# 6/8/1979

# OREGON ENVIRONMENTAL QUALITY COMMISSION MEETING MATERIALS



State of Oregon Department of Environmental Quality

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#### SPECIAL OREGON ENVIRONMENTAL QUALITY COMMISSION MEETING

#### June 8, 1979

# Portland City Council Chambers City Hall 1220 Southwest Fifth Avenue Portland, Oregon

#### AGENDA

#### 8:00 AM

- A. PROPOSED RULE ADOPTIONS AS REVISIONS TO THE STATE IMPLEMENTATION PLAN (SIP)
  - Amendment of OAR 340-31-030 to relax the Photochemical Oxidant Ambient Air Quality Standard from .08 ppm to .12 ppm to be consistent with Federal standards.
  - Amendments to Volatile Organic Compounds Rules for non-attainment areas, (OAR 340-22-100 through 22-150)
  - New Rules for Special Permit Requirements for sources locating in or near non-attainment areas (proposed OAR 340-20-190 through 20-198)
  - New Rules to Prevent Significant Deterioration of Air Quality (proposed OAR 340-31-100)
  - 5. New Rules pertaining to stack heights in air quality modeling (proposed OAR 340-31-110 through 31-112)
- B. PROPOSED ADOPTION OF TRANSPORTATION CONTROL STRATEGIES AS REVISIONS TO THE SIP
  - 1. Carbon Monoxide and Ozone Control Strategies for the Portland-Vancouver Interstate AQMA
  - 2. Carbon Monoxide and Ozone Control Strategies for the City of Salem
  - 3. Carbon Monoxide Control Strategy for the Eugene-Springfield AQMA
  - 4. Proposed Carbon Monoxide and Ozone Control Strategies for the Medford-Ashland AQMA

Because of the uncertain time span involved, the Commission reserves the right to deal with any item at any time in the meeting. Anyone wishing to be heard on an agenda item that doesn't have a designated time on the agenda should be at the meeting when it commences to be certain they don't . miss the agenda item.

# MINUTES OF THE SPECIAL MEETING OF THE OREGON ENVIRONMENTAL QUALITY COMMISSION

#### June 8, 1979

On Friday, June 8, 1979, a special meeting of the Oregon Environmental Quality Commission convened in the Portland City Council Chambers, 1220 S. W. Fifth Avenue, Portland.

Present were all Commission members: Mr. Joe B. Richards, Chairman; Dr. Grace S. Phinney, Vice-Chairman; Mrs. Jacklyn L. Hallock; Mr. Ronald M. Somers; and Mr. Albert H. Densmore. Present on behalf of the Department were its Director, William H. Young, and several members of the Department staff.

Staff reports presented at this meeting, which contain the Director's recommendations mentioned in these minutes, are on file in the Director's Office of the Department of Environmental Quality, 522 S. W. Fifth Avenue, Portland, Oregon.

# AGENDA ITEM A - PROPOSED RULE ADOPTIONS AS REVISIONS TO THE STATE AIR QUALITY IMPLEMENTATION PLAN

Chairman Richards indicated that since some limited amendments had been proposed since the time of the public hearings, testimony would be heard regarding those amendments. Otherwise, he continued, the Commission would not hear any testimony other than very brief comments on topics which there had been an opportunity to testify on previously through the public hearing process.

Director Young indicated that the items before the Commission at this meeting were the result of a process the Department had been taking part in along with other jurisdictions over the past 18 months. Before the Commission at this time, he said, were SIP (State Implementation Plan) revisions to transportation control strategies for four urban areas of the state and five supporting rules. Director Young said that the proposed rules for Prevention of Significant Deterioration and the ozone standard did not necessarily need to be adopted for the submission of the SIP to EPA in July, but the Department felt that adoption at this time would offer some guidance to the staff.

Director Young said that testimony had been received at public hearings held early in May around the State. Testimony was generally light regarding these SIP revisions, he said. Director Young then outlined some of the testimony that had been received regarding the agenda items. This testimony is summarized in the staff reports regarding each item.

Some changes had been made to the proposed rules, Director Young said, as a result of the public hearing process.

Mr. John Kowalczyk, Air Quality Division, indicated that comments received through the A-95 process came in after the staff reports had been distributed. He outlined the comments received from the A-95 process which are made a part of the Commission's record on this matter.

Commissioner Hallock commented that the Commission had only had one week to review the voluminous material submitted by the Department and asked if it was imperative that the Commission act at this meeting. Mr. Kowalczyk replied that if the Commission did not act at this meeting it would delay submittal of the Plan to EPA and therefore delay EPA's approval of the Plan. If the Plan was not approved by July 1, 1979, then growth sanctions for new and major industrial sources would automatically go into effect which would not be lifted until EPA approved the Plan. This would mean that permits could be processed but not issued, he said.

Commissioner Hallock asked if the Plan could be submitted on time if the Commission made any changes in the recommendations. Mr. Kowalczyk replied that he believed any changes the Commission would make could be incorporated into the Plan in time for it to be submitted by July 1, 1979.

Commissioner Phinney asked if portions of the present SIP had been omitted from the proposed SIP. Mr. Kowalczyk replied that all the existing rules and regulations of the current SIP were staying intact and that what was before the Commission were revisions to the current SIP.

# AGENDA ITEM A(1) - AMENDMENT OF OAR 340-31-030 TO RELAX THE PHOTOCHEMICAL OXIDANT AMBIENT AIR QUALITY STANDARD FROM .08 ppm to .12 ppm TO BE CONSISTENT WITH FEDERAL STANDARDS

Director Young said this agenda item dealt with a proposed alteration to the ambient air standard for ozone. The Department was proposing that the Commission adopt the new federal standard of .12 ppm ozone, he said, and then report back to the Commission in six months following further study as to the appropriateness of adopting a secondary standard.

Dr. David Lawrence, Health Officer, Multnomah County, testified against the Department's recommendation on this matter. He said the EPA document the staff used to support its recommendation stated that .15 was the lowest level at which there were known, proven health effects. EPA also recommended a safety margin of two to two and one-half times the lowest level at which known health effects occurred, which in this case would be .06, Dr. Lawrence said. Chairman Richards asked if EPA was specifically talking about ozone. Dr. Lawrence replied it was.

Dr. Lawrence argued that ozone and photochemical oxidants were poisons and the notion of safety margins was an erroneous way to think about the effects of a poison on the human body. He again requested that the Commission reject the Director's recommendation and retain the standard at its current level. Commissioner Hallock said the staff indicated that one of the reasons it was going along with EPA's recommendation was that it lacked the health expertise to dispute EPA's findings. She asked if Dr. Lawrence's testimony would affect the staff's decision, and also if any other testimony from health experts had been received. <u>Mr. Ray Johnson</u>, Air Quality Division, replied that the Department felt it did not have the health expertise, nor was there such expertise within the state to dispute EPA's conclusions. He said that the Department had received testimony from medical people on both sides of the issue.

<u>Mr. Jan Sokol</u>, Oregon Student Public Interest Research Group, said he believed the staff failed to give the Commission a complete picture in their report. He said the staff lacked the manpower to verify or dispute the EPA findings and suggested that the responsibility for the primary standard be on EPA.

Mr. Sokol said there was substantial information to indicate that EPA's decision was not based on a concern for public health but rather based on political and economic motives. He said that only one document the staff relied upon in making its recommendation actually supported the .12 standard. All the other documents supported either retention of the .08 standard or suggested a .10 ppm primary standard and a .08 secondary standard, he said.

Mr. Sokol said the tone of the staff report seemed to indicate that the Department was seeking to increase the standard solely to insure that the State would be able to attain the air quality goals and he didn't think that should be the purpose for increasing the standard. He suggested the Commission set up a medical and scientific advisory committee to review EPA's evidence and report back to them. He said testimony reflected that there was adequate medical and scientific expertise in the State to serve on such a committee. He thought that reliance on the EPA studies was misplaced in this case.

Chairman Richards said Mr. Sokol had raised some interesting questions, some of which bothered him also. In response to Chairman Richards, Mr. Sokol said he believed the old standard was supported by documented evidence and unless there was sufficient evidence to show that that standard was unreasonable, then the old standard should be kept until sufficient evidence was received to justify changing the standard.

Chairman Richards and Mr. Sokol then discussed the various studies EPA relied on in preparing the federal standard. Chairman Richards said he was concerned about the effects on the most sensitive population of establishing a level below .15 ppm. Mr. Sokol said that some of the studies relied upon by the Department were not done with persons that were most sensitive. He said .15 ppm caused effects on healthy persons, therefore there should be concern if .12 was protective of the most sensitive population.

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Commissioner Phinney noted that it was just as impossible to prove damage above .15 as it was to prove that no damage occurred below that level. She said she did not believe the .15 ppm was a reliable figure. When all factors were taken into consideration, she continued, she was not sure than even .12 would provide an adequate safety margin.

Ms. Melinda Renstrom, Oregon Environmental Council, reiterated that this matter concerned a poison and what level of poison was wanted for Oregon. She said she had been following the ozone controversy through various periodicals on the national level and had grown cynical about how the matter was handled by EPA.

Ms. Renstrom said the .12 ppm standard was not based on protection for the sensitive population. She said it had been recommended to EPA to pay less attention to the most vulnerable segments of the population.

Ms. Renstrom urged the Commission to consider the most stringent standard in view of the fact that there was no absolute point at which ozone was safe.

This ended public testimony on this item.

Commissioner Phinney asked what effect retaining the .08 standard would have on the control strategy and what would be the result if the Commission were to decide to establish a different standard in the Portland-Salem-Medford areas. Mr. Johnson replied that the strategies could be adopted at .12 and at a later time different control strategies for the state standard could be adopted. Commissioner Phinney expressed concern as to whether the public health would be protected by changing the standard.

Commissioner Hallock asked about the possibility of having a medical task force formed to study the health effects. She also asked if the Department could conduct its own studies in Oregon through the Medical School. Mr. Johnson replied that any new studies would have to include a number of actual physical studies using human beings which would take a considerable amount of resource committment that would have to be considered.

Mr. John Kowalczyk of the Department's Air Quality Division, commented that the .08 ppm standard was presently in the State Implementation Plan. If that standard was not changed, he continued, the federal government may require the state to meet the .08 standard under a time frame set up by them. He said it would be more reasonable to pull the .08 out of the SIP and retain it as a state standard and submit the .12 standard to EPA.

After a discussion among Commission members, Commissioner Phinney <u>MOVED</u> and Commissioner Hallock seconded that the .08 ppm standard be retained. Director Young advised the Commission that it was important to consider as a separate item whether or not the .08 standard would be put into the State Implementation Plan. The standard would then be subject to having established a different federal standard for the State of Oregon at that level, he said. Commissioner Hallock said she would prefer keeping the .08 ppm standard in the SIP. The motion carried with Chairman Richards desenting.

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Director Young indicated that information on the impact of retaining the .08 ppm standard in the SIP would be available from EPA later in the meeting.

Chairman Richards clarified that the effect of the motion was to adopt the Director's recommendation substituting .08 ppm for .12 ppm.

# AGENDA ITEM A(2) - AMENDMENTS TO VOLATILE ORGANIC COMPOUNDS RULES FOR NON-ATTAINMENT AREAS, OAR 340-22-100 THROUGH 22-150

Director Young informed the Commission that three areas of the state currently exceeded the National Ambient Air Quality Standards for ozone; Portland, Salem and Medford. These areas needed rules on volatile organic compounds to meet the standard for ozone, he continued. The amendments before the Commission, he said, were to correct some errors and to clarify parts of the rules originally adopted by the Commission in December 1978. When adopted, Director Young continued, these rules would become a part of the State Implementation Plan.

<u>Mr. Lyman Skory</u>, Dow Chemical Company, pointed out that the material they submitted regarding the exemption of methylene chloride was not all generated by Dow Chemical Company. Part of it was generated by EPA, he said.

No one else was present to testify on this matter.

It was <u>MOVED</u> by Commissioner Somers, seconded by Commissioner Densmore, and carried unanimously that proposed Volatile Organic Compound rules, OAR 340-22-100 to 22-150 be adopted and that the Department be directed to submit them to EPA as a revision to the State Implementation Plan.

AGENDA ITEM A(3) - NEW RULES FOR SPECIAL PERMIT REQUIREMENTS FOR SOURCES LOCATING IN OR NEAR NON-ATTAINMENT AREAS (PROPOSED OAR 340-20-190 THROUGH 20-198)

Director Young told the Commission that this proposed rule would add requirements for permit approval for new major sources impacting either on carbon monoxide or ozone non-attainment areas. Also proposed for adoption in this item, he said, were rules which would clarify the Department's authority to establish emission limits on a plant-site basis.

Mr. Mike Ziolko, Air Quality Division, presented amendments to the proposed rules.

<u>Ms. Margery Abbott</u>, Port of Portland, presented a letter from Lloyd Anderson, Executive Director of the Port of Portland, requesting a two-week continuation by the EQC on the adoption of these proposed rules to allow those impacted by the rule to work further with DEQ in developing the rules to be submitted to EPA. Mr. Anderson's letter is made a part of the Commission's record on this matter. <u>Ms. Cynthia Kurtz</u>, City of Portland, opposed the adoption of these rules as they would apply to the Portland AQMA at this time. She was also concerned that the Portland AQMA Advisory Committee had not had sufficient time to go over the proposed rules and make recommendations. Mr. Kurtz requested that the Commission delay adoption of the rules for two weeks.

<u>Mr. Dean McCargar</u>, Associated Oregon Industries, questioned whether the issues involved in this matter had been given adequate deliberation and suggested a continuation of this hearing for at least one week to allow adequate time for public input. Mr. McCargar's written testimony is made a part of the Commission's record on this matter.

This completed public testimony on this item.

Mr. Ziolko said the Department had been issuing permits based on this proposed rule, and the rule was proposed to clarify the Department's authority to issue those permits. Therefore, he said, this action would not constitute a change in the current actions of the Department.

It was <u>MOVED</u> by Commissioner Somers, seconded by Commissioner Hallock and carried unanimously that the Director's Recommendation to adopt the proposed revised rules, as amended, pertaining to Special Permit Requirements for Sources Locating in or near Non-Attainment Areas (OAR 340-20-190 through 20-198), be adopted.

# AGENDA ITEM A(4) - NEW RULES TO PREVENT SIGNIFICANT DETERIORATION OF AIR QUALITY (OAR 340-31-100)

Director Young said this rule, if adopted and approved by EPA, would give the responsibility of the Prevention of Significant Deterioration (PSD) program to DEQ.

Mr. Mike Ziolko, Air Quality Division, presented some amendments to the proposed rule as follows:

340-31-100(j)(2)(i) add: "...rates shall apply only with respect to a pollutant for which an increment, or state or national ambient air quality standard..."

340-31-100(q)(3): "...The Federal Land Manager of any [such] Class I..."

Commissioner Phinney reminded the staff that all rules should include metric equivalents.

No one was present to testify on this matter.

It was <u>MOVED</u> by Commissioner Hallock, seconded by Commissioner Somers and carried unanimously that the Director's Recommendation to adopt the revised proposed rule (OAR 340-31-100), as amended, be approved.

AGENDA ITEM A(5) - NEW RULES PERTAINING TO STACK HEIGHTS IN AIR QUALITY MODELING (OAR 340-31-100 through 31-112)

Director Young said that this rule was a requirement of the Clean Air Act and contained amendments to prevent the use of tall stacks or other dispersion methods to meet ambient air quality standards.

No one was present to testify on this matter.

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It was <u>MOVED</u> by Commissioner Somers, seconded by Commissioner Hallock and carried unanimously that the Director's recommendation to adopt the revised proposed rule (OAR 340-31-110 to 31-112) be approved.

# PROPOSED ADOPTION OF TRANSPORTATION CONTROL STRATEGIES AS REVISIONS TO THE STATE IMPLEMENTATION PLAN (SIP)

Director Young informed the Commission that three of the four items under this section of the agenda reflected back to agenda item A(l) regarding the photochemical oxidant ambient air quality standard which the Commission voted to retain at .08 ppm. He suggested the EQC hear a response from EPA before deciding on these matters.

# AGENDA ITEM B(3) - CARBON MONOXIDE CONTROL STRATEGY FOR THE EUGENE-SPRINGFIELD AQMA

Director Young said this item documented that the carbon monoxide (CO) standard was not going to be met by December of 1982 in the Eugene-Springfield AQMA and requested an extension of that attainment past 1982 but not later than 1987.

No one was present to testify on this matter.

It was <u>MOVED</u> by Commissioner Densmore, seconded by Commissioner Phinney and carried unanimously that the Director's Recommendation to approve the CO SIP revision for the Eugene-Springfield AQMA as modified to include special New Source Review requirements, be approved.

<u>Mr. Tom Wilson</u>, Chief of Air Quality Planning and Coordination for EPA Region X, informed the Commission that he had conferred with Region X and they briefly outlined some points of concern regarding the Commission's decision to retain the .08 ppm ozone standard.

Mr. Wilson cited the example that an area which attained .12 and had not attained .08 could be designated a non-attainment area by the State of Oregon, yet EPA could not promulgate that as a federal non-attainment area since it would not be in violation of the federal non-attainment standards. Therefore, this would strictly be a state action and EPA would play no role in this area. A more complex situation would be when an area was in violation of both the federal and state standards, he continued.

Mr. Wilson said that EPA's legal counsel had indicated that the state could submit a plan which contained both the .12 and .08 attainment dates and that if the .12 attainment occurred prior to 1987 it would be acceptable to EPA and the state would have flexibility as to what they did to attain .08. However, he said, he was not comfortable with that interpretation because for EPA to approve and promulgate a plan they had to be assured that if the State did not do what was necessary to carry out the plan, EPA could.

If the .08 were adopted as a secondary standard, Mr. Wilson said, then the State could submit a plan for attaining the primary standard of .12 and then develop and implement a plan to attain a secondary standard of .08 in the manner and time frames it chose.

In summary, Mr. Wilson said he was not comfortable that the staff in EPA had had sufficient time to fully go over this matter to identify to the EQC all the implications of their decision. Fundamentally, he said, EPA supported any state that wanted to do more to protect the health of their citizens. Also, he continued, EPA did not want to get involved any more than they absolutely had to in what the State was doing.

<u>Mr. E. J. Weathersbee</u>, Air Quality Division, suggested that rather than take action based on incomplete information, perhaps the staff should return at the next meeting with more clear information so the Commission would know the consequences of what they did and how things should proceed from there. Mr. Weathersbee said the transportation control strategies proposed for adoption at this meeting did not address the .08 level and would need revision to do so.

Commissioner Hallock asked if the Commission did not want to relax the strategy could .08 be adopted as part of the SIP and time lines be set up to develop a new strategy. Mr. Weathersbee replied that that could be done and a submittal could not be made in the near future because the currently proposed strategies to meet .12 would have to be revised to address .08.

<u>Mr. Denton Kent</u>, Metropolitan Service District (MSD), said that the State had the option to set whatever standards it deemed appropriate. However, he said, they had not had time to reflect adequately on the ramifications of the Commission's action to retain .08 versus having had the SIP plans developed primarily on a .12 standard. Mr. Kent said he was doubtful that they could rapidly come up with control strategies to address the .08 standard.

Mr. Kent also was concerned that Oregon had a different standard than Washington in view of the parts of Washington within the Portland-Vancouver Interstate AQMA. He was concerned about the federal funding to do planning which would be necessary to meet the difference between the state and federal standard.

The question as to whether or not the .08 standard could be met in time for attainment for the federal SIP, was another concern of Mr. Kent's.

Ms. Melinda Renstrom, Oregon Environmental Council, said that several months previous MSD and DEQ began bringing preliminary SIP information before the Portland AQMA Committee and assured the Committee that the standard could be easily changed from the proposed .12 to .08 if necessary. That was never done, she said. The MSD Council had also expressed concern over the proposed change in the standard, she said.

<u>Mr. Tom Donaca</u>, Associated Oregon Industries, said that eventhough .08 ppm was the present standard, that standard had never been applied to industry. In response to Chairman Richards, Mr. Donaca said they assumed new industrial point source facilities were designed and built to meet a .12 ppm standard.

Mr. Donaca said it was difficult for industry to comment on these proposed rules because they did not have the information on the affect of the rule. He said these rules would be the most expensive ever promulgated and enforced by EPA.

Chairman Richards concluded testimony on this matter.

Chairman Richards asked if there would be a penalty if the SIP were submitted without the Transportation Control Strategies for Portland-Vancouver, Salem and Medford-Ashland, with the condition that they would be placed on the agenda for the Commission's June 27, 1979 meeting. Director Young said it would be useful for the staff to do some additional work if the Commission wished to withhold certain portions of the SIP submittal. This would not necessarily mean an extension of the overall review time EPA would have, he said.

Director Young said it would be his recommendation to submit all of the SIP as possible at this time which would include the carbon monoxide portions of the transportation control strategies, so that a later submittal could be as minimal as possible.

AGENDA ITEMS B(1), B(2) and B(4) - CARBON MONOXIDE CONTROL STRATEGIES FOR PORTLAND-VANCOUVER INTERSTATE AQMA, CITY OF SALEM AND MEDFORD-ASHLAND AQMA

It was <u>MOVED</u> by Commissioner Densmore, seconded by Commissioner Hallock and carried unanimously that the carbon monoxide control strategies for Portland-Vancouver Interstate AQMA, City of Salem and Medford-Ashland AQMA be adopted and that the Department be instructed to submit them to EPA as part of the SIP.

Chairman Richards said the staff was instructed to revise the ozone control strategies for Portland-Vancouver Interstate AQMA, City of Salem, and Medford-Ashland AQMA in light of the Commission's action on the ozone standard, and to bring revised strategies back to the Commission as soon as practicable. Commissioner Densmore said that

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implicit in this action was the instruction to the Department to act with the lead agencies to develop its own posture with regard to the Commission's action and to advise the Commission further on the workability of that posture.

Commissioner Hallock requested that the strategies deal with identifying where most of the problem was, i.e., automobile-related, non-point source related, etc.

There being no further business, the meeting was adjourned.

Respectfully submitted, Carol A. Splettstaszer Recording Secretary

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522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

### MEMORANDUM

То:	Environmental Quality Commission
From:	Director
Subject:	Introduction to June 8, 1979 SIP Adoption Meeting

#### Background

This meeting is to consider adoption of substantial revisions to the State Implementation Plan. This culminates nearly two years of intensive Department effort to address requirements of the Clean Air Act Amendments of 1977. The many items you have before you, will significantly affect and direct the state's efforts over the next several years to clean up poor air quality areas in the state and keep existing clean air areas from experiencing significant deterioration.

The most extensive local government and public participation process ever undertaken by the Department was utilized in the development of the SIP revisions. We believe a product has been developed which generally satisifies concerns of affected parties and a product which will be approved by EPA.

As you know, several federal sanctions regarding grants and growth of new sources may be applied if an acceptable plan is not submitted to the EPA by July 1, 1979. It is therefore imperative that adoption of critical items be accomplished before then.

The SIP revisions before you, comprise transportation control strategies for four (4) urban areas of the state. Five (5) supporting rules are also proposed for adoption.

We will be proposing adoption of the rules first, since they are critical parts of the transportation control strategy.



The prevention of significant deterioration and ozone standard rules, are not sanctionable items for the July, 1979, SIPs, but action on them will provide needed guidance to the state programs in these areas.

Testimony at public hearings in Portland, Salem, Eugene, and Medford in early May on the SIP revisions, was generally light. Transportation control strategies received almost no comments. The ozone rule received the expected pro and con positions. There was significant comment on the special permit rule in the area of objecting to a recent reversal of EPA interpretations of the Clean Air Act requirements. Volatile Organic Compound Rules, by far received the greatest testimony, both from the public and from EPA.

The Department has made some changes in the rules and strategies subsequent to the hearings and generally believes that a reasonable compromise position has been reached on all controversial matters.

Some further changes will be proposed today based on comments and further review of the items sent to the commission on June 1, 1979.

It is believed EPA will be able to approve the SIP revision as proposed, although some conditional approvals may be placed on certain items, particularly in relation to the VOC rules.

As you consider each agenda item, I will highlight the issues. Staff members directly responsible for each agenda item are in attendance to answer questions and clarify any misconceptions. They will present any proposed additional amendments. You may wish to allow some limited testimony on certian key items. EPA Region X office is also represented and available to answer any questions that might arise regarding Federal requirements of the SIP.

