storing logs during the summer logging season for use during the winter period when logging operations are not carried on due to weather conditions.

In past years, our company stored from 25 to 30 million board feet of logs in the waters of the Coos Bay estuary in close proximity to the mill.

In recent years, we have been able through more precise planning and inventory control procedures to reduce these inventories by 50% of those we used to carry. Now, of the 12 to 15 million feet that we carry in inventories, approximately 90% of these inventories are stored in locations where the logs may be aground at low tides. Areas where logs will not go aground just are not available.

Our company does not possess sufficient land areas adjacent to the mill for dry-land storage of inventories of the volume necessary to keep the mill in full production and for full employment during the winter season when log receipts are not available.

If a policy were adopted by the Environmental Quality Commission to prohibit the storage of logs that might be grounded at low tide, we could only store enough logs that would not go aground to operate our mill for a period of three to four weeks.

You can readily see, I am sure, that such a policy would force the discontinuance of operations of our company, and the unemployment of all of the employees of our company, and the withdrawal of the economic support which the company provides to the economic base of Coos County and the Coos Bay businesses, supply houses, and other miscellaneous contractors and sub-contractors in the Coos Bay area.

Mr. Chairman and gentlemen, I strongly urge you to consider your actions carefully. I would further urge that should you adopt a policy concerning the storage of logs in the waters of Oregon that would be deleterious to the economic interests of the people of Coos Bay and Coos County, that adequate public hearings be held in the community affected by the policy prior to the implementation of the policy.

You should carefully weigh the economic impact of your proposed policies with the environmental gains that can be clearly demonstrated and not some wishful improvements that might, hopefully, occur.

I am most sorry that due to the press of certain business matters, I was unable to attend your meeting and present our views in person; but, I thank you for the opportunity to present our thoughts by means of this written statement.

A handwritten signature in cursive script, appearing to read "M. S. M. M. M.", with a long horizontal flourish extending to the right.



DEPARTMENT OF
ENVIRONMENTAL QUALITY

MEDFORD BRANCH OFFICE
SOUTHWEST REGION
223 W. Main St. Room 202
Medford, OR 97501 - 779-8557

1234 S.W. MORRISON STREET • PORTLAND, OREGON • 97205 • (503) 229-

ROBERT W. STRAUB
GOVERNOR

July 8, 1975

Steven D. Scheer, R. S.
County Sanitarian
Department of Planning and Development
32 W. Sixth Street
Medford, Oregon 97501

RE: LQ-SS - Jackson County
Vista View Subdivision
(36S-4W-10 W.M.)

Dear Steve:

This will verify our recent conversation regarding Prior Approval (as specified under O.A.R. 71-015[8]) status for the above described subdivision. The July 22, 1970 letter from the Jackson County Health Department has been reviewed by our legal counsel. In the opinion of our legal counsel, the July 22, 1970 letter does not constitute an approval for specific lots within the subdivision. In that specific approval was not given each lot, consideration could not be given for prior approval as specified under O.A.R. 71-015(8). To be considered a prior approval, the following three points must be satisfied:

1. The approval expressly authorizes use of subsurface sewage disposal for an individual lot or for a specific lot within a subdivision.
2. Approval or permits were issued by a representative of a state or local agency authorized by law to grant such approval.
3. The approval was issued in accordance with all rules in effect at the time.

If I can be of further assistance in any way, please feel free to contact me.

Sincerely,

LOREN KRAMER
Director


David H. Couch
District Sanitarian

Exhibit "G"
PETITION FOR RELIEF
DHC:fs

cc: SW Region