EJWeathersbee:kdr 229-5397 June 5, 1979



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#### MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. Al, June 8, 1979, EQC Meeting

Adoption of Amendments to the State Photochemical Oxidant Ambient Air Quality Standard (OAR-340-31-030) as a revision to the State Implementation Plan

# Background and Problem Statement:

On February 8, 1979, the Environmental Protection Agency adopted a new Ambient Air Quality Standard for Ozone. The reasoning of EPA in setting the new standard level was based on extensive review of older health and welfare studies and on evaluation of studies completed since the original standard was adopted in 1970. The new standard was set at .12 ppm, 50% higher than the old standard, and is based on ozone rather than total photochemical oxidant.

After reviewing the EPA promulgation, the Department requested EQC authorization to conduct public hearings to consider the adoption of the new federal standard by the state. Testimony was also solicited concerning the appropriateness of adopting a secondary (welfare) standard at a level different from the primary standard. The Department felt that the responsibility for setting primary standards should rest with the federal agency, inasmuch as the resources of the state agency were inadequate to properly interpret health studies of this type. Other options for oxidant standards were proposed for consideration along with the request for hearings authorization. Hearings were authorized by the Commission, and were held in Medford on May 3, 1979, and in Portland on May 7, 1979. Hearings Officers reports are included with this presentation as Attachments 1 and 2.



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In considering the possible revisions to the standard, it must be kept in mind that the Department must develop plans by July 1979 to insure attainment and maintenance of the federal standard throughout the state.

The testimony received at the public hearings was evenly distributed between those in favor of the proposed standard and those desiring to retain the present standard. Very little new testimony was received, with most of the referenced studies included in the material originally reviewed by the staff when developing the proposed changes to the standard. The attached comments on testimony (Attachment 3) address the information received which is considered significantly new.

#### Authority to Act and Statement of Need for Rulemaking

The Authority to Act and Statement of Need are included with this report as Attachment 4.

### Alternatives and Evaluation

Four basic alternatives exist for the consideration of the Commission. They are as follows:

- Adopt the new federal primary and secondary standard of .12 ppm, measured as ozone, as the state primary and secondary ambient air quality standard.
- 2. Adopt the federal .12 ppm standard as the state primary standard, and consider a different state secondary standard.
- 3. Adopt different primary and secondary state standards at levels below .12 ppm.
- 4. Retain the present state primary and secondary standard of .08 ppm., changing the measured contaminant to ozone rather than photochemical oxidant.

The consequences of adopting the above alternatives are as follows:

1. Adoption of the federal primary standard would ease the cost of attainment for individuals, industry and agencies. Attainment plans would only be necessary in the Portland metropolitan area, as 1979 SIP revisions indicated proposed control strategies will attain the federal standard in all other affected areas of the state. No changes in monitoring, nor in recorded levels will result, as the state has been reporting and monitoring ozone at all locations since ozone specific instruments have been available. It will be necessary to change the alert level for ozone episodes, however, inasmuch as the current alert level would be less than the proposed standard. Environmental Quality Commission June 8, 1979 Page 3

- 2. Adoption of the federal primary standard with a different state secondary standard would also mean that the present SIP control strategies would be generally adequate. Supplementary control strategies to attain a lower secondary welfare standard could be prepared in a time frame specified by the EQC, and attainment of the secondary standard would provide even more of a safety margin for protection of the public health. No changes in monitoring procedures would be needed, and the alert level would need to be raised as in the first alternative.
- 3. Adoption of a different standard at a level below 0.12 ppm would necessitate changes in all the control strategies, and would probably result in significantly higher control costs to industry and the public. Benefits would be limited to an additional health safety margin, and the new standard would be inconsistent with that of the federal government. A change in the alert level would still be necessary.
- 4. Retention of the present .08 ppm standard would force changes in proposed control strategies over time and substantically increase attainment costs for industries, the general public, and governmental entities. Comparability of the state's attainment data with other states would be affected, and the improbability of attainment of the standard at some locations due to high ozone background or other causes would need to be considered.

<u>Rule Development Process:</u> All required rulemaking procedures have been followed. Copies of public notices are included as Attachment 5. All persons submitting written rather than oral testimony have been notified that their comments have been included in the hearings record. The rule was reviewed by staff and counsel at the time hearings were authorized.

Hearing procedures have also been submitted for comment by counsel. No formal position comments have been received from any of the three AQMA Citizen's Advisory committees. Comments on testimony received have been included on Attachment 3.

#### The Proposed Rule

Based on evidence reviewed by the staff and testimony presented during the hearings procedure, the Department proposes to (a) revise its current photochemical oxidant standard from 0.08 ppm, 1 hour average photochemical oxidant to 0.12 ppm 1 hour average of ozone, (b) submit to EPA the revised standard as a State Implementation Plan revision and (c) continue toreview the appropriateness of a more stringent secondary standard and report back to the Commission by January, 1980. Environmental Quality Commission June 8, 1979 Page 4

The proposed rule action is based on testimony and other evidence which indicates that earlier scientific evidence supporting a primary or secondary standard of .08 ppm 1 hour average was inappropriate and provides an excessive margin of safety below threshold effects. This evidence, and the results of more recent health effect studies provided the basis of support for the proposed primary standard revision. Recent studies, and public testimony do support, however, the need for further review directed toward adoption of a secondary standard based on a long term averaging time. Such a standard may be appropriate to protect against the cumulative effects of ozone in such cases as damage to plants and corrosion of materials.

#### Summation:

- 1. The Environmental Protection Agency has concluded that current health studies support a revision of the primary ozone standard to 0.12 ppm, l hour average. The Department concurs with this position and proposed to modify the state standard and to revise the SIP accordingly.
- No conclusive evidence was presented during the hearings process to justify retaining the present state primary and secondary 0.08 ppm photochemical oxidant standard.
- 3. The federal 0.12 ppm primary standard appears protective of the public health with an adequate safety margin.
- 4. The evidence supports need to further review the available data and consider the adoption of a long term ozone secondary standard to protect public welfare.

# Director's Recommendations:

Based on the summation, it is recommended that the Commission adopt the Federal Ambient Air Quality Standard for ozone, 0.12 ppm, (Amended OAR 340-31-030) one hour average, as the state's primary ozone standard and direct the Department to submit it to the Environmental Protection Agency as a revision to the State Implementation Plan. Further, it is recommended that the Commission direct the Department to review all appropriate data and report back no later than January 1, 1980, regarding the appropriateness of a more stringent secondary ozone standard.

WILLIAM H. YOUNG

RMJohnson:jo 229-6411 May 30, 1979 Attachments: Medford Hearings Officer's Report Portland Hearings Officer's Report Department's Response to Public Comment Authority to Act and Statement of Need Public Notices Proposed Rule (OAR 340-31-030)



522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

#### MEMORANDUM

To: Environmental Quality Commission

From: Hearings Officer

Subject: Public Hearing to Consider Proposed Changes in the Ambient Air Standard for Photochemical Oxidant, Medford, Oregon, May 3, 1979

Introduction: As provided in the Public Notice, the hearing was held in the Jackson County Auditorium at 1:00 p.m. on May 3, 1979. The hearings officer was Jerry Jensen of the Department staff, and Dennis Belsky was present as the staff representative from the Air Quality Division. Following the close of the hearing, record remained open until May 11, 1979 to provide for any additional testimony.

#### Summary of Testimony Received:

Oral Testimony: Those persons presenting testimony at the hearing were as follows:

1. Mr. Bruce Shaw, representing the Jackson County Commissioners. Mr. Shaw's testimony expressed concern over the statement in the hearings notice that indicated testimony would be weighed according to scientific evidence presented to support such testimony. He also suggested that the Department provide evidence that relaxation of the standard would not have a detrimental effect. He also expressed concern that basing the standard on ozone rather than total oxidant would have the effect of further reducing the standard. He did, however, agree with the proposed new method of averaging to determine compliance with the standard. He felt that the .08 ppm standard should be retained and used for a goal for attainment strategies. He was also opposed to setting any secondary standard as it would "open up a Pandora's box of secondary standards for all pollutants, including total suspended particulate."



DEQ-46

an adequate margin of safety in numerical terms, and that safety margins as high as 100% have been suggested. Dr. Susag also lists the references for the 3-M Company position, cites the comment that the Department is heavily reliant on EPA guidance in setting primary standards and lists questions concerning various aspects of the ozone standard which may remain unanswered. He also comments that while the 3-M White City operation could continue operation and achieve compliance with the 0.12 standard the 0.08 standard could not be met without production curtailment, even considering presently planned control programs. Concerning the adoption of a secondary standard, he notes that the US EPA has considered that a standard differing from the primary standard, is not needed at the present time. He also notes that Oregon may have other reasons such as visibility and forest protection to consider, along with possible effects on fruit and vegetable crops. He recommends that Oregon begin detailed studies on welfare effects to determine a future need for a differing welfare standard. He concludes that Oregon should adopt the 0.12 ppm standard on the basis of current independent scientific evidence. Futher, the state should guard its own welfare values from national averaging associated with possible revisions to the secondary welfare standard.

- 2. Dr. James E. Walther, Portland: Dr. Walther, representing Associated Oregon Industries, (A.O.I.) summarized the support of AOI for the proposed changes. He indicated that recent reviews support the change, that the threshold for health effects was at least 50% greater than originally thought, and that natural background is at least 50% greater than originally thought. This would support a change raising the standard by 50%. Dr. Walther also submitted the testimony of Dr, Mullenix (referenced above). He concluded that inadequate studies have been completed to justify a secondary standard and that the "tremendous capital costs " of achieving such a standard should be considered.
- 3. Ms. Melinda Rendstrom, Portland: Ms. Rendstrom, representing the Oregon Enviromental Council (OEC), presented testimony against the proposed standard changes. She noted that OEC had commented against the proposed changes to EPA last year on the basis that 0.08 ppm standard provided a "slight margin of safety to public health . . . particularly out of consideration to the so-called sensitive population." She reviewed and presented a table of referenced studies citing low-level effects of ozone (previously submitted with other testimony at the Medford hearings). She notes that the OEC was "truly shocked" when the EPA proposed the 0.12 standard, and comments on the OEC opinion that this decision was based on economic considerations under pressure from the American Petroleum Institute. She states that the DeLucia study used as a basis for the new standard was misinterpreted, and that the author had denounced EPA's interpretation, stating that 0.08 was a reasonable ambient standard based on public health considerations. She states that OEC opposes

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the relaxation on "health and environmental grounds," and that the Department's position is not based on medical expertise and is assuming economic difficulties in attaining the former standard. She implies a loss of credibility by EPA as a result of this standard change, and questions the motives of DEQ in following the EPA lead.

#### Written Testimony Submitted At, and Subsequent to the Hearing

- 1. Mr. Dwain Wright, Bend: a letter from Mr. Wright in opposition to the standard change was entered into the hearing record at the hearing. Mr. Wright noted he had been forced to move from the Willamette Valley by environmental pollutants, particularly in the Albany area.
- 2. Mr. H.R. Solomon, Seattle, Washington: A letter from Mr. Solomon, representing Chevron, USA Inc. was entered into the record at the hearing. As a part of the letter, which commented on two proposed rules, Mr. Solomon indicated his support for the proposed standard changes, and redesignation of any part of the state that would come into attainment as the result of adoption of the new standard.
- 3. Anonymous, League of Women Voters of Oregon, Salem. Testimony was received from the Salem LWV in opposition to the proposed changes, and indicated that if the standard were changed, it should be no higher than 0.10 ppm. They commented that the state may at times need to set higher standards than those of the Federal government. They also cited the DeLucia study and others, including effects in test animals. They also commented on the need for an adequate margin of safety, considering a 20% margin as too small for protection of susceptible populations.
- 4. Dr. J.E. Walther, Camas, Washington: Dr. Walther presented testimony for the Northwest Pulp and Paper Association (NWPPA) concerning the current proposed revisions to the State Implementation Plan. As a part of this testimony, support was given to the proposed standard with the suggestion that other ambient standards also be reviewed for consistency with those of EPA.
- 5. Mr. Jan Sokol, Portland: Mr. Sokol, attorney for the Oregon Student Public Interest Research Group (OSPIRG) presented the position of that organization in oppostion to the proposed standard change. Mr. Sokol's report included comments on the legal aspects of the standard adoption, available health studies in humans and animals, mutagenic effects, eye irritation, and disease risk. The margin of safety of the new standard was questioned, and a larger margin suggested. Mr. Sokol concluded that inadequate evidence had been presented to justify a change in the standard.
- 6. Mrs. Irving Lord, Ashland: A letter from Mrs. Lord in opposition to the standard changes was received after the hearings report for

Medford was completed, and is included here for the record. She is in opposition to any relaxation of standards and urges the Department not to let air quality worsen.

7. Ms. Melinda Rendstrom: Ms. Rendstrom submitted additional testimony in the form of a telephone dictation by Dr. Anthony DeLucia. Dr. DeLucia indicated that his study had in fact shown impairment of performance in three of six subjects, with "two or three" subjects not showing a marked or consistent reponse at 0.15 ppm. Dr. DeLucia urged maintaining the 0.08 ppm standard. Dr. DeLucia commented that their lowest level (0.15 ppm) would be re-equated to 0.12 ppm, apparently as a result of new calibration methods in the federal rule.

<u>Conclusion:</u> No further testimony was received as of May 22, 1979. All testimony has been provided for staff analysis prior to recommendation to the Commission.

Respectfully Submitted,

Jerry V. Jensen Hearings Officer

RMJohnson:bm 229-6411 May 24, 1979

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#### MEMORANDUM

To: Environmental Quality Commission

From: Hearings Officer

Subject: Public Hearing to Consider Proposed Charges in the Ambient Air Standard for Photochemical Oxidant, Portland, Oregon, May 7, 1979

Introduction: As provided in the Public Notice, the hearing was held in Room 36, State Office Building at 1:00 p.m. on May 7, 1979. The hearings officer was Jerry Jensen of the Department staff, and Raymond Johnson was present as the staff representative from the Air Quality Division. Following the close of the hearing, the record remained open until May 11th to provide for any additional testimony.

# Summary of Testimony Received:

1. Dr. Russell Susag, St. Paul, Minnesota: Dr. Susag, representing Minnesota Mining and Manufacturing Company (3-M) presented testimony in favor of the proposed changes in the standard. In his testimony, Dr. Susag described the 3-M Company operation in White City, Oregon; generally referred to the criteria for primary and secondary standards, and reviewed the history behind the adoption of the present 0.08 ppm standard. He then reviewed the later EPA efforts to determine the adequacy of the standard, including the DeLucia and Adams study which has been considered misinterpreted. Because EPA did not cite specific health effects but considered them "subtle and not well documented," and because no specific health effects were shown to occur at levels less than 0.15 ppm in the referenced studies, 3-M Company "believes 0.12 ppm is a very conservative primary standard, and may be revised upward again." He also cited the paper by Dr. Phyllis Mullenix (also referenced at the Medford Hearing, May 3, 1979) wherein it was stated "no adverse human health effects have been demonstrated to result from exposure to one-hour ozone concentrations below 0.30 ppm." Dr. Susag also pointed out that no ambient ozone caused deaths have been reported, and no records show any permanent harm to humans at levels as high as 0.40 ppm. With the original study setting the level at 0.08 generally discredited no major health effects had been shown at levels equal to or greater than 0.37 ppm. He also notes that the Clean Air Act does not define



2. Mr. Steven Ruddick, representing SUNERGI (Southern Oregon New Energy Insitute). Mr. Ruddick also took exception to the position regarding weighing of testimony. He cited a reduction of measured watts per square meter of available sunlight amounting to approximately 30% during periods of oxidant exceeding the .08 ppm standard. A table purporting to correlate these levels was submitted. Mr. Ruddick also cited negative effects of ozone on vegetative material, particularly on timber and cultivated crops. Levels of ozone producing these effects were not cited in his testimony. He expressed concern that these negative effects would have detrimental effects on availability of timber and agricultural residues used for biomass conversion for alternate energy sources such as methane, methanol, and others. He also cited material damage to rubber, plastic, fabrics, and other materials, caused by high levels of ozone. Because of the above factors, he expressed his organization's recommendation against the proposed standard change.

3. Ms. Dorothy Warnick, representing the League of Women Voters of Ashland and the Rogue Valley. Ms. Warnick made reference to the 1978 EPA staff paper wherein the advisory committee to EPA had recommended that the standard not be changed. She indicated that records for 1978 showed that while the present standard was exceeded 27 times, the proposed standard would only have been exceeded twice. She also cited a recent poll showing air quality to be the primary concern of respondent residents, and also cited an "outpouring of protest from a wide spectrum of local citizenry" at a recent hearing (February 19) of the State Legislative Committee on Trade and Economic Development. She also noted an increase of citizen complaints in the local press concerning air quality deterioration.

Mr. Peter Sage, representing U. S. Representative Jim Weaver. 4. Mr. Sage read Rep. Weaver's testimony for the hearing. The testimony opined that the USEPA had "caved in to the pressure of the oil lobby" by not only relaxing the primary standard, but by also relaxing and, in essence, eliminating the secondary standard. He urged that the state not relax the present oxidant standard. He presented a chart showing nine studies which purport to show effects to lung function, reduced oxygen pressure, reduced athletic performance and headaches, and other effects at levels below .12 ppm. He also cited statistics on lost employment time due to air pollution and extrapolated those figures to indicate that the cost in lost time would be equal to a cost to Jackson County employers of \$3,500,000 last year, compared to four years ago due to sick time resulting from deterioration of air quality. He also cited studies showing damage to alfalfa (at .10 ppm for 70 days) and to ponderosa pine (.10 ppm for six hours/day). He expressed concern that the new forestry nursery would be adversely affected by high oxidant levels. He also cited an EPA staff report which placed a cost of \$580,000,000 to ozone sensitive forest crops, but which concluded that the losses due to standard relaxation were acceptable to the nation as a whole. He concluded by reiterating that the state retain the .08 ppm primary and secondary standard for photochemical oxidant.

5. Ms. Patricia Kuhn, representing the public at large. Ms. Kuhn, a former member of the Medford-Ashland Air Quality Advisory Committee started her testimony by expressing dissatisfaction about the provision weighing testimony in favor of testimony with scientific backing. She cited the cooperation of local department representatives and expressed concern that "only scientific evidence would be admissable" at the hearing. Her testimony indicated that the standard should not be changed until more, less conflicting, evidence established that the relaxed standard was not economic rather than health related. She also recommended that areas which could not attain the more stringent standard petition for a relaxed standard for the unattainable area, and that the secondary standard remain the same as the primary standard.

6. Mr. Edward Cox, representing himself. Mr. Cox presented testimony concerning the beneficial aspects of a commercially available device on emissions from motor vehicles. He testified that "Oregon is first, and should stay that way" and that the standards not be relaxed, but should be attained by methods such as his patented device.

Bob Gantenbein, representing the Medford Chamber of Commerce. 7. Mr. Gantenbein, a professional engineer employed by a consultant firm retained by the Chamber of Commerce presented testimony as follows: He applauded the emphasis on scientific evidence, but indicated that this should not deter persons from presenting testimony. He agreed that the state has limited resources to properly evaluate health effects, and that the Department must rely on EPA opinion unless adequate evidence is presented to the contrary. He agreed with EPA that ozone would be the preferred standard entity because the effects are better known, and the data base is not adequate to justify separate standards concerning other oxidants. He agreed with the new statistical method for determining standard attainment. He maintained the adoption of a secondary standard was improper at this time due to virtually non-existent data showing plant damage in the Medford area. He concluded by summarizing the evidence and arguments supporting the .12 ppm ozone standard.

Gary Stevens, representing Jackson County Health Department. Mr. 8. Stevens testified that he felt EPA was eliminating the level of protection by raising the standard to a point which may or may not include any protection at all for health or welfare. He found no evidence in the EPA Advisory panel summary statement supporting change in oxidant standards. He noted that the local health departments, along with the citizens of the state, are reliant on the Department to provide standards and education to protect them and to apprise them of environmental hazards. He indicated that the changes in standards must be based on information showing that no harm would result from the change and not reasons of economy or inability to timely attain the standard. He noted that data from the EPA Panel on Health Effects indicated that effects might be seen in some individuals at levels as low as .10 ppm. He reiterated that the panel found no reason to change the standard from the .08 ppm level. He concluded that raising the standard for reasons other than health effects should be documented for the public, and implied that maintenance of individual health may be as costly as meeting air standards.

9. John P. Brown, representing himself and Rogue River Sierra Club. Mr. Brown wished to go on record as agreeing with testimony against changing the standard.

This completed the oral testimony at the hearing. Written copies of testimony were received from all who testified except Mr. Cox and Mr. Brown. Copies of these are attached to this report.

#### Additional testimony received:

In addition to the oral testimony, written presentations were received as follows:

1. Sara Shapiro, Medford. Ms. Shapiro implies that the standard is being changed because it is too difficult to attain. She cites studies by five researchers showing health or welfare effects at .10 ppm and less. She feels the standard should not be changed and that there is a plan in existence to attain the .08 standard in Jackson County.

2. Shirley A. Nelson, Medford. Ms. Nelson also feels the standard should not be changed and implies it is being changed because of the difficulty of attainment. She protests the proposed change and urges more stringent clean-up measures.

3. Beverly J. Beck, Ashland. Ms. Beck stated she was not in favor of changing the ozone standard and that air quality was a primary right and should not be an economic or political issue.

4. Eleanor L. Bradley, Ashland. Ms. Bradley stated her opposition to relaxation of the standard. She cited the Federal Register (FR 2/2/79, p. 8203) which indicates the difficulty of establishing threshold effect levels in sensitive individuals, and indicated that the previous summer she had experienced real health problems during periods of high oxidant at Medford. She also cited possible detrimental effects of poor air quality on the timber industry, tourism, and agriculture in Jackson County. She concluded with the hope that the Commission not approve the standard changes.

5. Christine Fowler, Ashland. Mr. Fowler urged the Commission not to adopt the standard changes. She cited personal health problems from high pollution levels, her concern for possible detrimental effects to pregnant women and the fetus, and the detrimental effects of air pollution on tourism and agriculture.

6. Robert L. Gantenbein. Mr. Gantenbein submitted an additional letter and supplemental information in the form of a presentation by Dr. Phyllis Mullenix of Haward Medical School. The letter implied that few who had testified at the hearing were qualified to make judgments as to the adequacy of the standard, and presented the paper by Dr. Mullenix as evidence supporting the change. Dr. Mullenix' presentation indicts EPA

as being selective in accepting evidence and as failing to listen to conclusions made by its own Science Advisory Board. She indicated that the consensus opinion of the board was that no adverse human health effects had been demonstrated to result from exposure to one-hour ozone concentrations less than 0.30 ppm. She questioned the objectivity shown by EPA, inasmuch as few, if any, of the recommendations made by the Science Advisory Board had been incorporated in revisions to the draft criteria document for the ozone standard. She stated that the EPA had opted (in 1978) to base the revised standard on the conclusions of a group of advisors who had not even reviewed the revised criteria document. She quoted various members of the Science Advisory Board as being in disapproval of the final criteria document, and indicated that EPA had neither sought nor received the approval of the Board for the document. She faults the EPA as being overinterpretive of limited studies in setting the standard level, and that this overinterpretation has resulted in the adoption of a standard much more stringent than necessary to protect public health. She cited additional authorities to show that the standard was more stringent than necessary and resulted in unnecessary economic costs for implementation. These costs were represented as being 8.7 billion dollars per year to implement a standard at the 0.1 ppm rather than the 0.2 ppm level. She again referred to the bypassing of the advisory board as illegal and abusive of the statutory review process.

The above report is inclusive of all oral and written testimony received from the Jackson County area as of May 17, 1979. Additional testimony from the Portland public hearing on this subject is contained in a separate hearings officer's report.

Respectfully submitted,

Jerry V. Jensen Hearings Officer

RMJohnson:tf 229-6411 May 18, 1979 Attachments A2337.1:F20 Attachment 3

# Public Hearings to Consider Changes in the Ambient Air Standard for Photochemical Oxidant

# Summary of Public Comment and Department's Response

Testimony is excepted from the hearings officer's reports.

# Testimony at the Medford Hearing:

1. Mr. Bruce Shaw, representing the Jackson County Commissioners. Mr. Shaw's testimony expressed concern over the statement in the hearings notice that indicated testimony would be weighed according to scientific evidence presented to support such testimony. He also suggested that the Department provide evidence that relaxation of the standard would not have a detrimental effect. He also expressed concern that basing the standard on ozone rather than total oxidant would have the effect of further reducing the standard. He did, however, agree with the proposed new method of averaging to determine compliance with the standard. He felt that the .08 ppm standard should be retained and used for a goal for attainment strategies. He was also opposed to setting any secondary standard as it would "open up a Pandora's box of secondary standards for all pollutants, including total suspended particulate."

Department Comment: The statement in the hearing notice did not exclude testimony from anyone, but rather indicated that more weight would be placed on testimony with adequate, referenced scientific backing. Many of the effects noted with oxidants can be construed as subjective, and this statement was intended to provide more objectivity in the evaluation of the testimony. Mr. Shaw's comment on further reducing the standard because it would be based on ozone is incorrect. The Department presently measures ozone, and has always reported ozone in the Medford area. The statement concerning additional secondary standards is also uninformed--secondary standards already exist for many other contaminants.

2. Mr. Steven Ruddick, representing SUNERGI (Southern Oregon New Energy Insitute). Mr. Ruddick also took exception to the position regarding weighing of testimony. He cited a reduction of measured watts per square meter of available sunlight amounting to approximately 30% during periods of oxidant exceeding the .08 ppm standard. A table purporting to correlate these levels was submitted. Mr. Ruddick also cited negative effects of ozone on vegetative material, particularly on timber and cultivated crops. Levels of ozone producing these effects were not cited in his testimony. He expressed concern that these negative effects would have detrimental effects on availability of timber and agricultural residues used for biomass conversion for alternate energy sources such as methane, methanol, and others. He also cited material damage to rubber, plastic, fabrics, and other materials, caused by high levels of ozone. Because of the above factors, he expressed his organization's recommendation against the proposed standard change.

Department Comment: Mr. Ruddick's comment concerning reduction of available sunlight fails to take into account the presence of other contaminants, such as suspended particulate, which would have even greater sunlight-reducing effects than would the ozone. A least squares regression performed on the data provided by Mr. Ruddick showed a very low correlation between watts/m<sup>2</sup> and ozone concentration. Mr. Ruddick's comments that high ozone concentrations may have effects on vegetation and result in less materials for biomass conversion are well taken, but in the absence of referenced levels it is not possible to determine whether ambient ozone levels high enough to produce significant effects of this type have been measured in Oregon.

3. Ms. Dorothy Warnick, representing the League of Women Voters of Ashland and the Rogue Valley. Ms. Warnick made reference to the 1978 EPA staff paper wherein the advisory committee to EPA had recommended that the standard not be changed. She indicated that records for 1978 showed that while the present standard was exceeded 27 times, the proposed standard would only have been exceeded twice. She also cited a recent poll showing air quality to be the primary concern of respondent residents, and also cited an "outpouring of protest from a wide spectrum of local citizenry" at a recent hearing (February 19) of the State Legislative Committee on Trade and Economic Development. She also noted an increase of citizen complaints in the local press concerning air quality deterioration.

Department Comment: The EPA staff paper referred to in this testimony has been questioned in other testimony presented at this hearing (Dr. Phyllis Mullenix, below). Her comments on increased citizen concern are noted.

4. Mr. Peter Sage, representing U. S. Representative Jim Weaver. Mr. Sage read Rep. Weaver's testimony for the hearing. The testimony opined that the USEPA had "caved in to the pressure of the oil lobby" by not only relaxing the primary standard, but by also relaxing and, in essence, eliminating the secondary standard. He urged that the state not relax the present oxidant standard. He presented a chart showing nine studies which purport to show effects to lung function, reduced oxygen pressure, reduced athletic performance and headaches, and other effects at levels below .12 ppm. He also cited statistics on lost employment time due to air pollution and extrapolated those figures to indicate that the cost in lost time would be equal to a cost to Jackson County employers of \$3,500,000 last year, compared to four years ago due to sick time resulting from deterioration of air quality. He also cited studies showing damage to alfalfa (at .10 ppm for 70 days) and to ponderosa pine (.10 ppm for six hours/day). He expressed concern that the new forestry nursery would be adversely affected by high oxidant levels. He also cited an EPA staff report which placed a cost of \$580,000,000 to ozone sensitive

forest crops, but which concluded that the losses due to standard relaxation were acceptable to the nation as a whole. He concluded by reiterating that the state retain the .08 ppm primary and secondary standard for photochemical oxidant.

Department Comment: Congressman Weaver's testimony raises a point which must be addressed by the Commission in evaluating this proposed standard. The point in question is whether or not pressures from lobby interests have resulted in a standard based on economic rather than health considerations. The testimony to EPA by the American Petroleum Institute is available as part of the testimony presented at the Portland hearing, to be reviewed later in this report. The chart presented with this testimony references studies already considered in EPA's evaluation of the standard, and the levels shown as damaging to plants have never persisted in Oregon for the extended duration shown.

5. Ms. Patricia Kuhn, representing the public at large. Ms. Kuhn, a former member of the Medford-Ashland Air Quality Advisory Committee started her testimony by expressing dissatisfaction about the provision weighing testimony in favor of testimony with scientific backing. She cited the cooperation of local department representatives and expressed concern that "only scientific evidence would be admissable" at the hearing. Her testimony indicated that the standard should not be changed until more, less conflicting, evidence established that the relaxed standard was not economic rather than health related. She also recommended that areas which could not attain the more stringent standard petition for a relaxed standard for the unattainable area, and that the secondary standard remain the same as the primary standard.

Department Comment: Ms. Kuhn misinterprets the weighing of testimony to conclude that only scientific testimony is acceptable. All testimony received at the hearing is considered, but weighted according to scientific evidence. The Department feels that evidence supporting the relaxed standard is already available, and that differing standards for differing areas would be difficult to enforce. Health effects occur at the same levels, no matter how difficult attainment may be.

6. Mr. Edward Cox, representing himself. Mr. Cox presented testimony concerning the beneficial aspects of a commercially available device on emissions from motor vehicles. He testified that "Oregon is first, and should stay that way" and that the standards not be relaxed, but should be attained by methods such as his patented device.

Department Comment: Mr. Cox's testimony is welcomed, and is selfexplanatory.

7. Bob Gantenbein, representing the Medford Chamber of Commerce. Mr. Gantenbein, a professional engineer employed by a consultant firm retained by the Chamber of Commerce presented testimony as follows: He applauded the emphasis on scientific evidence, but indicated that this should not deter persons from presenting testimony. He agreed that the state has limited resources to properly evaluate health effects, and that the Department must rely on EPA opinion unless adequate evidence is presented to the contrary. He agreed with EPA that ozone would be the preferred standard entity because the effects are better known, and the data base is not adequate to justify separate standards concerning other oxidants. He agreed with the new statistical method for determining standard attainment. He maintained the adoption of a secondary standard was improper at this time due to virtually non-existent data showing plant damage in the Medford area. He concluded by summarizing the evidence and arguments supporting the .12 ppm ozone standard.

<u>Department Comment:</u> Mr. Gantenbein is basically in support of the EPA position and does not support a secondary standard at this time.

Gary Stevens, representing Jackson County Health Department. Mr. 8. Stevens testified that he felt EPA was eliminating the level of protection by raising the standard to a point which may or may not include any protection at all for health or welfare. He found no evidence in the EPA Advisory panel summary statement supporting change in oxidant standards. He noted that the local health departments, along with the citizens of the state, are reliant on the Department to provide standards and education to protect them and to apprise them of environmental hazards. He indicated that the changes in standards must be based on information showing that no harm would result from the change and not reasons of economy or inability to timely attain the standard. He noted that data from the EPA Panel on Health Effects indicated that effects might be seen in some individuals at levels as low as .10 ppm. He reiterated that the panel found no reason to change the standard from the .08 ppm level. He concluded that raising the standard for reasons other than health effects should be documented for the public, and implied that maintenance of individual health may be as costly as meeting air standards.

<u>Department Comment:</u> Mr. Stevens' fears that the safety margin may be inadequate must be evaluated in the selection of the proposed standard. The EPA panel referred to is discredited in later testimony to be reviewed further on in this report. The Department and EPA feel the .08 ppm level was improperly established and was based on inadequate study.

 John P. Brown, representing himself and Rogue River Sierra Club. Mr. Brown wished to go on record as agreeing with testimony against changing the standard.

Department Comment: Mr. Brown's testimony is noted and welcomed.

#### Written testimony received:

 Sara Shapiro, Medford. Ms. Shapiro implies that the standard is being changed because it is too difficult to attain. She cites studies by five researchers showing health or welfare effects at .10 ppm and less. She feels the standard should not be changed and that there is a plan in existence to attain the .08 standard in Jackson County.

<u>Department Comment:</u> Ms. Shapiro is mistaken in her comment concerning attainment of the .08 standard in Medford. The only attainment plan for that area is based on the .12 ppm standard.

 Shirley A. Nelson, Medford. Ms. Nelson also feels the standard should not be changed and implies it is being changed because of the difficulty of attainment. She protests the proposed change and urges more stringent clean-up measures.

<u>Department Comment:</u> Present attainment plans may satisfy Ms. Nelson's comments on clean-up measures.

3. Beverly J. Beck, Ashland. Ms. Beck stated she was not in favor of changing the ozone standard and that air quality was a primary right and should not be an economic or political issue.

<u>Department Comment:</u> Ms. Beck's comments are responded to in other parts of this review.

4. Eleanor L. Bradley, Ashland. Ms. Bradley stated her opposition to relaxation of the standard. She cited the Federal Register (FR 2/2/79, p. 8203) which indicates the difficulty of establishing threshold effect levels in sensitive individuals, and indicated that the previous summer she had experienced real health problems during periods of high oxidant at Medford. She also cited possible detrimental effects of poor air quality on the timber industry, tourism, and agriculture in Jackson County. She concluded with the hope that the Commission not approve the standard changes.

Department Comment: Ms. Bradley's comments are noted. Inasmuch as no monitoring data is available for Ashland, the Department can neither confirm nor deny the existence of high oxidant levels which may have caused her discomfort. The Department agrees that detrimental effects may occur at high ozone levels, but feels that further evaluation information is needed to determine what level will be adequately protective of the industries referred to in this testimony.

5. Christine Fowler, Ashland. Mr. Fowler urged the Commission not to adopt the standard changes. She cited personal health problems from high pollution levels, her concern for possible detrimental effects to pregnant women and the fetus, and the detrimental effects of air pollution on tourism and agriculture.

<u>Department Comment:</u> The Department is not aware of any studies linking oxidant levels with fetal injury. The .12 ppm standard is considered by EPA to be reasonably protective of public health. 6. Robert L. Gantenbein. Mr. Gantenbein submitted an additional letter and supplemental information in the form of a presentation by Dr. Phyllis Mullenix of Harvard Medical School. The letter implied that few who had testified at the hearing were qualified to make judgments as to the adequacy of the standard, and presented the paper by Dr. Mullenix as evidence supporting the change. Dr. Mullenix' presentation indicts EPA as being selective in accepting evidence and as failing to listen to conclusions made by its own Science Advisory Board. She indicated that the consensus opinion of the board was that no adverse human health effects had been demonstrated to result from exposure to one-hour ozone concentrations less than 0.30 ppm. She questioned the objectivity shown by EPA, inasmuch as few, if any, of the recommendations made by the Science Advisory Board had been incorporated in revisions to the draft criteria document for the ozone standard. She stated that the EPA had opted (in 1978) to base the revised standard on the conclusions of a group of advisors who had not even reviewed the revised criteria document. She quoted various members of the Science Advisory Board as being in disapproval of the final criteria document, and indicated that EPA had neither sought nor received the approval of the Board for the document. She faults the EPA as being overinterpretive of limited studies in setting the standard level, and that this overinterpretation has resulted in the adoption of a standard much more stringent than necessary to protect public health. She cited additional authorities to show that the standard was more stringent than necessary and resulted in unnecessary economic costs for implementation. These costs were represented as being 8.7 billion dollars per year to implement a standard at the 0.1 ppm rather than the 0.2 ppm level. She again referred to the bypassing of the advisory board as illegal and abusive of the statutory review process.

<u>Department Comment:</u> The Mullenix testimony is new to our review process, and was submitted by a number of individuals. We feel the above summary is self-explanatory, and comment only that this is the first knowledge we have had of the Science Advisory Board referenced in the testimony.

# Testimony Received at the Portland Hearing

1. Dr. Russell Susag, St. Paul, Minnesota: Dr. Susag, representing Minnesota Mining and Manufacturing Company (3-M) presented testimony in favor of the proposed changes in the standard. In his testimony, Dr. Susag described the 3-M Company operation in White City, Oregon; generally referred to the criteria for primary and secondary standards, and reviewed the history behind the adoption of the present 0.08 ppm standard. He then reviewed the later EPA efforts to determine the adequacy of the standard, including the DeLucia and Adams study which has been considered misinterpreted. Because EPA did not cite specific health effects but considered them "subtle and not well documented," and because no specific health effects were shown to occur at levels less than 0.15 ppm in the referenced studies, 3-M Company "believes 0.12 ppm is a very conservative primary standard, and may be revised upward again." He also cited the paper by Dr. Phyllis Mullenix (also referenced at the Medford Hearing, May 3, 1979) wherein it was stated "no adverse human health effects have been demonstrated to result from exposure to one-hour ozone concentrations below 0.30 ppm." Dr. Susag also pointed out that no ambient ozone caused deaths have been reported, and no records show any permanent harm to humans at levels as high as 0.40 ppm. With the original study setting the level at 0.08 ppm generally discredited no major health effects had been shown at levels equal to or greater than 0.37 ppm. He also notes that the Clean Air Act does not define an adequate margin of safety in numerical terms, and that safety margins as high as 100% have been suggested. Dr. Susag also lists the references for the 3-M Company position, cites the comment that the Department is heavily reliant on EPA guidance in setting primary standards and lists questions concerning various aspects of the ozone standard which may remain unanswered. He also comments that while the 3-M White City operation could continue operation and achieve compliance with the 0.12 ppm standard the 0.08 ppm standard could not be met without production curtailment, even considering presently planned control programs. Concerning the adoption of a secondary standard, he notes that the US EPA has considered that a standard differing from the primary standard, is not needed at the present time. He also notes that Oregon may have other reasons such as visibility and forest protection to consider, along with possible effects on fruit and vegetable crops. He recommends that Oregon begin detailed studies on welfare effects to determine a future need for a differing welfare standard. He concludes that Oregon should adopt the 0.12 ppm standard on the basis of current independent scientific evidence. Further, the state should guard its own welfare values from national averaging associated with possible revisions to the secondary welfare standard.

Department Comment: Dr. Susag's testimony also references the DeLucia study, testimony by the American Petroleum Institute before the EPA, and the Mullenix paper previously mentioned. The Department feels the above summary is self-explanatory.

2. Dr. James E. Walther, Portland: Dr. Walther, representing Associated Oregon Industries, (A.O.I.) summarized the support of AOI for the proposed changes. He indicated that recent reviews support the change, that the threshold for health effects was at least 50% greater than originally thought, and that natural background is at least 50% greater than originally thought. This would support a change raising the standard by 50%. Dr. Walther also submitted the testimony of Dr. Mullenix (referenced above). He concluded that inadequate studies have been completed to justify a secondary standard and that the "tremendous capital costs" of achieving such a standard should be considered.

<u>Department Comment:</u> Dr. Walther's testimony also includes the Mullenix report. The remainder of his testimony is self-explanatory.

3. Ms. Melinda Renstrom, Portland: Ms. Renstrom, representing the Oregon Environmental Council (OEC), presented testimony against the proposed standard changes. She noted that OEC had commented against the proposed changes to EPA last year on the basis that 0.08 ppm standard provided a "slight margin of safety to public health . . . particularly out of consideration to the so-called sensitive population." She reviewed and presented a table of referenced studies citing low-level effects of ozone (previously submitted with other testimony at the Medford hearings). She notes that the OEC was "truly shocked" when the EPA proposed the 0.12 standard, and comments on the OEC opinion that this decision was based on economic considerations under pressure from the American Petroleum Institute. She states that the DeLucia study used as a basis for the new standard was misinterpreted, and that the author had denounced EPA's interpretation, stating that 0.08 was a reasonable ambient standard based on public health considerations. She states that OEC opposes the relaxation on "health and environmental grounds," and that the Department's position is not based on medical expertise and is assuming economic difficulties in attaining the former standard. She implies a loss of credibility by EPA as a result of this standard change, and questions the motives of DEQ in following the EPA lead.

<u>Department Comment:</u> References submitted by Ms. Renstrom are included in other testimony previously referenced, and have been previously reviewed by the Department. The Department is not relying solely on the DeLucia study in its evaluation of the proposed standard.

### Testimony received by letter:

 Mr. Dwain Wright, Bend: A letter from Mr. Wright in opposition to the standard change was entered into the hearing record at the hearing. Mr. Wright noted he had been forced to move from the Willamette Valley by environmental pollutants, particularly in the Albany area.

<u>Department Commment:</u> Mr. Wright's comments are general in nature and are noted for the record.

2. Mr. H.R. Solomon, Seattle, Washington: A letter from Mr. Solomon, representing Chevron, USA Inc. was entered into the record at the hearing. As a part of the letter, which commented on two proposed rules, Mr. Solomon indicated his support for the proposed standard changes, and redesignation of any part of the state that would come into attainment as the result of adoption of the new standard.

Department Comment: Mr. Solomon's comments are noted for the record.

3. Anonymous, League of Women Voters of Oregon, Salem. Testimony was received from the Salem LWV in opposition to the proposed changes, and indicated that if the standard were changed, it should be no higher than 0.10 ppm. They commented that the state may at times need to set higher standards than those of the Federal government. They also cited the DeLucia study and others, including effects in test animals. They also commented on the need for an adequate margin of safety, considering a 20% margin as too small for protection of susceptible populations.

Department Comment: The League's suggestion of a new standard at the 0.10 level is of interest and may be justifiable in view of providing an additional margin of safety. The animal studies have not yet been shown to correlate with human health effects.

4. Dr. J.E. Walther, Camas, Washington: Dr. Walther presented testimony for the Northwest Pulp and Paper Association (NWPPA) concerning the current proposed revisions to the State Implementation Plan. As a part of this testimony, support was given to the proposed standard with the suggestion that other ambient standards also be reviewed for consistency with those of EPA.

Department Comment: Dr. Walther's comments are noted for the record.

5. Mr. Jan Sokol, Portland: Mr. Sokol, attorney for the Oregon Student Public Interest Research Group (OSPIRG) presented the position of that organization in opposition to the proposed standard change. Mr. Sokol's report included comments on the legal aspects of the standard adoption, available health studies in humans and animals, mutagenic effects, eye irritation, and disease risk. The margin of safety in the new standard was questioned, and a larger margin suggested. Mr. Sokol concluded that inadequate evidence had been presented to justify a change in the standard.

<u>Department Comment:</u> Studies referenced in Mr. Sokol's testimony had previously been reviewed by the Department. His comments concerning an inadequate safety margin warrants consideration in this adoption. The Department does not agree that inadequate evidence has been presented to warrant a change from the 0.08 ppm level, but rather that the study on which that level was based has been completely discredited.

6. Mrs. Irving Lord, Ashland: A letter from Mrs. Lord in opposition to the standard changes was received after the hearings report for Medford was completed, and is included here for the record. She is in opposition to any relaxation of standards and urges the Department not to let air quality worsen.

Department Comment: Mrs. Irving's comments are noted for the record.

7. Ms. Melinda Renstrom: Ms. Renstrom submitted additional testimony in the form of a telephone dictation by Dr. Anthony DeLucia. Dr. DeLucia indicated that his study had in fact shown impairment of performance in three of six subjects, with "two or three" subjects
not showing a marked or consistent response at 0.15 ppm. Dr. DeLucia urged maintaining the 0.08 ppm standard. Dr. DeLucia commented that their lowest level (0.15 ppm) would be re-equated to 0.12 ppm, apparently as a result of new calibration methods in the federal rule.

<u>Department Comment:</u> Dr. DeLucia's comments are noted. The Department has been unable to reach him to confirm certain aspects of his study, particularly references to calibration procedures. In any event the DeLucia study is only one of many studies reviewed for this proposal. Comments concerning the calibration procedures will be appended or presented orally to the Commission if received prior to the meeting.

RJ/MEF:kmm A2426.B

#### Attachment 4

#### Proposed Changes to Ambient Air Standard for Ozone Authority to Act and Statement of Need

#### Authority to Act

#### Citation of Legal Authority

The legal authority for adoption of these rule changes lies in ORS 468.020, Rules and Standards; and 468.295, Air Purity standards, air quality standards. The present ambient air standard for photochemical oxidant is in OAR CR 340, Division 31, Section 340-31-030.

#### Statement of Need

Information developed since the adoption of the current state oxidant standard has raised questions as to the appropriateness of the standard for its purpose in protecting the public health and welfare. New methods for estimating violations of the standard and for insuring proper calibration of the sampling instruments have also been developed. The state needs to re-evaluate the standard based on these new data and to determine whether the present allowable level is appropriate for health and welfare purposes. The state standard should be reviewed to determine its appropriateness in light of this new information.

#### Citation of Principle Documents Relied Upon in Considering Need for Rule

The following documents have been considered in this proposed rule adoption:

- Federal Register Vol. 44, No. 28, February 8, 1979 "National Primary and Secondary Ambient Air Standards" Chapter 1, Subchapter C, Part 50 and Part 51, "Revisions to Implementation Procedures Related to Photochemical Oxidants."
- 2. "Revision of the National Ambient Air Quality Standard for Photochemical Oxidants" January 6, 1978 Staff Summary Paper, External Review Draft, Strategies and Air Standards Division, Office of Air Quality Planning and Standards Division, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina.
- 3. "A Method for Assessing the Health Risks Associated with Alternative Air Quality Standards for Photochemical Oxidants, External Review Draft, loc. cit.
- "Alternate Forms of the Ambient Air Quality Standard for Photochemical Oxidants," U.S. Environmental Protection Agency Staff Paper, January, 1978, (Preliminary draft).

Attachment 3 Page 2

- 5. "Summary Statement from the EPA Advisory Panel on Health Effects of Photochemical Oxidants," prepared for U.S. EPA by the Institute of Environmental Studies at the University of North Carolina at Chapel Hill; January 1978.
- 6. "Air Quality Criteria for Photochemical Oxidant and Oxidant Precursors" Vols. I & II, Preliminary Drafts, U.S. Environmental Protection Agency, Office of Research and Development, Washington, DC, September 1977.
- 7. "Preamble and Proposed Revision to the National Ambient Air Quality Standard for Ozone"; U.S. Environmental Protection Agency; June, 1978.
- "Ozone and Other Photochemical Oxidants"; Committee on Medical and Biological Effects of Environmental Pollutants; Division of Medical Sciences, Assembly of Life Sciences, National Research Council; National Academy of Sciences; Washington, DC, 1977.
- 9. Public Hearings Testimony from the Hearings to Consider Changes in the Ambient Air Standard for Photochemical Oxidant, Medford, Oregon, May 3, 1979; and Portland, Oregon, May 7, 1979. Includes all testimony received by the Department as of May 25, 1979.



## Department of Environmental Quality

522 SOUTHWEST 5TH AVE. PORTLAND, OREGON

SCAERI VY SIRAUS

MAILING ADDRESS: P.O. BOX 1760, PORTLAND, OREGON 97207

Prepared: 3/14/79 Hearing Dates: 5/3 and 5/7/79

#### NOTICE OF PUBLIC HEARING

#### A CHANCE TO BE HEARD ABOUT:

#### PROPOSED CHANGES IN THE AMBIENT AIR QUALITY STANDARD FOR PHOTOCHEMICAL OXIDANT

Information developed since the photochemical oxidant standard was adopted by the Environmental Protection Agency (EPA) in 1970 indicates that changes in the standard should be considered. EPA has adopted a new standard substantially higher than the present state standard. The Department of Environmental Quality has reviewed the evidence presented by EPA, and is proposing changes in the state standard to make it consistent with the federal standard.

#### WHAT IS THE DEQ PROPOSING?

Interested parties should request a copy of the complete proposed rule package. The major aspects of the proposed changes are:

- \*\* DEQ proposes to adopt the new federal ambient air quality standard of 0.12 ppm ozone, one hour average, as a state primary standard.
- \*\* DEQ is soliciting testimony concerning the appropriateness of adopting a secondary welfare standard for ozone.

#### WHO IS AFFECTED BY THIS PROPOSAL?

To some extent, all persons in the state, but particularly those in the metropolitan areas where oxidant violations are common during summer months. Substantial economic impact may be associated with control program requirements.

March 14, 1979 Page 2

#### HOW TO PROVIDE YOUR INFORMATION:

Written comments should be sent to the Department of Environmental Quality, Air Quality Division, P.O. Box 1760, Portland, OR 97207, and should be received by May 3, 1979.

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

City	Time	Date	Location
Medford	1:00 p.m.	May 3	Jackson County Courthouse Auditorium 10 South Oakdale
Portland	1:00 p.m.	May 7	Room 36, State Office Bldg. 1400 SW Fifth Avenue

Evaluation of all testimony presented will be weighed according to the scientific evidence presented to support the testimony.

#### WHERE TO OBTAIN ADDITIONAL INFORMATION:

Copies of the proposed rule may be obtained from:

Mr. Raymond Johnson Department of Environmental Quality Air Quality Division P.O. Box 1760 Portland, Oregon 97207 (503) 229-6411

#### LEGAL REFERENCES FOR THIS PROPOSAL:

This proposal amends OAR 340-31-030. This rule is proposed under authority of ORS 468.020 and ORS 468.295.

#### LAND USE PLANNING CONSISTENCY

The Department has concluded that the proposals do affect land use.

With regard to Goal 6 (air, water and land resources quality) the rules are designed to enhance and preserve air quality in the affected area and are considered consistent with the goal. March 14, 1979 Page 3

Goal 11 (public facilities and services) is deemed unaffected by the proposals.

Public comment on any land use issue involved is welcome and may be submitted in the same fashions as are indicated for testimony in this NOTICE OF PUBLIC HEARING.

It is requested that local, state, and federal agencies review the proposed action and comment on possible conflicts with their programs affecting land use and with Statewide Planning Goals within their expertise and jurisdiction.

The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any apparent conflict brought to our attention by local, state or federal authorities.

#### FURTHER PROCEEDINGS

After public hearing the Environmental Quality Commission may adopt a rule identical to the proposed rule, adopt a modified rule on the same subject matter, or decline to act. The Commission's deliberation should come on June 8, 1979 as part of the agenda of a scheduled Commission meeting. The adopted regulations may be submitted to the Environmental Protection Agency as part of the State Clean Air Act Implementation Plan.

PROPORTUNITY TO COMMENTION YOUR OPPORTUNITY TO COMMENT ON PROPOSED CHANGES IN THE STATE **OZONE AMBIENT AIR** 14 **QUALITY STANDARD** The Department of Environmental Quality is proposing to change the state The Department of Environmental Quality is proposing to primary air quality standard for ozone to 0.12 ppm, one hour average, to change the state primary air quality standard for ozone tor 1.1 make it consistent with the federal 'air quality standard. The DEQ is also 0.12 ppm, one hour average, to make it consistent with the soliciting testimony concerning the appropriateness of adopting a secondary 23 federal air quality standard. The DEQ is also soliciting testi-(welfare-related) standard for ozone. A revised primary standard may be mony concerning the appropriateness of adopting a secondsubmitted to EPA as a change to the Oregon Clean Air Act Implementation Plan. You may comment orally at: ary (welfare-related) standard for ozone. A revised primary standard may be submitted to EPA as a change to the Oregon Clean Air Act Implementation Plan. You may comment. 1:00 P.M. PUBLIC HEARING, MAY 3, 1979 S. Ball & Art JACKSON COUNTY COURTHOUSE orally at: 1:00 P.M. PUBLIC HEARING, MAY 3, 1979 AUDITORIUM, MEDFORD 🗈 JACKSON COUNTY COURTHOUSE 1:00 P.M. PUBLIC HEARING, MAY 7, 1979 AUDITORIUM, MEDFORD 1:00 P.M. PUBLIC HEARING, MAY 7, 1979 RM 36, STATE OFFICE BUILDING 10 RM 36, STATE OFFICE BUILDING inchalles ye 🚧 1400 S.W. Fifth Avenue 🛶 👘 ared To 1400 S.W. Fifth Avenue 5 PORTLAND ~~\_\_\_\_\_ PORTLAND 14 ÷, Copies of the proposed rule are available for your study and Copies of the proposed rule are available for your study and comment by comment by writing or phoning Raymond Johnson, 229writing or phoning Raymond Johnson, 229-6411, DEQ Air Quality Division, P.O. Box 1760, Portland, OR 97207, You, can, call-toil-free 1-800-452-7813 and ask for DEQ 229-6411. 6411. DEQ Air. Quality Division, P.O. Box 1760, Portland, OR 97207, You can call toll-free 1-800-452-7813 and ask for DEQ and the second s Written comments may be submitted until May 3 at the above ъĘ. 229-6411. Written comments may be submitted until May address. 3 at the above address. EAST OREGONIAN 3/30/79 4 - Ma OUR OPPORTUNITY TO COMMEN PROPOSED CHANGES IN OUR OPPORTUNITY TO COMMENT ON PROPOSED CHANGES IN THE STATE The Department of Environmental Quality is proposing to change m the state primary air quality standard for ozone to 0.12 ppm, one The Department of Environmental Quality is proposing to change  $\overline{\mathfrak{O}}$ the state primary air quality standard for ozone to 0.12 ppm, one hour average, to make it consistent with the federal air quality standard. The DEQ is also soliciting testimony concerning the hour average, to make it consistent with the federal air quality appropriateness of adopting a secondary (welfare-related) stanstandard. The DEQ is also soliciting testimony concerning the 3 dard for ozone. A revised primary standard may be submitted to 5 Ū appropriateness of adopting a secondary (welfare-related) stan-EPA as a change to the Oregon Clean Air Act Implementation dard for ozone. A revised primary standard may be submitted to S Plan. You may comment orally at: EPA as a change to the Oregon Clean Air Act Implementation Plan. You may comment orally at. 1:00 P.M. PUBLIC HEARING, MAY 3, 1979  $\overline{\checkmark}$ 1:00 P.M. PUBLIC HEARING, MAY 3, 1979 1 JACKSON COUNTY COURTHOUSE AUDITORIUM S MEDFORD and the second sec JACKSON COUNTY COURTHOUSE AUDITORIUM B MEDFORD 1:00 P.M. PUBLIC HEARING, MAY 7, 1979 😹 S 1:00 P.M. PUBLIC HEARING, MAY 7, 1979 RM 36, STATE OFFICE BUILDING RM 36, STATE OFFICE BUILDING 1400 S.W. Fifth Avenue 1400 S.W. Fifth Avenue PORTLAND PORTLAND Copies of the proposed rule are available for your study and comment by writing or phoning Roymond Johnson, 229-6411, DEQ Air Quality Division, P.O. Box 1760, 15r Copies of the proposed rule are available for your study and comment by writing or phoning Raymond Johnson, 229-6411, DEQ Air Quality Division, P.O. Box 1760, Portland, OR 97207. You can call tall-free 1-800-452-7813 and ask for DEQ 229-6411. Portland, OR 97207. You can call toll-free 1-800-452-7813 and ask for DEQ 229-6411.510以这些上,他的社主大学的管理系统 Written comments may be submitted until May 3 at the above address. Written comments may be submitted until May 3 at the above address. Acture Mars - Acorten Roseburg Nows- Keview 3/30/79







The Department of Environmental Quality is proposing to change the state primary air quality standard for ozone to 0.12 ppm, one hour average, to make it consistent with the federal air quality standard. The DEQ is also soliciting testimony concerning the appropriateness of adopting a secondary (welfare-related) standard for ozone. A revised primary standard may be submitted to EPA as a change to the Oregon Clean Air Act Implementation Plan. You may comment orally at:

1:00 p.m. PUBLIC HEARING, MAY 3, 1979 JACKSON COUNTY COURTHOUSE AUDITORIUM MEDFORD



1:00 p.m. PUBLIC HEARING, MAY 7, 1979 RM 36, STATE OFFICE BUILDING 1400 S.W. FIFTH AVENUE

Copies of the proposed rule are available for your study and comment by writing or phoning Raymond Johnson, 229-6411, DEQ Air Quality Division, P.O. 1760, Portland, OR 97207. You can call toll free 1-800-452-7813 and ask for DEQ 229-6411.

DAILY ASTORIAN APRIL 9, 1979

### TOUR OPPORTUNITY TO COMMENT ON PROPOSED CHANGES IN THE STATE OZONE AMBIENT AIR QUALITY STANDARD

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1:00 P.M. PUBLIC HEARING, MAY 7, 1979 RM 36, STATE OFFICE BUILDING 1400 S.W. Fifth Avenue PORTLAND

Copies of the proposed rule are available for your study and comment by writing or phoning Raymond Johnson, 229-6411, DEQ Air. Quality Division, P.O. Box 1760, Portland, OR 97207. You can call toil-free 1-800-452-7813 and ask for DEQ 229-6411.

Written comments may be submitted until May 3 at the above address.

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1400 S.W. Fifth Avenue PORTLAND Copies of the proposed rule are available for your study and comment by writing or phoning Raymond Johnson, 229-6411, DEQ Air Quality Division, P.O. Bax 1760, Portland, OR 97207, You can call tolf-free 1-800-452-7813 and ask for DEQ 229-6411.

Written comments may be submitted until May 3 at the above address.

Albany Democrat - Herald Friday, March 30, 1979

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1:00 P.M. Public Hearing, May 3, 1979 Jackson County Courthouse Auditorium Medford ..... 

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1:00 P.M. Public Hearing, May 7, 1979 Rm 36, State Office Building 1. 44 1400 S.W. Fifth Avenue Portland YTENO - 800

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Copies of the proposed rule are available for your study and comment by writing or phoning Raymond Johnson, 229-6411, DEQ Air Quality Division, P.O. Box 1760, Portland, OR 97207. You can call toll-free 1-800-452-7813 and ask for DEQ 229-6411. 30 Written comments, may be submitted until May 3 at the above address.



#### ATTACHMENT 6

OAR 340-31-030 is amended as indicated:

Concentrations of (Photochemical oxidant) <u>ozone</u> at a primary air mass station, as measured by a method approved by and on file with the Department of Environmental Quality, or by an equivalent method, shall not exceed (1) <u>235</u> micrograms per cubic meter ((0.08 ppm)) <u>(0.12 ppm)</u> maximum one hour average, (more than once per year). <u>This standard is</u> <u>attained when the expected number of days per calendar year with maximum</u> <u>hourly concentrations greater than 235 micrograms per cubic meter is equal</u> to or less than one as determined by Appendix H, CFR 40, Part 50.9 (page <u>8220) FR 44 No. 28, February 8, 1979.</u>

RMJ:kmm A6262.3

#### ATTACHMENT 6

#### OAR 340-31-030 is amended as indicated:

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Concentrations of (Photochemical oxidant) <u>ozone</u> at a primary air mass station, as measured by a method approved by and on file with the Department of Environmental Quality, or by an equivalent method, shall not exceed (1) <u>235</u> micrograms per cubic meter ((0.08 ppm)) (0.12 ppm) maximum one hour average, (more than once per year). <u>This standard is</u> attained when the expected number of days per calendar year with maximum hourly concentrations greater than 235 micrograms per cubic meter is equal to or less than one as determined by Appendix H, CFR 40, Part 50.9 (page 8220) FR 44 No. 28, February 8, 1979.

RMJ:kmm A6262.3



## Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

#### MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Amendment No. A2, June 8, 1979, EQC Meeting

Adoption of Volatile Organic Compound Rules (OAR 340-22-100 to -150) as Amendments to the State Implementation Plan

#### Purpose of Amendment

There are four areas of the VOC Rules which the Department is proposing to revise at this time based on comments and review of draft sent to the commission on June 1, 1979.

#### Amendments

1. On May 14, 1979 EPA requested that the Department prove that methylene chloride was not photochemically reactive if it was going to be left in the list of VOC's exempt from the rules, OAR 340-22-100(1). The Department did not have such proof by May 30th, so the rule was sent to the commission without methylene chloride exempted. On June 5, 1979 the Department received about 15 pages of proof from Dow Chemical Company that methylene chloride is of negligible photochemical reactivity. Therefore, the attached VOC rules are amended to show methylene chloride in the list of VOC compounds exempt from VOC rules in OAR 340-22-100(1).

2. Change "of" to "or" at the end of 340-22-104(A) as a typing error was found. The Department made a typing error, 200,000 instead of 20,000, in 340-22-120 and omitted 340-22-115(5); both mistakes have been corrected in the attached rule and are agreed to by EPA and industry.

3. On May 14, 1979 EPA requested that the Department use EPA's February 5, 1979 DRAFT of gasoline marketing rules which contain equipment specification instead of proposed 340-22-110 to -121 which contain only numeric emission limits. EPA indicated and the department concurred that the equipment specifications make the rule more readily enforceable. The Department adapted these EPA DRAFT rules to the OAR format and the



Environmental Quality Commission Page 2

functional effect of the originally proposed -110 to -121 rules, and mailed them on June 1, 1979 to the EQC for consideration. Concurrently they were circulated to 14 industrial and EPA sources for comment. The principal industry reviewer, H. R. Coward of Chevron USA, San Francisco, had five pages of comments, and attached six supporting National Fire Protection Association, American Petroleum Institute, Uniform Fire Code, and Department of Transportation Specifications. These were received on June 6, 1979. In 3 cases the EPA DRAFT rule appears to violate fire and safety codes. Other flaws found were less serious. The staff revised the rule June 6, 1979 and sent it on June 7, 1979 to EPA and the industrial sources that responded.

The attached VOC rules are the June 6, 1979 version and are recommended for adoption.

4. The Department met with 3M Company of White City on June 5, 1979, and agreed to change "Daily monitoring of emissions and annual reporting are required" in 340-22-140 to "Daily monitoring and monthly reporting of emissions are required after July 1, 1980, unless exempted by the Department writing." These changes were made because the daily monitoring requirement is technology forcing in 3M's case, and they need time to comply with the "daily" part.

#### Director's Recommendation

It is recommended that the rule proposed with the subject STAFF report be modified as stated in this amendment and that the Commission adopt the attached revised VOC rules (OAR 340-22-100 to -150) and direct the Department to submit them to EPA as a revision to the State Implementation Plan.

William H. Young, Director Department Environmental Quality

P. B. Bosserman:tf 229-6278 June 6, 1979 Attachments: Revised Rules OAR 340-22-100 to -150 June 6, 1979 Revised Rules, OAR 340-22-100 to -150

#### - 1 -

#### General Emission Standards for Volatile Organic Compounds

These rules regulate sources of VOC which contribute to the formation of photochemical oxidant, [more-commonly-known-as-smog.] mainly ozone.

Since oxidant standards are not violated in Oregon from November through March (because of insufficient solar energy), these rules allow certain control devices to lay idle during the winter months. Since much of the state is considered in attainment with [oxidant] ozone standards, sources in "clean" areas are exempted from these rules.

Sources regulated by these rules are:

- New sources over 100 tons of VOC per year
- Gasoline Stations, underground tank filling
  - [(customer vehicle tank filling to be regulated later)]
- Bulk Gasoline Plants and Delivery Vessels
- Bulk Gasoline Terminal Loading
- Cutback Asphalt
- Petroleum Refineries
- [Petroleum ]VOC Liquid Storage
- Surface Coating including paper coating
- Degreasers
- Asphaltic and Coal Tar Pitch in Roofing

#### Definitions

340-22-100 As used in these regulations, unless otherwise required by context:

- (1) "Volatile Organic Compound," (VOC), means any compound of carbon that has a vapor pressure greater than 0.1 mm of Hg at standard conditions (temperature 20<sup>o</sup>C, pressure 760 mm of Hg). Excluded from the category of Volatile Organic Compound are carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and those compounds which the U.S. Environmental Protection Agency classifies as being of negligible photochemical reactivity which are methane, ethane, methyl chloroform, methylene chloride, and trichlorotrifluoroethane.
- (2) "Source" means any structure, building, facility, equipment installation, or operation (or combination thereof) which is located on one or more contiguous or adjacent properties, which is owned or operated by the same person (or by persons under common control), and which emits any VOC. "Source" does not include VOC pollution control equipment.
- (3) "Modified" means any physical change in, change in the method of operation of, or addition to a stationary source which increases the potential emission rate of any VOC regulated (including any not

previously emitted and taking into account all accumulated increases in potential emissions occurring at the source since regulations were adopted under this section, or since the time of the last construction approval issued for the source pursuant to such regulations approved under this section, whichever time is more recent, regardless of any emission reductions achieved elsewhere in the source).

- (i) A physical change shall not include routine maintenance, repair and replacement, unless there is an increase in emission.
- (ii) A change in the method of operation, unless previously limited by enforceable permit conditions, shall not include:
- (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 by reason of an order in effect under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), or by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act;
- (d) Use of an alternative fuel or raw material, if prior to January 6, 1975, the source was capable of accommodating such fuel or material, or
- (e) Use of an alternative fuel by reason of any order or rule under section 125 of the Federal Clean Air Act, 1977;
- (f) Change in ownership of the source.
- (4) "Potential to emit" means the capability at maximum capacity to emit a pollutant in the absence of air pollution control equipment. "Air pollution control equipment" includes control equipment which is not, aside from air pollution control laws and regulations, vital to production of the normal product of the source or to its normal operation. Annual potential shall be based on the maximum annual rated capability of the source, unless the source is subject to enforceable permit conditions which limit annual hours of operation. Enforceable permit conditions on the type or amount of materials combusted or processed may be used in determining the potential emission rate of a source.
- (5) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4.0 pounds [of] or greater which is used to fuel internal combustion engines.
- (6) "Submerged fill" means the filling of a delivery vessel or stationary tank through a pipe or hose whose discharge opening extends to within

6 inches of the bottom or is entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid.

- (7) "Bulk gasoline plant" means a gasoline storage and distribution facility which receives gasoline from bulk terminals by railroad car or trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations.
- (8) "Bulk gasoline terminal" means a gasoline storage facility which receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck.
- (9) "Delivery vessel" means any tank truck or trailer used for the transport of gasoline from sources of supply to stationary storage tanks of gasoline dispensing facilities and the attached vapor recovery system.
- (10) "Cutback asphalt" means a mixture of a base asphalt with a solvent such as gasoline, naphtha, or kerosene. Cutback asphalts can be rapid, medium, or slow curing (known as RC, MC, SC).
- (11) "Freeboard ratio" means the freeboard height divided by the width (not length) of the degreaser's air/solvent area.
- (12) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle, boat, or airplane gasoline tanks from stationary storage tanks.
- (13) "Operator" means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.
- (14) "Owner" means any person who has legal or equitable title to the gasoline storage tank at a facility.
- (15) "Splash filling" means the filling of a delivery vessel or stationary storage tank through a pipe or hose whose discharge opening is above the surface level of the liquid ; in the tank being filled.
- (16) "Vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.

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#### Lowest Achievable Emission Rate

OAR 340-22-104 in areas where these rules for VOC are applicable, all new or modified sources, with potential volatile organic compound emissions in excess of 90,720 kilograms (100 tons) per year, shall meet the Lowest Achievable Emission Rate (LAER).

Lowest Achievable Emission Rate or LAER means, [for-any-source7-that-rate of-emissions-which-reflects-the-most-stringent-emission-limitation-which is-achieved-by-such-class-or-category-of-source7-that-rate-of-emissions which-reflects-the-most-stringent-emission-limitation-which-is-achieved by-such-class-or-category-of-source-taking-into-consideration-the-pollutant which-must-be-controlled.--In-no-event-shall-the-proposed-new-or-modified source-emit-any-pollution-in-excess-of-the-amount-allowable-under applicable-new-source-performance-standards] the rate of emissions which reflects

- (A) the most stringent emission limitation which is contained in the implementation plan of any State for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable, or not maintainable for the proposed source or
- (B) the most stringent emission limitation which is achieved and maintained in practice by such class or category of source, whichever is more stringent.

In no event shall the application of LAER allow a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable new source standards of performance (OAR 340-25-525).

#### Exemptions

OAR 340-22-105 Natural gas-fired afterburners installed for the purpose of complying with these rules shall be operated during the months of April, May, June, July, August, September and October. During other months, the afterburners may be turned off with prior written Departmental approval, provided that the operation of such devices is not required for purposes of occupational health or safety, or for the control of toxic substances, malodors, or other regulated pollutants, or for complying with visual air contaminant limitations.

OAR 340-22-106 Sources are exempted from the General Emission Standards for Volatile Organic Compounds if they are outside the following areas:

- 1) Portland-Vancouver Air Quality Maintenance Area
- 2) Medford-Ashland Air Quality Maintenance Area
- [3]--Eugene-Springfield-Air-Quality-Maintenance-Area]
- 3) 4) Salem [Eity-Limits-as-of-January-17-1979] Area Transportation Study boundary

#### Testing

340-22-107 Construction approvals and proof of compliance will, in most cases, be based on Departmental evaluation of the source and controls. Applicants are encouraged to submit designs approved by the California Resources Board, the Bay Area Air Pollution Control District, the South Coast Air Quality Management District, and the San Diego County Air Pollution Control District, where VOC control equipment has been developed. Certification and Test Procedures are on file with the Department and are partly the certification and test procedures used by the California Air Resources Board as of August [ $\vartheta$ ] 9, 1978.

<u>Compliance Schedules</u> 340-22-108 The person responsible for an existing emission source subject to 340-22-100 through 340-22-150 shall proceed promptly with a program to comply as soon as practicable with these rules. A proposed program and implementation plan including increments of progress shall be submitted to the Department for review no later than May 1, 1979, for each emission source required to comply with VOC rules adopted by the <u>Commission on December 15, 1978 and for sources required to comply with the VOC rules amended by the Commission on June 8, 1979, shall be submitted no later than October 1, 1979. Compliance shall be demonstrated no later than the date specified in the individual sections of these rules. The Department shall within 45 days of receipt of a complete proposed program and implementation plan, complete an evaluation and advise the applicant of its approval or other findings.</u>

# REWRITTEN; SEE FOLLOWING RULES 340-22-110 TO 340-22-122

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ransfer of Gasoline to Small Storage Tanks

340-2 -110 A person shall not transfer or permit the transfer of gaseline from any tank truck or trailer into any stationary storage container which has a capacity of more than 400 gallons mless ich container is equipped with a permanent submerged all pipe and unless 90 percent by weight of the gasoline vapers displaced during the filling of the stationary storage container are preverted from being released to the atmosphere.

(Ъ) The provisions of this Rule shall not apply to

- (A) The transfer of gasoline into any stationary storage contained having a capacity of 2000 mellons or less which was installed prior to January 1, 1979, if such container is equipped with a permanent submiged fill pipe by January 1, 180.
- (B) The transfer of gasoline intrany stationary storage container which the Department finds is equipped to control emissions at least as effectively as required by this section.
- (2) The owner, operator, or builder any stationary storage container which is subject to this Rule and which is installed or constructed after January 1, 1979, shall complexith the provisions of this Rule at the time of installation
- The owner or operator of any existing stationary storage container (3) subject to 340-22-110 (4) shall comply with the provisions of this Rule by April 1, 198

340-22-111 Reserved for development in 1979 of rules to control VOC emissions from the filling of vehicle gasoline tank

Transfer of Gasoling at Bulk Storage Facilities

340-22-115

(1)

(1) A person sall not load gasoline into any truck cargo ank, or trailer from any loading facility unless 90 percent by eight of the gasoline vapors displaced during the filling of the envery vehicers are prevented from being released to the atmosphere.

(2) Leaving shall be accomplished in such a manner that displaced apor air will be vented only to the vapor control system. Measures shall be taken to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.

# REWRITTEN; SEE FOLLOWING RULES 340-22-110 TO 340-22-122

The vapor disposal portion of the vapor control system shall consist of one of the following:

An adsorber, condensation, displacement or combination system which processes vapors and recovers at least 90 percent by weight of the gasoline vapors and gases from the equipment being controlled.

- (b) A vapor handling system which directs vapors to a final gas system.
- (c) Other equipment of equal efficiency, provided such equipment is submitted to and approved by the Department
- (3) No person shall store gasoline in or otherwise use or operate any gasoline delivery veshel unless such vessel is designed and maintained to retain returned vapors.
- (4) Loading facilities loading 77,500 liters (1,000 gallons) or less per day on an annual daily average shall be exempted from sections 1, 2 and 3 of this Rule (OAR 341-22-115).

A person shall not load gasoline into any delivery vessel from any loading facility exempted under the section unless such delivery vessel is loaded through a submerged fill pipe.

Delivery trucks being filled at these exempt bulk plants may not deliver to stationary tanks enripped with a VOC control system which requires capture by the delayery truck and disposal at a vapor recovery system.

- (5) (a) The owner or operator of any stationary porage container or gasoline loading actility which is subject to this Rule and which is installed or constructed after January 1, 1979, shall comply with the provisions of this Rule at the time of installation.
  - (b) The owner of operator of any gasoline loading facility subject to this Rule which is operating prior to January 1, 1979, shall comply with the provisions of this Rule by April 1, 281.

### Delivery Vessel Roading at Bulk Gasoline Terminals

340-22-120 After April 1, 1981, no person shall cause volatile organic compounds (PDC) to be emitted into the atmosphere in excess of 80 milligrams of VOC per liter of gasoline loaded from the operation of loading truck tanks, and truck trailers at bulk gasoline terminals with daily throughputs of greater than 77,500 liters (20,000 gallons) ir day of gasoline.

#### Small Gasoline Storage Tanks (Under 40,000 Gallons Capacity)

340-22-110

(1) No person may transfer or cause or allow the transfer of gasoline from any delivery vessel which was filled at a Bulk Gasoline Terminal into any stationary storage tank unless:

- (a) The tank is filled by submerged fill.
- (b) The displaced vapors from the tank are:

(i) Processed by a vapor control system that prevents release to the atmosphere of no less than 90 percent by weight of the vapors displaced.

(ii) Transferred to the delivery vessel by means of a [vapor tight] vapor balance system which prevents release to the atmosphere of no less than 90 percent by weight of the vapors displaced.

(iii) Processed by a system demonstrated to the satisfaction of the Department to be of equivalent effectiveness to (i) and (ii) above.

[(c)--The-gauge-well-is-equiped-with-a-drop-tube-which-extends to-within-six-inches-of-the-tank-bottom-]

[(d)] (c) The tank is equipped with a system to ensure that the vapor <u>capture</u> [return] line will be connected during transfer. [Compliance-with-this-provision-shall-be-by-means-of.]

[(i)--A-restriction-on-the-vent-line-to-reduce-the-orifice to--75-inches-inside-diameter-]

or-greater-pressure-and-.25-psi-or-greater-vacum-]

[{iii}--A-system-demonstrated-to-ensure-that-the-vapor-return line-will-be-connected-during-transfer-which-is-equivalent-to-those-in (i)-and-(ii)-above-and-is-approved-by-the-Department.]

[+e--The-delivery-vessel-is-designed-and-maintained-to-be-vapor tight-at-all-times.]

(2) Exemptions. This section will not apply to:

(a) Transfers made to storage tanks of gasoline dispensing facilities equipped with floating roofs or their equivalent.

(b) Stationary gasoline storage containers of less than 2,085 liters (550 gallons) capacity used exclusively for the fueling of implements of husbandry, provided the containers use submerged fill.

(c) Stationary gasoline storage tanks located at a gasoline dispensing facility that are filled by a delivery vessel which was filled at a bulk gasoline plant; provided that the storage tanks use submerged fill.

(3) The owner, operator, or builder of any stationary storage container subject to 340-22-110 shall comply by April 1, 1981.

(4) Compliance with 340-22-110(1)(b) shall be determined by verification of use of equipment identical to equipment most recently approved and listed for such use by the Department or by testing in accordance with Method 30 on file with the Department. This method may be revised by the Department for improvement based upon experience and new data. However, no revision shall apply to a compliance test schedule prior to the making of the revision, unless the owner concurs.

#### Bulk Gasoline Plants and Delivery Vessels

340-22-115

(1) No person shall transfer or allow the transfer of gasoline to or from a bulk gasoline plant unless:

(a) Each stationary storage tank is equipped with a submerged fill [pipe-or-with-a-fill] line [whose-discharge-opening-is-flush-with the-bottom-of-the-tank.]

(b) The displaced vapors from filling each stationary gasoline storage tank are:

(i) Processed by a vapor control system or a vapor balance system that prevents release to the atmosphere of no less than 90 percent by weight of the vapors displaced; or

[(ii)--Transferred-to-the-delivery-vessel-by-means-of-a-vapor tight-balance-system,-or]

 $\left[\frac{\pm\pm\pm}{2}\right]$  (ii) Processed by a system demonstrated to the satisfaction of the Department to be of equivalent effectiveness to (i)  $\left[\frac{\text{and}}{\pm\pm}\right]$  above.

(c) All connections or fittings to vapor lines, connecting pipes or hoses on the storage tank or loading or unloading delivery vessel are vapor tight and will automatically and immediately close when disconnected.

(d) Each stationary gasoline storage tank [and-delivery-vessel] is equipped with pressure [and-vacuum] relief values set to release at no less than  $[4-\theta-kPa-(-7-psi)-]$  3.4 kPa (.50 psi) or some other setting approved in writing by the Department.

(e) Each delivery vessel loaded [or-unloaded] at a bulk gasoline plant is [equipped-with] filled by submerged filling.

(f) Each delivery vessel is unloaded in a manner that hatches are not opened at any time during [loading-or] unloading except where necessary for the proper operation of the vapor recovery system.

(g) Gasoline is handled in a manner to prevent spillage, discharging into sewers, storage in open containers, or handled in any other manner that would result in evaporation. <u>If an accident occurs</u>, it shall be reported in accordance with 340-21-065 to -075.

(h) The vapor-laden delivery vessel is designed and maintained to be vapor tight at all times.

(2) The owner or operator of any bulk gasoline plant or any delivery vessel subject to 340-22-115 shall comply with the provisions of this rule by April 1, 1981.

(3) Compliance with 340-22-115(1)(b) shall be determined by verification of use of equipment identical to equipment most recently approved and listed for such use by the Department or by testing in accordance with Method 31 on file with the Department. This method may be revised by the Department for improvement based upon experience and new data. However, no revision shall apply to a compliance test scheduled prior to the making of the revision, unless the owner concurs.

(4) Compliance with 340-22-115(1)(h) shall be determined by verification of use of equipment identical to equipment most recently approved and listed for such use by the Department or by testing in accordance with Method 32 on file with the Department. This method may be revised by the Department for improvement based upon experience and new data. However, no revision shall apply to a compliance test scheduled prior to the making of the revision, unless the owner concurs.

(5) No person shall deliver gasoline to a source at a rate exceeding 250,000 gallons per year from a bulk gasoline plant, unless 90 percent by weight of the gasoline vapors displaced during the filling of the delivery truck and during the filling of the source's tank(s) are prevented from being released to the atmosphere.

#### Bulk Gasoline Terminals

#### 340-22-120

After April 1, 1981, no person shall cause volatile organic compounds (VOC) to be emitted into the atmosphere in excess of 80 milligrams of VOC per liter of gasoline loaded from the operation of loading truck tanks, and truck trailers at bulk gasoline terminals with daily throughputs of greater than 76,000 liters (200,000 gallons) per day of gasoline. The daily throughputs are the annual throughput divided by 365 days.

#### 340-22-121

Compliance with 340-22-120 shall be determined by testing in accordance with Method 33 on file with the Department or by demonstration that similar equipment has passed similar testing. This method may be revised by the Department for improvement based upon experience and new data. However, no revision shall apply to a compliance test scheduled prior to the making of the revision, unless the owner or operator concurs. 340-22-122 Bulk Gasoline terminals shall comply with the following:

(1) All displaced vapors and gases during tank truck gasoline loading operations are vented only to the vapor control system, except as permitted in writing by the Department.

[+2}--A-means-is-provided-to-prevent-liquid-drainage-from-the-loading device-when-it-is-not-in-use-or-to-accomplish-complete-drainage-before the-loading-device-is-disconnected.]

(2) The loading device must not leak when in use. The loading device shall be designed and operated to allow no more than 10 cubic centimeters drainage per disconnect on the basis of 5 consecutive disconnects.

(3) All loading and vapor lines are equipped with fittings which make vapor-tight connections and which close automatically and immediately when disconnected.

[(4)--Each-vapor-laden-delivery-vessel-is-designed-and-operated-to be-vapor-tight-at-all-times-]

[(5)] (4) Gasoline is handled in a manner to prevent its being discarded in sewers or stored in open containers or handled in any manner that would result in evaporation. If an accident occurs, it shall be reported in accordance with 340-21-065 to -075.

[(6)] (5) The vapor collection system is operated in a manner to prevent the pressure in the vapor collection system to exceed the tank truck or trailer pressure relief settings.

[{7}--No-person-may-load-any-product-{including-fuel-oil-and-kerosene} into-any-gasoline-vapor-laden-delivery-vessel-unless-the-transfer-is-in accordance-with-340-22-120.]

#### Cutback Asphalt

#### 340-22-125

- After April 1, 1979, all uses and applications of cutback asphalts are prohibited during the months of April, May, June, July, August, September, and October, except as provided for in 340-22-125(2).
- (2) The following uses and applications of cutback asphalts shall be allowed during all months provided the cutback or blending petroleum distillate has a total vapor pressure (sum of the partial pressures of the constituents) less than 26 mm of Hg ef at 20<sup>o</sup>C:
  - (a) Solely as a penetrating prime coat for aggregate bases prior to paving;
  - (b) For the manufacture of <u>medium-curing</u> patching mixes to provide long-period storage stockpiles used exclusively for pavement maintenance;
  - (c) For all uses when the <u>National Weather Service</u> forecast of the high temperature during the 24-hour period following application is below  $10^{\circ}C$  ( $50^{\circ}F$ ).

#### **Petroleum Refineries**

340-22-130 After April 1, 1979, these regulations shall apply to all petroleum refineries.

- (1) Vacuum Producing Systems
  - (a) Noncondensable VOC from vacuum producing systems shall be piped to an appropriate firebox, incinerator or to a closed refinery system.
  - (b) Hot wells associated with contact condensers shall be tightly covered and the collected VOC introduced into a closed refinery system.
- (2) Wastewater Separators
  - (a) Wastewater separators forebays shall incorporate a floating pontoon or fixed solid cover with all openings sealed totally enclosing the compartmented liquid contents, or a floating pontoon or double deck-type cover equipped with closure seals between the cover edge and compartment wall.
  - (b) Accesses for gauging and sampling shall be designed to minimize VOC emissions during actual use. All access points shall be closed with suitable covers when not in use.
- (3) Process Unit Turnaround
  - (a) The VOC contained in a process unit to be depressurized for turnaround shall be introduced to a closed refinery system, combusted by a flare, or vented to a disposal system.

- (b) The pressure in a process unit following depressurization for turnaround shall be less than 5 psig before venting to the ambient air.
- [(c)--Venting-or-depressurization-to-the-ambient-air-of-a-process-unit for-turnaround-at-a-pressure-greater-than-5-psig-shall-be-allowed if-the-owner-demonstrates-the-actual-emission-of-VOC-to-the ambient-air-is-less-than-permitted-by-340-22-130(3)(b);]
- (4) Maintenance and Operation of Emission Control Equipment

Equipment for the reduction, collection or disposal of VOC shall be maintained and operated in a manner commensurate with the level of maintenance and housekeeping of the overall plant.

#### Liquid Storage

340-22-135 After April 1,  $[\pm 980]$  1981 all tanks storing methanol and other volatile organic compound liquids with a true vapor pressure , as stored, greater than 10.5 kPa (kilo Pascals) (1.52 psia), but less than 76.7 kPa (11.1 psia) and having a capacity greater than 150,000 liters (approximately 39,000 gallons) shall comply with one of the following:

- (1) Meet the equipment specifications and maintenance requirements of the federal standards of performance for new stationary sources -Storage Vessels for Petroleum Liquids, 40 CFR 60 [±+0] Subpart K, as amended by proposed rule change, Federal Register, May 18, 1978, pages 21616 through 21625.
- (2) Be retrofitted with a floating roof or internal floating cover using at least a nonmetallic resilient seal as the primary seal meeting the equipment specifications in the federal standards referred to in 340-22-135 (1) above, or its equivalent.
- (3) Is fitted with a floating roof or internal floating cover meeting the manufacturers equipment specificiations in effect when it was installed.

#### 340-22-136

All seals used in 340-22-135(2) and (3) above are to be maintained in good operating condition and the seal fabric shall contain no visible holes, tears or other openings.

All openings, except stub drains and those related to safety, are to be sealed with suitable closures. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

#### Surface Coating in Manufacturing

3

340-22-140 After December 31, 1982, the operation of a coating line [using more-than-2000-gallons-of-coating-a-year-or-10-gallons-an-hour] shall not emit into the atmosphere volatile organic compounds greater than following amounts per volume of coating excluding water as delivered to the coating applicators. The limitations shall be based on a 24 hour average during the months of April through October, and on a monthly average for the other months. Daily monitoring and monthly reporting of emissions are required after July 1, 1980, unless exempted as unnecessary by the Department in writing.

	Limitation	
Process	Grams/liter	lb/Gal
Can Coating Sheet basecoat (exterior and interior) and over-varnish; two-piece can exteri (basecoat and over-varnish)	340 or	2.8
Two and three-piece can interior body spray, two-piece can exterior end (spray or roll coat)	510	4.2
Three-piece can side-seam spray End sealing compound	660 440	5.5 3.7
Coil Coating Fabric Coating Vinyl Coating Paper Coating or Inert Gas Process Paper Coating	310 350 450 350 567*	2.6 2.9 3.8 2.9 4.7*
Auto & Light Duty Truck Coating Prime Topcoat Repair Metal Furniture Coating Magnet Wire Coating	230 340 580 360 200	1.9 2.8 4.8 3.0 1.7
Large Appliance Coating	340	2.8

\*Emission figured on a plant site basis, monthly average

340-22-141 Compliance with 340-22-140 shall be determined by testing in accordance with Method 18 or Method 34 (material balance method) on file with the Department. These methods may be revised by the Department for improvement based upon experience and new data. However, no revision shall apply to a compliance test scheduled prior to the making of the revision, unless the owner concurs.

#### Degreaser

340-22-145 Cold Cleaners

(a) All cold cleaners shall comply with the following equipment specifications after April 1, 1980:

- (i) Be equipped with a cover that is readily opened and closed.
- (ii) Be equipped with a drain rack that returns the drained solvent to the solvent bath.
- (iii) Have a freeboard ratio of at least 0.5.
- (iv) Have a visible full time.
- (b) An owner or operator of a cold cleaner shall be responsible for following the required operating parameters and work practices. The owner shall post and maintain in the work area of each cold cleaner a pictograph or instructions clearly explaining the following work practices:
- (i) The solvent level shall not be above the fill line.
- (ii) The spraying of parts to be cleaned shall be performed only within the confines of the cold cleaner.
- (iii) The cover of the cold cleaner shall be closed when not in use or when parts are being soaked or cleaned by solvent agitation.
- (iv) Solvent-cleaned parts shall be rotated to drain cavities or blind holes and then set to drain until dripping has stopped.
- (v) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal.
- (c) The owner or operator shall maintain cold cleaners in good working condition and free of solvent leaks.

340-22-146 Open Top Vapor Degreasers

- (a) All open top vapor degreasers [with-a-vapor-air-interface-greater-than one-square-meter-(10-square-feet)] shall comply with the following equipment specifications after April 1, 1980:
- (i) Be equipped with a cover that may be readily opened and closed. When a degreaser is equipped with a lip exhaust, the cover shall be located below the lip exhaust. <u>The cover shall move horizontally or slowly</u> so as not to agitate and spill the solvent vapor. The degreaser shall be equipped with at least the following three safety switches:
  - (a) Condenser flow switch and thermostat (shuts off sump heat if coolant is either not circulating or too warm).
  - (b) Spray safety switch (shuts off spray pump or conveyor if the vapor level drops excessively, e.g. greater than 10 cm (4 in.)).
    (c) Vapor level control thermostat - (shuts off sump heat when vapor
  - level rises too high).

(ii) Have one of the following:

- (A) A freeboard ratio equal to or greater than 0.75.
- (B) A freeboard chiller.
- (C) A closed design such that the cover opens only when the part enters or exits the degreaser.
- (iii) Post a permanent and conspicuous pictograph or instructions clearly explaining the following work practices:
- (A) Do not degrease porous or absorbent materials such as cloth, leather, wood or rope.
- (B) The cover of the degreaser should be closed at all times except when processing workloads.
- (C) When the cover is open the lip of the degreaser should not be exposed to steady drafts greater than 15.3 meters per minute (50 feet/min).
- (D) Rack parts so as to facilitate solvent drainage from the parts.
- (E) Workloads should not occupy more than one-half of the vapor-air interface area.
- (F) When using a powered hoist, the vertical speed of parts in and out of the vapor zone should be less than 3.35 meters per minute (11 feet/min.)
- (G) The vapor level should not drop more than ten centimeters (4 inches) when the workload enters the vapor zone.
- (H) Degrease the workload in the vapor zone until condensation ceases.
- (I) Spraying operations should be done within the vapor layer.
- (J) Hold parts in the degreaser until visually dry.
- (K) When equipped with a lip exhaust, the fan should be turned off when the cover is closed.
- (L) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater shall be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser.
- (M) Water shall not be visible in the solvent stream from the water separator.
- (b) A routine inspection and maintenance program shall be implemented for the purpose of preventing and correcting solvent losses, as for example, from dripping drain taps, cracked gaskets, and malfunctioning equipment. Leaks must be repaired immediately.
- (c) Sump drainage and transfer of hot or warm solvent shall be carried out using threaded or other leakproof couplings.

- (d) Still and sump bottoms shall be kept in closed containers.
- (e) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal.
- (f) Exhaust ventilation shall not exceed 20  $m^3/min per m^2$  (65 cfm per  $ft^2$ ) of degreaser open area, unless necessary to meet OSHA requirements. Ventilation fans shall not be used near the degreaser opening.
- 340-22-147 Conveyorized Degreasers

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- (a) All conveyorized cold cleaners and conveyorized vapor degreasers shall comply with the following operating requirements after April 1, 1980:
- Exhaust ventilation should not exceed 20 cubic meters per minute of square meter (65 cfm per ft<sup>2</sup>) of degreaser opening, unless necessary to meet OSHA requirements. Work place fans should not be used near the degreaser opening.
- (ii) Post in the immediate work area a permanent and conspicuous pictograph or instructions clearly explaining the following work practices;
- (A) Rack parts for best drainage.
- (B) Maintain vertical speek of conveyored parts to less than 3.35 meters per minute (ll feet/min.)
- (C) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater shall be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser.
- (b) A routine inspection and maintenance program shall be implemented for the purpose of preventing and correcting solvent losses, as for example, from dripping drain taps, cracked gaskets, and malfunctioning equipment. Leaks must be repaired immediately.
- (c) Sump drainage and transfer of hot or warm solvent shall be carried out using threaded or other leakproof couplings.
- (d) Still and sump bottoms shall be kept in closed containers.
- (e) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal.

#### Asphaltic and Coal Tar Pitch Used for Roofing Coating

#### 340-22-150

A person shall not operate or use equipment after April 1, 1980, for melting, heating or holding asphalt or coal tar pitch for the on-site construction or repair of roofs unless the gas-entrained effluents from such equipment are contained by close fitting covers.

A person operating equipment subject to this rule shall maintain the temperature of the asphaltic or coal tar pitch below  $285^{\circ}C$  ( $550^{\circ}F$ ), or  $17^{\circ}C$  ( $30^{\circ}F$ ) below the flash point whichever is the lower temperature, as indicated by a continuous reading thermometer.

The provisions of this rule shall not apply to equipment having a capacity of 100 liters (26 gallons) or less; or to equipment having a capacity of 600 liters (159 gallons) or less provided it is equipped with a tightly fitted lid or cover.

PBB:tf June 6, 1979 A6252.B2



## Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

#### MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. A2, June 8, 1979, EQC Meeting

Adoption of Volatile Organic Compound Rules (OAR 340-22-100 to -150) as Amendments to the State Implementation Plan

#### Background and Problem Statement

Background Three areas of Oregon exceed the National Ambient Air Quality Standard for ozone. These three areas, Portland, Salem, and Medford, need Volatile Organic Compound (VOC) reductions to meet the standard for ozone. The federal Environmental Protection Agency (EPA) and the federal Clean Air Act Amendments of 1977 require the State to adopt VOC rules, as a part of the required 1979 State Implementation Plan (SIP) revisions, to control certain classes of VOC emitters.

<u>Problem Statement</u> The VOC rules, adopted by the Environmental Quality Commission (EQC) on December 15, 1978 need changes to correct errors, to clarify, and to respond to over 80 comments from EPA. Agenda Item No. D(5), March 30, 1979, EQC Meeting, attached, which authorized the hearing to consider changes, described 9 needed changes. As an example, Item 8 of that memorandum discussed the need to grant more compliance time in rule 340-22-135. Two much more serious problems, concerning gasoline bulk plants and their customers, were described in Item 7 of that memorandum. EPA indicates that their May, 1979, comments are so significant that they may disapprove the VOC rules and the State Implementation Plan, if changes are not made.

Authority for the Commission to act comes from Oregon Revised Statutes 468.020 and 468.295 (3) where the Commission is authorized to establish emission standards for certain areas of the state for different classes of air contaminant sources.


# A Statement of Need for Rulemaking is the first attachment to this memorandum.

## Alternatives and Evaluation

<u>No Action Alternative</u> The Commission has the alternative of taking no action on the VOC rules. This would leave certain small gasoline retailers and users without a legal gasoline supply after April 1, 1981. Without the changes required by EPA, the VOC rules may likely be disapproved by EPA, causing EPA to disapprove the State Implementation Plan. Without an approved State Implementation Plan, Oregon may be subjected to certain non-discretionary sanctions such as withholding certain federal appropriations and as prohibiting major new or modified construction in non-attainment areas. The no action alternative would give the staff more time to respond to the recently received comments from EPA. However, the serious concerns of EPA generally been taken care of and at least some EPA verbal agreement has been given.

#### Rule Development Process

The VOC Rules were developed from EPA's Control Technology Guideline documents, the first eleven documents listed in the attached statement of need.

The following table indicates how the staff distributed the rule for review and when comments were received. The many other recipients and their comments are on file at the Department.

Recipient of Rule	Date Sent	Date Comments Received
EPA, Seattle	8/4, 9/20, 12/8/78, 4/10/79	11/2/78, 12/7/78, 5/2/79, 5/14/79, 5/16/79
Washington State Department of Ecology	8/4/78, 9/18, 1/4/79 12/8/78, 4/12/79	10/9/78, 11/3/78 3/13/79, 5/4/79

SW Air Pollution Control Authority, Vancouver, WA.	8/4/78, 9/18/78, 12/8/78	none
Portland Gasoline Terminals	8/4/78, 9/18/78, 12/8/78 1/26/79, 4/4/79	10/6/78, 10/17/78 7/7/78, 10/13/78 5/8/79
Crown Zellerbach	9/18/78, 2/16/78	9/13/78, 5/8/79
3-M Company	6/1/78, 8/4/78, 9/18/78, 12/28/78	10/16/78, 5/79
Detrex	9/18/78	8/14/78, 3/13/79, 4/30/79
Dow	8/4/78, 9/18/78, 3/16/79	7/6/78, 8/25/78, 12/14/78, 3/7/79, 3/21/79, 3/28/79
Oregon State Department of Justice	hand carried, no record of transmittal	12/5/78, 5/30/79
Oregon Environmental Council	12/8/78	12/15/78
Bulk Plant Owners	4/18/79, 5/2/79, 4/23/79	4/18/78, 5/2/79 5/8/79
1232 gas stations	August 1978	various

Public hearings were held on the rules on October 16, 1978 and on May 8, 1979. See the attached hearings report for the May 8th hearing. Agenda Item G, December 15, 1978, EQC Meeting, has the October 16, 1978 hearings report and evaluations.

The VOC rules were adopted by the Environmental Quality Commission on December 15, 1978.

The needed amendments, identified in Agenda Item D (5), March 30, 1979, EQC Meeting, attached, were reviewed by the affected parties. See the above table for Recipients of Rule.

The Department paid for newspaper advertisements announcing the May 8, 1979 hearing. These advertisements are on file at the Department.

#### Issues and Resolution

The Department has identified 10 major issues from all the testimony and comments received. The other testimony and comments are considered minor and are dealt with in the attached "Department's Response to Public Comment."

#### Issue l

Bulk Gasoline Plants and their customers requested partial exemption from certain VOC rules. Rule 340-22-110 required gasoline-service-station tanks, over 2,000 gallon size, to have vapor recovery fittings. Rule 340-22-115 exempted bulk gasoline plants from vapor recovery. Thus service stations with over 2,000 gallon tanks could no longer be served by bulk plants. Switching to another supplier to comply with this rule is next to impossible under federal gasoline allocation rules.

#### Alternatives

- A. Exempt all bulk plants and their customers from vapor balance. This is being done in some parts of California.
- B. Exempt all bulk plants and their customers from vapor balance. Mitigate this extra VOC loss by requiring vapor balance when the bulk plant's own storage tanks are filled; also forbid the bulk plants from serving large accounts (over 1/4 million gal/yr).
- C. Same as B, only exempt only the smaller bulk plants (under 4,000 gal/day) in the Portland AQMA from full vapor balance. This will allow the VOC rules in Portland to be similar to those in Vancouver, Washington.
- D. Exempt only the smaller bulk plants from vapor balance, and their customers. This was the rule, drafted in March 1979, on which the May 8, 1979 hearings were held.
- E. No exemptions; 90 percent control of all gasoline vapors during wholesale gasoline marketing.

#### Resolution

The testimony received from industry supported alternative B. The cost effectiveness of vapor balance for bulk plant's account trucks is over \$2,000 per ton/year of VOC. This is so costly that it is not <u>reasonably</u> available control technology. As outlined in the Agenda Item G Memorandum to the EQC's December 1978 meeting, the range of the rules was from \$7.90 per ton/year to \$140.00 per ton/year of VOC.

The attached proposed rule conforms to alternative B, and is simple to understand, and simple to enforce, in contrast to alternative C and D. The extra VOC lost, is less than 5 percent of the VOC lost from wholesale gasoline marketing in Portland; therefore formal approval by EPA is expected for the exemption in alternative B.

#### Issue 2

Equipment Specifications in rules 340-22-110, -115, -120, and -140 are being required by EPA's Seattle Office, even though these rules each have a numeric standard (i.e. 90 percent VOC capture).

#### Alternatives

- A. Numeric Standard plus all known RACT equipment specifications. See attached rules, -110, -115, and -120.
- B. Numeric Standard plus some major equipment specifications. This alternative would include only those specifications which EPA made specific comments on in May, 1979.
- C. Pure numeric standard, no equipment specifications. The rules -110, -115, -120, which are shown crossed out (adopted Dec. 15, 1978) are pure numeric standards.

#### Resolution

Alternative A is proposed because it is the only acceptable approach to EPA. The equipment specifications demanded and recommended by EPA are extensive. Although redundant to the numeric standard, the added equipment specifications satisfy the EPA reviewers in Seattle that the rule does represent reasonable available control technology, and that it is enforceable.

#### Issue 3

EPA wants daily or hourly monitoring and reporting from surface coating sources. Two surface coating plants are emitting over 4,000 tons of VOC per year presently. Their hourly emissions (over 900 lbs/hr) have a significant effect on oxidant formation. Monitoring and reporting on less than a daily or hourly basis is not responsive to air-shed management needs, since ozone standards are based on 1 hour averages.

Alternative	Monitoring	Reporting
A	Annual	Annual
В	Monthly	Monthly
С	Weekly	Weekly
D	Daily	Daily
E	Hourly	Hourly
F	Not specified	Not specified

Or any combination of the above.

# Resolution

The Department generally does not have the manpower available to read reports more often than annually from a large number of sources, except during advisory, alert, etc., episodes of oxidant standard violations. During management of those episodes, monitoring on a daily basis, rather than an hourly basis, is not too helpful. Therefore the Department will write into all surface coating (less than half a dozen) sources, Air Contaminant Discharge Permits, conditions requiring daily monitoring and annual reporting. During episode management, the Department will get daily or hourly reporting, as necessary. Legal authority from OAR 340-20-046 and ORS 468.320 is sufficient. The Department prefers daily monitoring and annual reporting; see attached proposed rule 340-22-140, the added language, "daily monitoring of emissions and annual reporting are required."

#### Issue 4

Exempt Methylene Chloride from VOC rules in OAR 340-22-100 (1).

#### Alternatives

- A. Exempt it, as proposed in the March 1979 rule draft, upon which a hearing was held.
- B. Leave it out, causing it to be controlled as other VOC's. See the attached proposed rule.

#### Resolution

Methylene Chloride has been in-again, out-again over the past seven months. EPA's Region X implied that it was photochemically reactive in their May 14, 1979 comments. To play it safe, the staff presents the rule to the Commission with Methylene Chloride again deleted from the list of exempt compounds. Should EPA not produce evidence that it is photochemically reactive by June 8, 1979, the staff may propose its addition to the exempt compound list on that date. The staff does not see that it should be taken off the exempt list, because of its alleged toxic, carcinogenic, or ozone-layer-depletion properties. The exempt list is for VOC's of negligible photochemical reactivity, period.

#### Issue 5

EPA requires test methods for each numeric standard to be cited, and desires the test methods be part of the SIP.

#### Alternative

- A. Add, make part of rule like EPA, transmit test methods in S.I.P.
- B. Add, by reference to method on file (not part of rule), transmit test methods to EPA under separate cover; see the attached proposed rule.
- C. Don't add, like the rule which was passed on December 15, 1978, and was promulgated for hearing in March 1979.

#### Resolution

Making the test methods part of the rule and part of the SIP makes them too difficult to change and too difficult to adapt to field imposed changes. The staff recommends alternative B as a compromise to EPA.

#### Issue 6

EPA requires justification of the exemption of small coating operations in rule 340-22-140.

# <u>Alternatives</u>

- A. Leave as adopted on December 15, 1978, with small operations exempted, even though their existence and possible impact are unknown.
- B. Perform surveys, research, etc. to determine the existence and impact of small sources.
- C. Delete the exemptions for small sources written into -140. If small sources identify themselves or are otherwise discovered, consider their impact, the rule's cost effectiveness, and modify the rule as needed.

#### Resolution

Delete the exemptions. This is almost the same as alternative B except that small sources may not be able to meet the -140 rule's December 31, 1982 deadline if they are not identified until close to that date. VOC rules will be added to in late 1979, and again in 1980, as the second and third set of federal guideline documents are implemented. The -140 rule could be altered to add a needed exemption point if the staff finds some sources needing exemption.

# Issue 7

Should the Eugene-Springfield AQMA be exempt from the VOC rules? See 340-22-106. Only areas with violations of the newly amended ozone standard need to be subject to VOC rules, per federal law. With the change of the ozone standard in February 1979 from .08 ppm to .12 ppm, that AQMA no longer has violations.

#### Alternatives

- A. Delete Eugene from -106.
- B. Resist deletion, deny requests to delete.
- C. Hold separate hearing, consider it later.

#### Resolution

Recommend A, delete the Eugene-Springfield AQMA from the VOC rules in 340-22-106. The local air pollution authority and the citizens advisory committee on that subject both sent letters asking for exemptions from the VOC rules. The Departmental staff have examined the highest ozone readings in that area and have noted that they are less than the new standard of .12 ppm (235 ug/m<sup>2</sup>) in recent years. The Department believes that there is due process and sufficient public notice for this deletion.

Because of Issue 9, the whole set of VOC rules is up for re-adoption. Consideration of deletion of Eugene and Salem from the VOC rules is found in the September 22, 1978 Agenda Item 0 and the December 15, 1978 Agenda Item G memorandums to the EQC.

Alternative B, no change, has its merits and was discussed in Agenda G, December 15, 1978, page 5, where the Association of Oregon Industries petitioned for Salem to be exempt from the VOC rules. The staff's inclination was to make the entire Willamette Valley into a non-attainment area for ozone.

Choice C is not too viable as the one terminal, several bulk plants, and hundreds of gas stations in the Eugene-Springfield AQMA need to know <u>now</u> whether they must have vapor balance installed by April 1, 1981. Should the citizens of that AQMA demand retention of the VOC rules, the Lane Regional Air Pollution Authority can adopt them. Then the ozone standard can be met with a considerable margin of safety.

#### Issue 8 Change Salem Boundary.

# Alternatives

- A. Don't change. Keep at city limits, as in 340-22-106 rule passed December 15, 1978.
- B. Change to Salem Area Transportation Study Boundary, as attached and as proposed for hearing in March 1979.

#### Resolution

No testimony was received. Make change as proposed.

Issue 9 Re-adopt Complete Rules

#### Alternatives

- A. Adopt only desired changes, presume rules were legally adopted on December 15, 1978.
- B. Adopt whole rules 340-22-100 to -150, assuming the federal Clear Air Act's advertising requirements were not exactly followed in 1978.

#### Resolution

It takes no extra effort to re-adopt the entire VOC rules. This may remove a procedural flaw where the Department did not use paid newspaper ads when publicizing the October 16, 1978 hearing for the VOC rules.

#### Issue 10 Add Bubble Concept Rule.

Where emissions are equivalent, regulatory agencies may, by a Bubble Concept Rule, allow companies to emit more from one source than a rule allows and less from another source etc., if the total emissions are the same or less than that allowed by totaling all sources. It is intended to be a cost-effective rule, whose purpose is to allow a source to meet plant-site emissions limits at least cost. The plant site emission limit rule, while seeming to do nearly the same thing, see 340-20-196 in Agenda Item A3, is only imposed to lower emissions by limiting production growth, etc., or to be more stringent than rules permit. The plant-site-emission-limit rule allocates an air-shed's carrying capacity to plants whose total emissions, along with area sources, exceed an air-shed's carrying capacity so that total emissions will no longer exceed an air-shed's carrying capacity.

#### Alternatives

- A. Do nothing.
- B. Add a bubble concept rule now.
- C. Add a bubble concept rule later.

#### Response

EPA has not provided a model "bubble concept" rule which has EPA's approval. The Bubble Concept Rule proposed at the hearing appears to build in banked emissions, a subject currently under consideration by the Oregon Legislature. Therefore the Department recommends alternative C, to consider adding the rule later.

#### Summation

- 1. Under the present rule customers of exempt bulk plants could be denied a legal supply of gasoline. The proposed rule revision exempts these customers, but requires bulk plants to put VOC controls on their own storage tanks.
- 2. EPA requires equipment specifications in some rules where the Department had only a numeric standard. Since the rules are functionally the same, the equipment specifications have been added to the proposed rule in order to secure EPA's approval of the VOC rules.
- 3. EPA and the Department would like to have daily monitoring from surface coating sources emitting over 1000 tons of VOC per year. Proposed, attached rule 340-22-140 requires daily monitoring and annual reporting which may be the practical limit of available monitoring techniques and of the staff's manpower to read and analyze reports.
- 4. Dow Chemical Company and Washington State's Department of Ecology urge that methyl chloroform and methylene chloride be added to the list of compounds exempt from VOC rules in 340-22-100 (1), because of their negligible photochemical reactivity. EPA Seattle has requested that methylene chloride not be exempted and therefore only methyl chloroform is proposed to be added to the exempt list at this time.
- 5. Cross references to test methods were added to rules-110, -115, -120, and -140 because of requests from EPA.
- 6. Minor changes are needed in the VOC rules to improve clarity and consistency with other rules.
- 7. The Eugene-Springfield AQMA should be exempt from the VOC rules, because in recent years ozone readings have not gone over the .12 ppm Federal Standard in that area.

- The Salem area, where VOC rules are imposed, should be changed from the city limits (irregular shape) to the Salem Area Transportation Study boundary (regular shape), to cover the majority of urban sources.
- 9. Re-adoption of the total VOC rules as amended after paid advertisement in newspapers is thought prudent to avoid any legal challenge because of inadequate public notice for the first rule adoption in December 1978.
- 10. Since no "Bubble Concept" Rule approved by EPA is available, and since banking issues have not been resolved by the legislature, postponing adoption is recommended.

#### Director's Recommendation

Based upon the Summation, it is recommended that the Commission adopt the revised proposed VOC rules (OAR 340-22-100 to -150) and direct the Department to submit them to EPA as a revision to the State Implementation Plan.

Bien

William H. Young

PBBosserman:bm 229-6278 May 30, 1979 Attachments: Statement of Need for Rulemaking Hearing Officer's Report Department Response to Public Comment Proposed Rules OAR 340-22-100 to -150 Memorandum, Young to EQC, Agenda Item No. D(5), March 20, 1979 EQC Meeting, Authorization to Hold a Hearing . . . to Change VOC Rules

# <u>Statement of Need for Rulemaking</u>

The Environmental Quality Commission is requested to consider adoption of the attached, proposed VOC rules (OAR, Chapter 340, Sections 22-100 to 22-150). This statement of need for rulemaking is provided pursuant to ORS 183.225(1) and 183.333(7).

- a. Legal Authority: ORS 468.020 and 468.295(3); Federal Clean Air Act Amendments of 1977--P.L. 95-95 (August 7, 1977), Section 172.
- b. Need for Rule:

à

- To reduce VOC being discharged into the atmosphere where they are causing oxidant to form and concentrate in excess of Federal (40 CFR 50.9) and state (OAR-31-030) ambient air quality standards. The rules require specific types of sources of VOC to install control equipment and/or adopt maintenance and operating practices which will reduce VOC emissions to the atmosphere.
- To prevent EPA sanctions which may result in withholding the Department's and State Highway funds for failure to pass VOC rules on schedule.
- 3. To increase the Department's authority to require pollution control equipment not only of highest and best practicable treatment (OAR 340-20-001) but also of lowest achievable emission rate where ambient air standards are being violated.
- 4. To reduce VOC being discharged into the atmosphere by certain sources which also create a nuisance by their odor.
- c. Documents Relied Upon:
  - "Design Criteria for Stage 1 Vapor Control Systems Gasoline Service Stations," EPA, November 1975.
  - 2. "Control of Volatile Organic Emissions from Solvent Metal Cleaning," EPA-450/2-77-022, November 1977.
  - 3. "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals," EPA-450/2-77-026, October 1977.
  - "Control of Refinery Vacuum Producing Systems--Wastewater Separators: Process Unit Turnarounds," EPA-450/2-77-025, October 1977.
  - 5. "Control of Volatile Organic Compounds from Use of Cutback Asphalt," EPA-450/2-77-037, December 1977.
  - "Control of Volatile Organic Emissions from Existing Stationary Sources - Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks," EPA-450/2-77-008, May 1977.

7. "Control of Volatile Organic Emissions from Existing Stationary Sources, Volume V: Surface Coating of Large Appliances," EPA-450/2-77-034, December 1977.

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- 8. "Control of Volatile Organic Emissions from Existing Stationary Sources, Volume IV: Surface Coating for Insulation of Magnet Wire," EPA-450/2-77-033, December 1977.
- 9. "Control of Volatile Organic Emissions from Bulk Gasoline Plants," EPA-450/2-77-035, December 1977.
- "Control of Volatile Organic Emissions from Existing Stationary Sources, Volume III: Surface Coating of Metal Furniture," EPA-450/2-77-032, December 1977.
- 11. "Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed-Roof Tanks," EPA-450/2-77-036, December 1977.
- 12. Bay Area Air Pollution Control District (San Francisco), current regulations, received May 14, 1978.
- South Coast Air Quality Management District (Los Angeles), current rules, received May 25, 1978.
- State of California Air Resources Board, "Certification and Test Procedures for Vapor Recovery Systems of Gasoline Bulk Plants, Delivery Tanks, Terminals, and Service Stations," amended August 9, 1978.
- 15. Suggested Model Rules, Rule A: Transfer of Gasoline into Stationary Storage Containers, Rule B: Transfer of Gasoline into Vehicle Fuel Tanks, Rule C: Transfer of Gasoline at Bulk Storage Facilities, Rule D: Storage of Gasoline, received July 7, 1978, from Jim Presten of Chevron USA Inc., San Francisco.
- 16. "Emission Standards and Controls for Sources Emitting VOC," Washington State Rules, revised 4/26/79, received May 4, 1979.
- 17. Letter from G.J. Beuker, The Asphalt Institute, received August 1, 1978, draft of liquid asphalt rule, proposed OAR 340-22-125.
- "Oregon Air Quality Report 1977," State of Oregon, Department of Environmental Quality, Air Quality Division, Appendix 1C, Photochemical Oxidant Summary.
- "Control and Prohibition of Air Pollution by Volatile Organic Substances," justification for rule by the New Jersey Department of Environmental Protection, received May 4, 1978.
- 20. "A Review and Survey of Hydrocarbon Emission Sources in the Medford AQMA," Pacific Environmental Services under EPA contract, May 1977.

- 21. "Photochemical Oxidant Air Quality Profile and Evaluation for the Oregon Portion of the Portland-Vancouver Air Quality Maintenance Area (AQMA)," DEQ, June 1978.
- 22. "Question and Answers Concerning the Basis for the Agency's Position on Controlling Hydrocarbons to Reduce Oxidant," September 18, 1978 letter from EPA's David G. Hawkins.
- "Health Effects of Exposure to Low Levels of Regulated Air Pollutants," Journal of the Air Pollution Control Association, May 1978, pp. 485-487.
- 24. 43 FR 26962-26985.
- 25. Unanswered letter, March 20, 1979, Bosserman of DEQ to U.S. Department of Energy, Seattle office, regarding Oregon VOC Rules, Bulk Plants and Service Stations.
- 26. The Health Implications of Photochemical Oxidant Air Pollution to Your Community, EPA 450/2-76-015, August 1976.

PBB:kmm A6252.B



# Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

### MEMORANDUM

To: Environmental Quality Commission

From: Hearings Officer

Subject: Hearing Report for Hearing Held May 8, 1979 Regarding Amendments to Volatile Organic Compounds Regulations

# Summary of Procedure

As advertised in the public notice, a public hearing was convened in room 773 of the State Office Building in Portland at 9:30 a.m. The purpose was to receive testimony on proposed amendments to Volatile Organic Compounds Regulations. These amendments will be included in Oregon's State Clean Air Act Implementation Plan. The hearing was conducted by Linda Zucker, hearing officer for the Environmental Quality Commission. Representing the Department of Environmental Quality were Peter B. Bosserman and Marianne E. Fitzgerald of the Air Quality Division staff.

Oral and written testimony was offered by Dr. James E. Walther, Northwest Pulp and Paper Association; Mel Winkelman, Chevron USA Commission Agent, Medford; James E. Hudson, Grange Cooperative Supply Association, Central Point; W. C. Felker, Mt. Hood Oil Company, Gresham; J. Courtney Jones, J. C. Jones Oil Company, Salem; Allan Mick, International Paper Company; and David R. Spencer, Dow Chemical USA, Walnut Creek, California.

Oral testimony was offered by William Cornitius, a Shell jobber in Medford; Michael J. Dougherty, Union Oil Company, Los Angeles; and Richard Harris, Harris Enterprises, Portland.

Written testimony was submitted by Mike C. Hawkins, Hawk Oil Company, Medford; R. W. Hays, Hays Oil Company, Medford; Frank L. Carter, Thorelson and Carter, Medford; L. S. Angst, R. S. Angst and Son, Inc., Eugene; David B. Monroe, Sliger-Monroe Oil Company, Hillsboro; H. R. Solomon, Chevron USA, Seattle; D. J. Fogelquist, Western Oil and Gas Association; Joseph A. Lassiter, Lane Regional Air Pollution Authority, Eugene; Jack Delay, Eugene-Springfield AQMA Citizens Advisory Committee; Gene Hopkins, Greater Medford Chamber of Commerce; Dr. Hugh A. Farber, Dow Chemical USA, Midland, Michigan; L. Schlossberg, Detrex Chemical Industries Inc., Detroit Michigan; R. E. Chaddock, Hercules Incorporated, Wilmington, Delaware; and the U.S. Environmental Protection Agency.



# Summary of Testimony

<u>Dr. James Walther</u> of Crown-Zellerbach Corporation in Camas, Washington, submitted oral and written testimony for the Northwest Pulp and Paper Association (NWPPA). NWPPA had general comments regarding litigation in progress pertaining to federal regulations. NWPPA recommends that DEQ adopt a policy to ensure that if changes are made to federa; regi;atopms. appropriate changes will be made to Oregon's regulation to reflect these changes, and that the state regulations will be re opened for comment.

NWPPA recommends, after studying EPA guidance for plant site emission limits (ie., surface coating) and the bubble concept, that a subsection be added to OAR 340-22-105 as follows:

"Plant wide emission reduction plans are acceptable if the plant owner demonstrates to the Department that any emissions in excess of those allowed for a given facility (ie. coating line) would be compensated elsewhere in the source (plant)."

They feel this addition would reduce the costs to companies for complying with this rule.

<u>William C. Cornitius</u>, the Shell jobber in Medford, presented oral testimony on OAR 340-22-115, bulk plants. Mr Cornitius suggested revisions to this section to exempt bulk plants of 12,000 or less gallons per day on an annual daily average, and to require vapor recovery and bottom loading on all terminal loaded truck and trailers (transports). In response to several questions from Mr. Bosserman, Mr. Cornitius clarified his intent that account trucks and customers of account trucks would be exempt from this rule if the bulk plant is exempt from the rule.

Mr. Cornitius and <u>Mel Winkelman</u>, a distributor for Standard Oil of California Products in Medford, estimated costs for retrofitting their equipment; Mr. Winkelman submitted a cost-benefit analysis prepared by Chevron USA in Portland to support his testimony.

#### Mr. Cornitius's Estimates

Retrofit one truck and tra	ailer \$6,0	00 to 8,000
New truck and trailer, 9, (large) with vapor recov	700 gallons very system \$85,00	0 to 100,000

Mr. Winkelman's Estimates

Retrofit one	bulk plant	
(6 spouts,	7 storage tanks)	\$55 <b>,</b> 000

Retrofit one truck and trailer \$6,500

> New truck and trailer, 4,300 gallons without vapor recovery system \$63,000

> Nozzle alone for truck and trailer vapor recovery system \$450

Mr. Winkelman submitted written testimony in support of a 12,000 gallon per day exemption (340-22-115(4)). He also suggested replacing the third paragraph in 340-22-115(4) with, "Customers purchasing 250,000 gallons or less from bulk plants will also be exempt from VOC emission control." He feels all filling of such exempt customers should be by some type of submerged filling. He further suggested that all truck and trailer deliveries within the Medford-Ashland AQMA, whether to customers or to bulk plants, be required to be equipped with vapor recovery systems.

Mike C. Hawkins, President of Hawk Oil Company, feels the DEQ should be reasonable in their requirments, especially as related to the cost-effectiveness of requirements. He is concerned about the problems in transporting gasoline in southern Oregon, and about the safety of his drivers and the public. He said over half the gasoline in southern Oregon is from a terminal in Crescent City, California, and they are not required to install vapor recovery equipment. He is concerned that any measures to force the addition of vapor control facilities at that terminal may well close the terminal. He said his transports would deliver gasoline in the Medford-Ashland area and then drive the transports back to Crescent City along a treacherous highway. The only way he knows to release the vapors from the transports is by opening the dome covers, but the pressure really slams the covers open and could seriously injure the driver opening the cover.

Mr. Hawkins is also concerned about submerged fill requirements for existing small tanks. He said most stationary storage tanks are underground and have been there for many years, and few have the 3" or 4" fill pipes required for vapor recovery systems. Rather than impose costly requirements on these tanks, he has heard that small delivery trucks can carry a submerged fill hose adapter that will fit into a 2" pipe and provide the same air quality results as requiring every gasoline tank to be fitted with submerged fills.

Mr. Hawkins also said that compliance with transport and service station requirements, while eliminating a large amount of vapors, would cost him over \$30,000, a severe financial burden.

Mr. Hawkins said his plant operation can't afford the \$50,000 plus to outfit the plant and small delivery trucks for vapor recovery. He said it would force him to stop serving small accounts, creating additional financial hardships for him and his accounts. He feels these requirements are clearly unreasonable because they are aimed at less than 1% of the total VOC problem in the Medford-Ashland area.

James E. Hudson, general manager of Grange Cooperative Supply Association, feels the VOC rules adopted in December, 1978 were unworkable, and the proposed amendments make the rules even more restrictive. He said the expense of complying with the rules would be prohibitive, especially on small delivery trucks or field tanks of less than 1,000 gallons. Mr. Hudson suggested using the following steps, which he feels would control a high percentage of VOC emissions without imposing undue hardship on most dealers:

- 1. Trucks delivering gasoline from terminal sources would have to be equipped with vapor return equipment.
- 2. Any station, bulk plant, or other tank receiving gasoline directly from a terminal source would have to be equipped with vapor return equipment.
- Gasoline tanks of over 400 gallons installed after January 1, 1979 would have to be filled with some type of submerged fill pipe (portable or permanent) after January 1, 1980.

Mr. Hudson also suggested an exemption limit (340-22-115(4)) higher than 12,000 gallons per day on an annual daily average, or no limit at all. He noted that Grange Cooperative Supply Association is approaching a 12,000 gallon per day throughput and should reach that mark in three to four years.

Mr. Bosserman asked Mr. Hudson to comment on a rule which would require submerged fill system with no lower limit, or with a 400 gallon limit for all tanks or for those over 400 gallons Mr. Hudson said the portable submerged fill system is a practical approach, but a lower limit is needed. In response to another question from Mr. Bosserman, Mr. Hudson said he has about 2,000 accounts, primarily rural and farm accounts, whose tank sizes vary from 100 gallons and up. He also said he has a lot of tanks as small as 200 gallons. He also said he is implementing a new policy where he'll only deliver to accounts where at least one tank has a 200 gallon capacity. Mr. Hudson is unhappy about requiring a vapor recovery system for small bulk plants, small delivery trucks and small customer accounts, but he could accept requiring only truck and trailers (transport deliveries) to have vapor recovery systems.

Frank L. Carter, Union Oil Distributors in Medford, submitted written testimony containing his suggestions for easing the financial burden on small distributors:

1. Bulk plants with a daily volume of 12,000 or less gallons per day on an average of 365 days a year would be exempt from vapor recovery on their delivery trucks and loading racks.

- 2. Customers of exempt bulk plants should be exempt from vapor recovery requirements as long as they do not receive gasoline by truck/trailer transport.
- Customers with less than truck/trailer filled storage tanks will have submerged fill pipes, or be filled with trucks equipped with slip pipes for submerged filling.
- 4. Bulk plants will be equipped with a vapor recovery system to receive truck and trailer deliveries into their storage tanks.

Mr. Carter said the proposed VOC amendments requiring bulk plants with a 4,000 gallon per day throughput to install vapor recovery systems would involve almost every plant in the Medford-Ashland area. He feels that the financial burden of this requirement might put some plants out of business, or would result in loss of income if customers were unwilling to install such equipment.

<u>R. W. Hays</u>, President of Hays Oil Co., submitted written testimony containing suggestions on how the VOC rules could be more fair and equitable to petroleum jobbers and keep this industry in the Medford area to less than 1% of the problem. His suggestions are:

- Any bulk plant dispensing via tank wagon deliveries 12,000 or less gallons per day on an average of 365 days per year will be exempt from vapor recovery system requirements.
- 2. Customers purchasing bulk plant/tank deliveries less than 250,000 gallons per year would be exempt from VOC emission control.
- 3. Stationary storage containers of 2,000 gallons or less equipped with submerged fill pipes would be exempt.
- 4. All truck and trailer deliveries direct from a loading terminal to customers and bulk plants must have a vapor recovery system.

<u>Allan Mick</u> of International Paper Company pointed out that the first paragraph under <u>General Emission Standards for Volatile Organic Compounds</u> incorrectly equates photochemical oxidant and smog. He said smog includes photochemical oxidants plus many other pollutants.

Regarding the exemptions section (340-22-105), Mr. Mick feels there is no reason to require the operation of thermal oxidation systems during periods when the photochemical oxidant potential is low. He said the operation of these systems should be determined by an advisory issued by DEQ on days when the potential for excessive photochemical oxidant levels exists in the airshed. He said this policy would conserve large amounts of our limited natural gas supplies. Mr. Mick also feels the use of cutback asphalts (340-22-125) could be determined by the same advisory system.

<u>Mike Dougherty</u> of Union Oil Co. expressed concern about discrepancies he noted in the VOC rule. He said 340-22-110 gives an exemption to outlets served by exempt plants, while 340-22-115 prohibits deliveries from trucks filled at exempt plants to stationary tanks equipped with a VOC control system unless the tank owner or the delivery truck owner provides proof to the Department that gasoline cannot be secured from a source with a vapor recovery system. Mr. Dougherty said that because the Department of Energy controls where outlets get their gasoline from, through an allocation program, this last requirement is unrealistic and should be deleted.

Mr. Dougherty also had some questions on the impact of the new ozone standard on control estimates. Mr. Bosserman's reply was that a request was made to EPA to re-designate the Eugene-Springfield AQMA to an attainment area for ozone. He also said the DEQ follows EPA guidelines for requirements, and where the guidelines are loose the DEQ uses discretion to make reasonable guidelines.

<u>Bill Felker</u>, Union Oil distributor, Gresham, supports a revision to the rules that would exempt all customers of exempt bulk plants, NOTE: customers cannot change their supplier because of this program. because of the Federal Department of Energy's gas allocation program. He also supports requiring vapor recovery on all truck and trailer unloading because of the relatively low cost and the relatively high amount of vapors you can recover. He said it would cost him \$60,000 to \$100,000 to install a vapor recovery system at his bulk plant to return vapors from six customers receiving a total of 20,000 gallons per month. When asked by Mr. Bosserman how he felt about requiring submerged fill pipes, Mr. Felker said conversion to submerged fill is no problem and only costs around \$20. Most of his customers have 500 gallon tanks and larger, so he feels it would be worth it to use submerged fill. He said he is trying to establish a policy where he'll only deliver to accounts where at least one tank has a 500 gallon capacity.

<u>Courtney Jones</u>, Commission Agent for Chevron USA and representing dealers in the Salem area, said the cost for the vapor recovery for bulk plants with 20,000 or less gallons per day throughput is burdensome compared to the amount of vapors recovered. He said, according to H. R. Solomon, an engineer for Chevron USA in Seattle, the estimated cost for a vapor recovery system is \$70,000, and the estimated amount of vapors recovered is 1.5%.

<u>R. E. Chaddock, Director of Environmental Affairs for Hercules</u> Incorporated, urges adoption of the EPA "bubble concept" in the State Implementation Plan because it allows industry to determine the most cost-effective mix of air pollution control equipment at a plant site.

<u>Richard Harris</u>, Vice President of Harris Enterprises, owns several bulk plants which would be affected by the rules. He feels the most cost-effective rules for controlling VOC emissions would exempt bulk plants

with 20,000 or less gallons per day throughput, exempt the customers of exempt bulk plants, and require all bulk plants to have Stage I controls. He has no objections to requiring drop tubes, which cost \$20-30. When asked by Mr. Bosserman about the effectiveness of self-enforcement, Mr. Harris said he foresees 100% compliance by distributors if the regulations are reasonable, if the drivers are aware of the regulations, and if they have time to install equipment.

L. S. Angst, President of R. L. Angst and Son, Inc., Eugene, said their transport (truck and trailer) is submerged filled and they would provide bottom loading with vapor return to accommodate pipe line pick ups. He said they also would provide the vapor return lines and connections from storage tanks back to the truck and trailer for use when unloading gasoline into their storage tanks.

Dale B. Monroe, Sliger-Monroe Oil Company, Hillsboro, objects to changing the exemption on small bulk plants to less than 4,000 gallons per day because it is unreasonable, unrealistic and uneconomical. He said the cost to install vapor recovery equipment cannot be justified by the amount of vapors recovered because, when comparing a bulk plant with 20,000 gallons per day throughput, the cost per gallon is ten times greater, the amount of vapors recycled to the trucks is ten times less, and with no facilities to recycle the VOC recovered, the vapor is eventually released anyway and the entire investment is wasted. He said that by complying with 340-22-110, most of the air quality objectives are achieved through less expensive equipment, submerged fill at delivery destinations and vapor return lines on bulk plant tanks. He supports exempting customers of exempt bulk plants by deleting paragraph 3 of 340-22-115(4).

Joseph A. Lassiter, Engineering Program Administrator, Lane Regional Air Pollution Authority, and <u>Jack Delay</u>, Chairman, Eugene-Springfield AQMA Citizens Advisory Committee, recommend exempting the Eugene-Springfield AQMA from the VOC Rules as long as violations of the oxidant standard do not occur.

<u>Gene Hopkins</u>, Executive Vice President, Greater Medford Chamber of Commerce, submitted comments prepared by their consultant, Bob Gantenbein of Marquess and Associates. Mr. Gantenbein supports the exemption of methyl chloroform and methylene chloride because they can be considered photochemically non-reactive, and supports deletion of future controls on automobile gasoline tank filling emissions. He said the most good can be gained by applying controls to trucks loading at bulk plants and trucks filling underground service station tanks. He pointed out that gasoline marketing is responsible for approximately 6% of total VOC emissions in the Medford-Ashland AQMA, too small a source group to worry about when we don't have a real handle on the oxidant problem. He said DEQ has forged ahead based on EPA guidance documents, not on a logical cause-and-effect basis. He recommends that Sections 340-22-115 and 22-120 be delayed until DEQ has information which points to a definite need.

H. R. Solomon, an engineer for Chevron USA, Seattle, and D. J. Fogelquist, Western Oil and Gas Association support the intent of the Environmental Quality Commission's decision in December 1978 to lessen the economic impact on small bulk plants. They support exempting bulk plants with 20,000 or less gallons per day throughput, and exempting customers of exempt bulk plants.

Mr. Solomon also pointed out that OAR 340-22-120 calls for control of VOC emitted into the atmosphere in excess of 80 milligrams of VOC per liter of gasoline loaded, while OAR 340-22-115 requires control of VOC to 90% by weight of the gasoline vapors displaced during truck loading. He feels the double standard should be eliminated.

Dave Spencer and Dr. Hugh A. Farber, Dow Chemical USA, and B. J. Reilly, EI DuPont de Nemours and Company, requested exemption of the solvents methylene chloride and methyl chloroform (1-1-1 trichloroethane) because neither compound generates significant amounts of ozone.

L. Schlossberg, Detrex Chemical Industries Inc., requested control of methylene chloride and methyl chloroform because they are suspected to affect the earth's ozone layer, and because there is some evidence that they may be carcinogenic.

Both Dow Chemical USA and Detrex Chemical Industries Inc. furnished supporting evidence for their positions, and have responded to each other's positions in detail. The complete testimony (approximately 200 pages) is on file with the Department of Environmental Quality.

Testimony from the <u>U.S. Envrionmental Protection Agency</u>, received after the closing date of the hearing record, is included as part of the hearing record as requested by EPA, and is attached, verbatim, to this report.

Recommendation

Your Hearing Officer makes no recommendation on this matter. Respectfully submitted,

Linda Zucker Hearing Officer

MEF:jl 229-5353 May 22, 1979 A6249.A2

#### ENVIRONMENTAL PROTECTION AGENCY U. S.

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REGIONIX 1200 SIXTH AVENUE SEATTLE, WASHINGTON 98101

ATTN OF M/S 629

EAY 1 1 1979

William Young, Director Department of Environmental Quality P. O. Box 1760 Portland, OR 97207

Dear Mr. Young:

On March 2, 1979, you submitted a letter summarizing the status of Oregon's non-attainment SIP revisions and making a number of requests for information and/or approval on various items. On April 6, 1979, you submitted a draft of the intended SIP revision for review and raised additional questions on certain aspects of the Clean Air Act.

You have already received partial response to the March 2 request in EPA letters dated March 29 and April 12. On Wednesday, May 2, 1979, Mike Schultz mut with your staff to go over the results of our review of the draft SIP revision. Finally, a formal report documenting our determinations on all of the items referred to above is being developed and will be transmitted directly to your staff on May 15, 1979. We request that report and this letter be made a part of the record of your hearings.

The report to be transmitted on or before May 15, will list all of the discrepancies between the Act's requirements, EPA regulations, guidance, etc, and the draft Oregon SIP revision that we have been able to identify. Ideally, these discrepancies would be corrected before formal adoption and submittal, and I request that you make every effort to do so. At the same time, I want to clearly draw an important distinction between the discrepancies to be identified in our May 15 report and thuse identified in the enclosure to this letter. Specifically, it will be our intent to handle any remaining discrepancies from our May 15 report through conditional approval of the SIP revision. The problems tentatively identified in the enclosure to this letter, if confirmed to be real by our further analysis, are more serious in nature. Unless corrected, these ... problems would necessitate disapproval insofar as that particular aspect of the revision is concerned.

14.

Of the three major issues, only one - VOC regulation - pertains to non-attainment SIP revision requirements; the other two, though important, relate to SIP requirements in attainment areas. Therefore, while we hope that all three can be resolved in time for EQC action (on June 8) as scheduled, highest priority should be placed on the VOC regulation. If you have any questions regarding these matter, please contact Clark L. Gaulding at 442-1230.

Revising SIPs is proving to be rigorous and challenging - as we all knew it would be. I am pleased with the level of commitment Oregon has made. At the same time I am disappointed, as I am sure you are, that delays have occurred such that our review of your draft had to be a compromise between our desire to do a thorough job and our desire to give you our best judgment in time for it to be reflected in the final SIP revision package. Our "official" judgment must necessarily come after the official SIP revision is completed and submitted; even so, I am reasonably confident that our actions will be consistent with the direction outlined in this letter.

Sincerely,

Wong Hannen, for

Donald P. Dubois Regional Administrator

Enclosure

# EPA COMMENTS ON OREGON DRAFT SIP MAJOR PROBLEM AREAS

1. Stationary Sources of Volatile Organic Compounds (VOC) -Numerous technical deficiencies and potential problems have been identified with the VOC rules which would prevent EPA approval. Problems primarily revolve around a lack of enforceability, specificity, and applicability.

2. New Source Review (NSR) for Attainment Areas - The State should have a clearly defined program for granting permits to sources in attainment areas where anticipated emissions are projected to cause a violation of NAAQS or PSD increments.

3. Prevention of Significant Deterioration (PSD) - Adoption of 40 CFR Part 51 requirements by reference is not acceptable. Adoption of Part 52 requirements with some modifications is possible, but would result in extremely restrictive regulations. We recommend State development of a PSD program in accordance with Part 51.

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UNITED ATES ENVIRONMENTAL PROTECTION AGENCY Office of Air Quality Planning and States Research Triangle Park, North Carolina 27711

MAY 4 1979

Draft SIP Revision from Oregon

ROM: Robert M. Schell, Chief CP Plans Analysis Section, CPDD (MD-15)

: Tom Wilson

Air and Hazardous Materials Division, Region X

We have completed our review of the draft of "Oregon's State Clean Air Act Implementation Plan," and wish to make the following comments and recommendations:

. . .)

1. The emission inventories for VOC in Portland and Salem appear to meet the requirements of the Clean Air Act and our guidelines. We do note, however, that they do not include emissions from bulk plants or degreasers. Likewise, the Salem inventory does not include emissions from "other solvent uses" or cutback asphalt.

2. The emission inventory for VOC for Portland includes emissions from sources in Clark County, Washington. Such emissions are not discussed anywhere else in the plan. The effects of these emissions on the control strategies and attainment demonstration should be noted.

3. For each of the nonattainment areas, the NMHC/NO, ratios are Tower than the 9.5:1 default value recommended in Mr. Rhoads' memorandum of February 21, 1979 entitled "Determination of Reductions Necessary to Attain the Ozone Standard." The high NO, data should be carefully reviewed to determine its representativeness before accepting the low NMHC/NO, ratio. This is particularly true for the Medford-Ashland area where the ratio is 3.4:1. Such low ratios would result in the control agency underpredicting the amounts of reduction needed to meet the ambient standards. Also, high ambient concentrations of NO<sub>x</sub> could indicate a violation of the NO<sub>2</sub> standard.

4. The design value for the Medford-Ashland area seems to have been improperly selected. Instead of the second high value over the past three years, the procedures described in EPA's "Guideline for Interpretation of Ozone Air Quality Standards" should have been utilized to select the design value for the Medford area in the same manner utilized for Portland on page 2 of Appendix 4.3-1.

5. On page 22 in Section 4.3.4, it was incorrectly stated for Portland that: "Since an ozone attainment plan is not being submitted at this time, new source review requirements of the Clean Air Act Amendments of 1977 will not affect this nonattainment area." It is clearly stated in Section 172 of the Act and in the Administrator's memorandum

EPA Form 1320-6 (Rev. 3-76)

OTHER

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

# DATE: MAY 15 1979

1

SUBJECT: Comments on the April 1979 Draft Oregon SIP Revision Package

FROM: George C. Hofer, Chief Support & Special Projects Section

TO: Oregon State Implementation Plan Docket No. 10A-79-8D

> Attached are the consolidated technical comments on the proposed Oregon SIP revision package. Incorporated herein also are concerns raised by the Surveillance and Analysis Division in an independent review of the package.

At this time we are analyzing the ozone design values through rigorous mathematical analytical techniques. We intend to submit comments on design values and the ozone modeling as soon as our analysis is complete.

It should be noted that our review is based only on the sections submitted by the State in April. The entire SIP (as is now approved) has not yet been reviewed for consistency with all CAA requirements and the April submittal. That review will be done when the complete SIP is submitted for Agency approval.

The comments marked with "ACTION REQUIRED" are ones deemed to constitute significant deficiencies which, unless addressed or corrected may provide a basis for disapproval. The comments marked with "RECOMMENDATION" constitute areas where improvement in the SIP is necessary to make it accurate and technically sound.

Considering the fact that the package is simply proposed for public comment it will, in all likelihood, be different than the final SIP submission to EPA. In this regard we reserve the right to expand or change our comments.

Attachment

- cc: T. Wilson
  - M. Schultz
  - W. Schmidt
  - B. Eusebio

20. <u>340-20-190 through 340-20-195</u> - General - The "Special Permit Requirements for Sources Subject to Control Strategies" does not appear to satisfy the requirements of Part D or offsets in general because of problems with applicability and definitions and lack of specifics and procedures for handling the many different situations which will arise.

ACTION REQUIRED: Ensure that this section satisfies CAA requirements. It is recommended that 40 CFR 51 Appendix S be used as a guideline for developing approvable regulations.

21. <u>Section 4.3.3.3.</u> - The level of control DEQ is requiring VOC sources to achieve is the lowest represented by CTG documents. In most cases there are two levels of control described in the CTG's. The DEQ may wish to include an examination of more restrictive VOC capture at existing sources.

RECOMMENDATION: Include "more restrictive VOC capture" in the list shown on table 4.3.3-1.

22. <u>Section 4.3.4, para 2</u> - It is not clear why the new source review requirements do not affect the Portland non-attainment area.

RECOMMENDATION: Expand the discussion of the applicability of new source review.

23. <u>Appendix 4.3 - 1A</u> - The emission inventory does not account for emissions from petroleum refineries, petroleum storage, or degreasing operations. These are all CTG categories and must be accounted in the inventory.

ACTION REQUIRED: Revise the emission inventory to include all CTG source categories. If no sources exist within the area insert "O".

24. <u>Section 4.4.3.4a</u> - The phrase "... would most likely not ..." is not very concrete.

RECOMMENDATION: Eliminate the words "most likely".

25. <u>Section 4.4.3.4c</u> - The Section is not specific enough as to when and how plant site CO emission limits will be set. It appears that these limits might be set.

RECOMMENDATION: Provide information as to when and how such limits will be set.

26. <u>Section 4.4.4</u> - The explanation of new source rules to be found in Section 5.4 is missing.

ACTION REQUIRED: Provide missing pages.

27. <u>Section 4.4.4.1</u> - The PSEL rule "... would clearly delegate authority ...." - when, how, etc?

RECOMMENDATION: Since a regulation either does or does not do something, it is recommended that the word "would" be eliminated and the statement be made more positive.

28. <u>Section 4.5.0.02</u> - An EPA approved model is cited for estimation of VOC reductions. Nothing is provided about the details of the model.

RECOMMENDATION: At a minimum the identity of the model must be given.

29. <u>Section 4.5.2.2.</u> - Table 4.5.2-1 describes growth indicies for the Salem area which do not cover all categories of sources shown in the emission inventory. It is not clear how the projected growth of sources not shown is determined.

ACTION REQUIRED: List the growth indicies for all applicable sources.

30. <u>Section 4.5.2.2</u>, para 6, para 2 - The statement concerning 100 tons/year potential emission does not appear to relate to anything. If the 100 ton/year criteria has any particular significance that significance must be clearly stated.

RECOMMENDATION: Clarify the subject paragraph.

31. <u>Section 4.5.3.1</u>, para 2 - The 982 ton/year value is a typo error, it should be 952 tons/year.

RECOMMENDATION: Repair the typo error.

32. <u>Section 4.5.3.2.</u>, para 2 - The control strategy indicates RACT will be implemented for 100 tons/year sources yet section 4.5.2.2 at page 6 indicates there are no 100 ton sources.

ACTION REQUIRED: Clarify the strategy to show that implementation of RACT will have no result.

33. <u>Section 4.5.3.2</u>, para 3 – The rules specified to manage growth omit the requirement contained in 340-22-104 where LAER must be installed on new or modified 100 ton VOC sources.

ACTION REQUIRED: Include rule 340-22-104 in the list of applicable //00

34. Section 4.5.3.3.2 - See comment #32.

34a. <u>Section 4.5.4.1</u> - The date shown for adopting Group II VOC rules is 1983. Since the Group II CTG documents are already published SIP revisions to include those categories are due on January 1, 1980.

ACTION REQUIRED: Change the date of applicability from 1983 to 1980.

35. <u>Section 4.5.4.1, para 2</u> - It is not clear why VOC rules do not apply to sources other than service stations and cutback asphalt. If the reason is that no other Group I VOC sources exist then it should be so stated.

RECOMMENDATION: Clarify the discussion.

36. Section 4.5.5, Figure 4.5.5-1 - The HC emissions line shows a gradual decrease starting in 1977 yet the applicable VOC rules only become effective after 1981. The graph should reflect this step change.

RECOMMENDATION: Modify the graph to show the delayed effective date of the VOC rules.

37. <u>Appendix 4.5-1</u> - No reference or method is cited for the VOC emission inventory.

RECOMMENDATION: Explain the basis for the VOC emission inventory (or any other inventory) and reference the pertinent studies which were considered in the development of the inventory.

38. <u>Section 4.8.2.1</u> - The source of the date base for the VOC emission inventory for Medford/Ashland is not explicitly stated. The VOC total agrees closely with NEDS, but there are differences in the subcategories. The May 1977 study by PES entitled "A Review and Survey of Hydrocarbon Emission Sources is the Medford AQMA" differs from the inventory given in the SIP.

ACTION REQUIRED: Explain the basis for the VOC emission inventory (or any other inventory) and reference the pertinent studies which were considered in the development of the inventory.

39. Section 4.8.5.1 - See comment #36.

40. <u>Section 4.8.5.1</u> - Figure 4.8.5.1 basically shows the RFP line but does not show the actual VOC emissions that are projected to occur. If the projected emissions are identical to the RFP line there may not be any increment to accomodate new sources.

RECOMMENDATION: Describe the projected VOC emissions as another line on the chart.

41. <u>Section 5.0</u> - New source review is not only a function of where a source proposes to locate (inside -vs- outside of a non-attainment area) but also where the source will impact air quality and what the existing air quality is at those points of impacts.

RECOMMENDATION: Do not adopt regulations until EPA requirements are promulgated.

47. <u>Section 9.1</u> - Section 340-31-100 thru 112 are referred to herein but were not contained in this submittal.

ACTION REQUIRED: Provide missing sections.

48. <u>Section 9.4</u> - Secton 3.2 does not contain a copy of these rules so no comment can be made.

ACTION REQUIRED: Provide missing sections.

49. <u>General</u> - It is not clear whether the increase in emissions at VOC 3-M results from a modification to the source or simply is an increase in production up to existing plant design capacity. If it is a modification (as defined in 40 CFR 51.24(b)(2)) then 3-M must meet either Part D permit requirements or the Interpretive Ruling whichever applies at the time of application. This means that 3-M must apply LAER and obtain offsets. If it is simply an increase in production then it graphically illustrates the problem with using actual emissions rather than allowable emissions in the emission inventory and attainment demonstration.

If actual emissions are used, then any source which increases its emissions up to its allowable emission limit will jeopardize attainment and maintenance of the NAAQS. However, if allowable emissions are used, then the attainment strategy is valid irrespective of the actual emissions of any source (assuming compliance with SIP requirements). If the 3-M situation is an indication that Oregon is using actual rather than allowable emissions and that such increases in actual emissions could (as in this case) jeopardize attainment, the efficacy of the entire control strategy approach is highly questionable.

ACTION REQUIRED: Clarify the SIP regarding the proposed increase in emissions at 3-M to include copies of applicable permits, etc. indicate clearly whether actual or allowable emissions are being used throughout the SIP, and if actual, discuss the effects that allowable increases in emissions would have on the attainment strategies. Office of Air Quality Planning and Standards Research Triangle Park, North Carolina 27711

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MAY 4 1979

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Review and Comments on the State of Oregon VOC Regulations

ری FROM: William Polglase and John Calcagni Control Programs Operations Branch

TO: Tom Helms, Chief アイド Control Programs Operations Branch

. The State of Oregon regulations to control volatile organic compounds (VOC), submitted to EPA as part of the 1979 State Implementation Plan revision, have been reviewed. Specific comments are as follows.

# 1. Page 23 Definition of "Volatile Organic Compound"

This definition excludes <u>methylene chloride</u>. EPA's "Recommended Policy on Control of Volatile Organic Compounds" (FR 35314, dated July 8, 1977) indicated that methylene chloride, along with other VOCs, have been implicated or identified as being carcinogenic, mutagenic, or teratogenic and, as such, are not recommended for exclusion from SIP regulations. The exemption would, however, be approved but the <u>Federal</u> <u>Register</u> notice must cite the exemption and forewarn of possible adverse health effects and possible future regulation under Section 111(d).

2. Page 25 Exemptions

Natural gas-fired afterburners installed for the purpose of complying with the VOC regulations are only required to be operated from April through October (7 months). The State should demonstrate to the Regional Office that the ozone standard is not threatened during the period from November through March (5 months).

3. Page 26 Testing

Test procedures for coatings as well as bulk gasoline terminals, as cited in the control technology guidelines (CTGs), should be listed.

4. Page 28 Paragraph 1

It is uncertain how emissions from pressure relief valvec would be measured. The pressure relief valves should be set at a value that would minimize emissions without jeopardizing the safety of the plant and equipment.

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# 5. Page 28 (4)

It appears that something is missing from this regulation. The inclusion of bulk plant maximum loading rates along with the exemption is confusing.

# 6. Page 29 Paragraphs 2 and 3

The exemption of gasoline storage tanks, serviced by exempt bulk plants, should only apply to those storage tanks that are <u>solely</u> serviced by exempt bulk plants.

# 7. Page 30 Cutback Asphalt

The State should document the allowance of the use of cutback or blending petroleum distillate, with a total vapor pressure less than 26mm of Hg at 20°C throughout the year, unless the SIP clearly demonstrates attainment with this exemption. What magnitude of emissions does this represent? Is the five percent showing satisfied?

# 8. Page 31 Cutback Asphalt

This regulation in addition to the above exemption, as well as a seasonal exemption, allows the use of cutback asphalt when the temperature forecast during the 24-hour period following application is below  $10^{\circ}$  C (50° F).

The State should document how this regulation will be enforced, whose forecast and thermometer will be used, etc. The State should have in written form the procedures to be used. Seasonal exemptions are preferred over temperature exemptions because of ease of enforcement.

# 9. Page 33 Surface Coating in Manufacturing

This regulation exempts coating lines using less than 2000 gallons of coating per year or 10 gallons an hour. Unless the State clearly demonstrates attainment with this exemption, the State should document the exemption by showing the impact on emissions is less than five percent. (For guidance to application of the five percent rule, see Roger Strelow's memorandum to Regional Administrators dated December 9, 1976.)

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# 10. Page 34 Inert Gas Process Paper Coating

The regulations include an emission limit of 4.7 lbs/gal (excluding water), calculated on a monthly average basis, for inert gas process paper coating. The State should document any unique characteristics of such facilities which would warrant a less stringent level of control than that required for other paper coating operations (2.9 lbs/gal excluding water). It would seem that any modification of the paper coating emission limit (2.9 lbs/gal. excluding water) should be made on a case-by-case basis where adequate technical justification exists, that it is not an achievable limit, and that the suggested limit is the maximum reasonable. We are also concerned with the use of a monthly average. Since ozone violations are essentially a short term phenomena rather than a long term phenomena, does this limit provide any practical control of a major emitting source? If not, does it serve any value as a generic regulatory provision or is it simply a regulation requiring no control?

Attachment Table I

cc: Leo Stander

STATE OF OREGON

Table I

CTG docu	ment	Includes CTG recommendations (RACT)	Compliance date	Exemptions
1.	Auto & lt. duty trucks	Yes	12-31-82	*
2.	Cans •	Yes	12-31-82	*
3.	Paper	Yes	12-31-82	*
4.	Fabric	Yes	12-31-82	*
5.	Metal furn.	Yes	12-31-82	*
6.	Large appl.	Yes	12-31-82	*
7.	Magnet wire	Yes	12-31-82	*
8.	Coils	Yes	12-31-82	*
9.	Fixed-roof tks.	Yes	4-1-81	
10.	Bulk terminals	Yes	4-1-81	
11.	Bulk plants	Yes	1-1-79?	<4000 gal/day thruput
12.	Stage I	Yes	1-1-80	New <400 gal tks Exist <2000 gal tks **
13.	Pet. ref. sources	Yes	4-1-79	
14.	Cutback asphalt	Yes	4-1-79	Total vap. press. <26mm Hg @ 20°C
15.	Degreasers	Yes	4-1-80	Open top vapor <10 Ft <sup>2</sup>

\* Coating line using <2000 gals/yr cr <10 gal/hr \*\* Service stations served by exempt bulk plants

Note: The above summery does not reflect the views of Regim X and may not reflect the views of the Administrator. N.W

# COMMENTS ON GENERAL EMISSON STANDARDS FOR VOC (340-22-100 thru 340-22-150)

1. 340-22-100(1) - The exclusion of methylene chloride solvent is inconsistent with EPA guidance. The chemical has a vapor pressure of 285 mm of Hg at 15°C and is therefore highly volatile. If the state choses to submit an SIP exempting methylene chloride from VOC control requirements a complete demonstration must be made showing that it is not reactive with NO<sub>x</sub> in the presence of sunlight.

ACTION REQUIRED: Delete methylene chloride from the list of exemptions.

2. <u>340-22-107</u> - The specific test procedures used for compliance determination with the VOC regulations are not included as an integral component of the SIP revision package. A statement that the procedures are on file makes federal enforcement of the SIP extremely onerous.

ACTION REQUIRED: Incorporate the test procedures into the SIP and include all applicable test procedures with the SIP submission to EPA.

3. 340-22-108 - Compliance schedules for each industrial category are not included in the SIP. Such schedules should include the following increments:

- a. Date of submission of compliance plan
- b. Date for award of contracts

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- c. Date for initiation of construction
- d. Date for completion of construction
- e. Date for demonstration of compliance

ACTION REQUIRED: Specify the applicable compliance increments for each industrial category covered by VOC rules.

4. <u>340-22-110</u> - The title "Transfer to Small Storage Tanks" seems incorrect for the category described. "Small" tanks are exempt while the applicability is actually to the gasoline transfer operation into basically large tanks.

RECOMMENDATION: Change the title to "Transfer of Gasoline into Stationary Storage Tanks."

5. 340-22-110(1)(a) - The phrase "...from any tank truck or trailer..." exempts the rule from applying to stationary storage tanks at tank truck gasoline loading terminals which are filled from barge, rail or other similar means of transportation.

RECOMMENDATION: Revise the rule or add a new rule to regulate tanks at tank truck gasoline loading terminals and at bulk gasoline terminals which received gasoline from refineries by pipeline, ship, rail or barge.
6. 340-22-110(1)(a) - The term "submerged fill pipe" is not defined.

ACTION REQUIRED: Define the term.

7.  $\underline{340-22-110(1)(a)}$  - The 90% capture of vapors is an efficiency requirement. As such it must rely upon specific equipment specifications and performance standards for it to be meaningful yet none of these are provided. The rule does not specify that storage tanks, transfer equipment and vapor collection devices be vapor tight. As specified in the CTG, vapor balancing equipment must be vapor tight for the system to be effective. Without such requirements the level of VOC capture represented by the rule cannot be determined.

ACTION REQUIRED: Requirements that the storage tank be vapor tight and other requirements listed in the CTG (for bulk gasoline plants) at page 6-2 regarding performance standards and equipment specifications must be specified.

8. 340-22-110(1)(a) - The rule does not specify requirements to assure that the vapor return line will be connected to the tank during tank filling.

ACTION REQUIRED: The rule must be revised to require that the vapor hose is connected. See page 5 of the CTG for gasoline service stations.

9. 340-22-110(1)(a) - The specific test methods used for compliance demonstration are not cited. Although the test procedures used by the California Air Resources Board are referred to in Rule 340-22-107 the source categories to which the procedures apply are quite divergent from the way DEQ has established its rules. For example, portions of test procedures for bulk gasoline storage, gasoline loading terminals and gasoline dispensing facilities all apply to Rule 340-22-110. It is not obvious which portions of the procedures apply.

ACTION REQUIRED: Revise the rule to cite the specific source test procedures (by section) which an owner must use.

10. 340-22-110(1)(b) - The DEQ may desire to also exempt storage tanks which are equipped with floating roofs or their equivalent.

11. 340-22-110(1)(b)(B) - It is not clear whether the level of control represented here is that equivalent to use of a submerged fill pipe (Section 110(1)(b)(A)) or the 90% vapor capture requirement (Section 110(1)(a)).

ACTION REQUIRED: Clarify the rule to state as follows - "...as required by sub-section 110(1)(a)."

12. 340-22-110(2) - The requirement contained in Section 110(1)(a) i.e., 90% vapor control, represents RACT and would appear to be in conflict with new source review procedures which require LAER at 100 ton sources. (See 340-22-104).

ACTION REQUIRED: Revise the rule to require implementation of LAER at the time of construction for any tank which has the potential to emit 100 ton/year of VOC into the atmosphere.

13. 340-22-110(3) - The April 1981 final compliance date for gasoline dispensing facilities does not appear as being expeditious as practicable.

RECOMMENDATION: Change the final compliance date for storage tanks at gasoline dispensing facilities to January 1980.

14. 340-22-110(4) - The terms "stations" and "bulk plants" are not defined.

ACTION REQUIRED: Define "stations" as any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks; change the term "bulk plants" to "bulk gasoline plants".

15. <u>340-22-115</u> - The title is incorrect for the category of source being regulated. It should apply to a much narrower scope of only transfer of gasoline into tank trucks from bulk gasoline plants rather than the broad scope of gasoline storage facilities. As written, it includes both bulk plants and tank truck loading terminals.

RECOMMENDATION: Change the title to "Transfer of Gasoline into Tank Trucks from Bulk Gasoline Plants."

16. <u>340-22-115(1)</u> - The 90% vapor capture requirement is an efficiency standard. As such it must rely upon specific equipment specifications and performance standards for it to be meaningful, yet none of these are provided. It is impractical to apply a recovery efficiency or even a mass emission limit to this category. Mass emissions will vary depending on the hydrocarbon concentration in the truck which itself may vary depending on whether or not vapors displaced from service station tanks were collected in the tank truck.

ACTION REQUIRED: Specify the equipment specifications and performance standards listed in the CTG (for bulk gasoline plants) at page 6-2.

17. 340-22-115(1) - The specific test methods for compliance determination are not cited. (See comment #9).

ACTION REQUIRED: Revise the rule to cite the specific source test procedures (by section) which the owner must use.

18. 340-22-115(1) - The exemption of emissions from pressure relief valves does not include a provision that the valve must be set at the highest maximum level consistent with system design integrity.

RECOMMENDATION: Specify that the pressure relief valve must be set at 110% of system design pressure (or the highest maximum level consistent with system design integrity).

19. 340-22-115(2) - The rule does not require submerged filling on all tank trucks. This is a CTG requirement.

ACTION REQUIRED: Specify that tank truck loading must be via submerged fill.

20. <u>340-22-115(2)(a)</u> - The VOC control equipment refered to as "displacement system" and "combination system" is not commonly known. If a "displacement system" is a vapor balancing system, it should be called a vapor balancing system. Furthermore, absorber and condensation systems are referred to in the CTG as a refrigeration absorption system and refrigeration condensation system.

RECOMMENDATION: For the sake of clarity, technical accuracy and enforcability of the rule the control devices should be properly identified.

21. 340-22-115(2)(c) - It is not clear why the DEQ would want the vapor control equipment submitted for approval. It is prudent to only require the design of such equipment to be approved.

RECOMMENDATON: Add the word "design" following the word "equipment".

22. 340-22-115(3) - The rule is applicable to truck cargo tanks or trailers yet this section uses the term delivery vessel. Delivery vessel is not defined.

RECOMMENDATION: Define the term.

23. 340-22-115(3) - It is not clear that the returned vapors are those which may result from filling a stationary tank which relies upon vapor balancing as a VOC vapor control technique.

RECOMMENDATION: Insert the phrase "...exhausted from stationary storage tanks being filled" following the words "returned vapors."

24. 340-22-115(4) - The averaging period is not clearly specified and can be interpreted in a less stringent way.

ACTION REQUIRED: Change the words following "4000 gallons" to read as follows - "... or less of gasoline per day averaged over the work days in any year shall be exempted..." 25. 340-22-115(4) - The term " loading facilities" is not defined yet should apply to any facility which transfers gasoline to truck cargo tanks or trailers.

ACTION REQUIRED: Define the term.

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26. 340-22-115(4), para 2 - The requirement for use of a submerged fill pipe is too narrowly defined in that the regulation does not require the pipe to be permanently installed.

RECOMMENDATION: Insert the phrase "...permanently equipped with and ..." between the words "is loaded".

27. <u>340-22-115(4)</u>, para <u>3</u> - The term "delivery trucks" is inconsistent with the terms "truck cargo tank or trailer" and "delivery vessel" as used elsewhere in the rule. Also, the term "bulk plant" is inconsistent with "bulk storage facility" and "loading facility" as used elsewhere. The new terms should be defined or else replaced with the same terms used elsewhere.

ACTION REQUIRED: Replace "delivery truck" with "truck cargo tank or trailer" and "bulk plant" with "bulk gasoline storage facility".

28. <u>340-22-115(4)</u>, para 3 - It is presumed that this subsection applies to securing gasoline from bulk storage plants which transfer less than 4000 gallons of gasoline per day and to delivery of gasoline to storage tanks which utilize vapor control systems which do not rely upon vapor balancing. It is not clear why the securing of fuel exemption cannot be expanded to include sources (ie. tanks) which have a vapor control system in lieu of simply a vapor recovery system.

ACTION REQUIRED: Insert the phrase "vapor balance and" immediately before the work "capture". Provide a demonstration as to the impact of exempting delivery trucks from securing gasoline from storage facilities where vapor control systems other than vapor balancing is used.

29. 340-22-115(4), para 4 - Vapor return fittings are not required by 340-22-110(1)(a). Furthermore, the rule is far less stringent than CTG requirements because a tank now receiving gasoline from exempt (less than 4000 gallons/day) bulk storage facilities may in the future, be subject to a different arrangement where gasoline is received from non-exempt tanks.

ACTION REQUIRED: Revise the rule to state that any storage tank receiving gasoline exlusively (and solely) from an exempt bulk storage facility must use a vapor control system other than vapor balancing. Also, a demonstration must be provided to show that the strategy used to control VOC emissions from the gasoline marketing and distribution sources does not provide loopholes. Such loopholes could exist where vapor balance systems at one source do not properly mesh with vapor control systems at other sources. 30. 340-22-115(4), para 5 - Same as comment #29.

31. <u>340-22-115(4)</u>, para 6 - Rule 340-22-110 does not require vapor balancing systems for bulk storage facilities but rather allows a variety of ways to control vapors. If the intent is to require a vapor balance system for all bulk storage tanks rule 340-22-110 should be revised accordingly.

ACTION REQUIRED: Clarify the subsection to eliminate ambiguities.

32. 340-22-115(5)(a) - The construction of new facilities is subject to the installation of LAER (Rule 340-22-104) not RACT (Rule 340-22-115).

ACTION REQUIRED: Revise the rule to require for 100 ton/year sources installation of LAER in lieu of RACT. (Comment #25 also applies).

33. 340-22-115(5)(b) - The rule applicable to transfer of gasoline from bulk gasoline plants to truck cargo tanks or trailers was effective January 1, 1979 and requires final compliance by April 1, 1981 i.e. nearly 2 - 1/2 years. This does not appear to require compliance as expeditious as practicable.

ACTION REQUIRED: Revise the final compliance date to approximately July 1980.

34. <u>340-22-120</u> - This category of VOC source is duplicative in that rule <u>340-22-115</u> (as written) also regulates such activities. It is possible, however, that the DEQ is somehow attempting to differentiate between <u>bulk gasoline terminals</u> and <u>bulk</u> (gasoline) <u>storage facilities</u> yet neither source category is defined. Perhaps the broader question is why haven't the CTG categories of <u>bulk</u> <u>gasoline plants</u>, <u>tank truck loading terminals</u> and <u>gasoline service</u> <u>stations</u> been used? Departure from the CTG documents makes the DEQ rules applicable to gasoline marketing operations quite unwieldy, and difficult to understand.

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RECOMMENDATION: Delete this rule. Alternatively, it is strongly recommended that the DEQ consider revising its rules applicable to gasoline marketing operations to correspond with the EPA draft regulations on the same subject (Attachment 1).

35. <u>340-22-120</u> - If the DEQ retains this rule, clarifies it to apply to gasoline tank truck terminals and modifies rule 340-22-115 to apply only to bulk gasoline plants the following series of comments #36 through #44 apply.

36. <u>340-22-120</u> - The volume of daily throughput is in error: 20,000 gallons is equivalent to 76,000 liters in lieu of the 77,500 liters shown. The averaging period is not properly stated.

ACTION REQUIRED: Change the last few words to read as follows: "...76,000 liters (20,000 gallons) of gasoline per day averaged over the work days in one year".

37. 340-22-120 - The specific test methods for compliance determination are not cited. (See comment # 9)

ACTION REQUIRED: Revise the rule to cite the specific source test procedures (by section) which the owner must use.

38. <u>340-22-120</u> - The rule should be applicable to transfer of gasoline into tank trucks from tank truck gasoline loading terminals rather than to bulk gasoline plants.

ACTION REQUIRED: Make the rule applicable to tank truck gasoline loading terminals.

39. 340-22-120(a)((b) & (c) - The numbering system is inconsistent with the format used elsewhere in the rules. For example, rule 340-22-105 uses (1), (2) & (3) rather than (a), (b) & (c).

RECOMMENDATION: Change the (a), (b), & (c) to (1), (2), & (3).

40. <u>340-22-120</u> - The CTG document specifies a requirement that there should be no leaks in the vapor collection system during gasoline transfer operations. This is necessary to insure a reasonable degree of vapor capture otherwise it would be impossible to assess the efficiency of the control strategy.

ACTION REQUIRED: Revise the rule to specify requirements which will ensure essentially leakless tank trucks, proper operating procedures, periodic maintenance of hatches, P-V relief valves and positive liquid and gaseous connections.

41. 340-22-120(a) - See comment #20.

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42. 340-22-120(a) - It is not clear that the requirement of 90% efficiency in vapor capture is sufficient to achieve the emission limit of 80 mg/liter of gasoline transfered.

ACTION REQUIRED: When the SIP is submitted to EPA a demonstration must be made to show the relationship to 90% capture and 80 mg/liter.

43. <u>340-22-120(a)</u> - A method of VOC control at tank truck gasoline loading terminals includes vapor collection and recovery or oxidation control systems but does not allow vapor balancing systems. Vapor balancing could essentially capture vapors at service stations transport them to bulk plants then ultimately release those to the atmosphere at loading terminals. Release could occur when the tanks at loading terminals are filled because VOC cotnrol is generally not required for those tanks.

ACTION REQUIRED: Specify that vapor balancing systems which can result in release of the captured vapor to the atmosphere at an alternate facilty are not authorized.

44. 340-22-120(a) - See comment #21.

45. 340-22-125 - The term "cutback asphalts" is not defined.

ACTION REQUIRED: Define the term.

46. 340-22-125(2) - There is a typo in the last line.

RECOMMENDATION: Change to read "... Hg at 20°C".

47. 340-22-125(2)(b) - The regulation allows any asphaltic material to be stored for long periods provided it is a patching mix. The Asphalt Institute, however, has recommended that regulations be adopted which only allows slow curing cutback asphalt to be long-life stockpiled for use during cold weather.

ACTION REQUIRED: Insert the term "slow curing" following "... manufacture of".

48. 340-22-125(2)(c) - The exemption based on forecast temperature is perhaps only as good as a weatherman's weather forecast. The limit should be based on actual recorded temperature not only for the setting period but also for the application period.

ACTION REQUIRED: Revise the rule to allow exemptions only for the period of application, the 24-hour period following application and when the temperature does not exceed  $10^{\circ}$ C.

49. 340-22-125(2) - No requirement is provided for monitoring and recording temperature during application and subsequent setting of the asphalt.

ACTION REQUIRED: Specify temperature monitoring and recording requirements in the rule.

50. 340-22-130(3)(c) - The exemption allowing alternative depressurization is meaningless and thus may not be enforceable. It appears this exemption provides relief for purging process units with non-VOC material and then allowing such material to be vented irrespective of the pressure within the unit.

RECOMMENDATION: The alternative depressurization exemption should explicitly state the criteria or operating procedures that allow purging with non-VOC material.

51. 340-22-130(3)(c) - The rule does not require methods of monitoring or compliance determination.

ACTION REQUIRED: Modify the rule to require the operator to keep a record of each process unit turnaround listing as a minimum the date the unit was shutdown, the approximate vessel hydrocarbon concentration when the hydrocarbons were first discharged to atmosphere, and the approximate total quantity of hydrocarbons emitted to the atmosphere.

52. 340-22-135 - The final compliance date for petroleum liquid storage tanks is not as expeditious as practicable. Compliance should be more rapid than approximately 2 - 1/2 years following the effective date of the rule. The recommended date is July 1980 for installation of floating roofs.

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ACTION REQUIRED: Revise the rule to require final compliance by January 1981.

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53. 340-22-135 - It is not clear that the true vapor pressure is measured at the temprature at which the liquid is stored.

ACTION REQUIRED: Insert the phrase ", as stored, " following the phrase "true vapor pressure".

54. <u>340-22-135</u> - The storage temperature is needed to be measured in order to determine true vapor pressure yet no such provision is provided.

ACTION REQUIRED: Revise the regulation to require true vapor pressure to be measured at "actual monthly average storage temperature" and define the term as follows - actual monthly average storage temperature is an arithmetic average calculated for each calendar month, or portion thereof if storage is for less than a month, from bulk liquid storage temperatures determined at least once every seven days. Such a definition is consistent with 40 CFR 60.113(c).

55. 340-22-135(1) - The citation for New Source Performance Standards is incorrect.

RECOMMENDATION: Change 40 CFR 60.110 to 40 CFR 60 Subpart K.

56. 340-22-135(2) - The reference to the NSPS for tanks is unclear.

RECOMMENDATION: Insert "... 340-22-135(1)" in place of "...(1)..." in the last line.

57. 340-22-140 - The rule provides an across the board exemption for surface coating yet the CTG documents do not specify exemptions for any surface coating facility. EPA has no basis for determining if the regulation of the industry, considering the scope of the exemption, represents RACT.

ACTION REQUIRED: Justification for the exemption must be clearly documented and contain an inventory of VOC emissions from the entire coating industry in the non-attainment areas and the segment exempted. Such a demonstration must show that the rule <u>applies</u> to major sources where many small process lines (less than 10 gallons/hour) are employed.

58. 340-22-140 - The rule does not specify how compliance will be demonstrated or the types of records which must be kept, or the duration for keeping records to determine if an exemptiom is allowable.

ACTION REQUIRED: Revise the rule to specify test procedures and recordkeeping procedures.

59. 340-22-145, 146, and 147 - The numbering format is inconsistent with the other portions of the rules for VOC.

RECOMMENDATION: Revise (a) and (b) to (1) and (2); revise (i), (ii), (iii) and (iv) accordingly.

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60. 340-22-145(a)(iii) - The terms "freeboard ratio", freeboard chiller, vapor-air interface area, vapor level, vaper zone and vapor layer are not defined.

ACTION REQUIRED: Define the term "freeboard ratio" as the freeboard height divided by the width (not length) of the degreaser's air/solvent area; define all other terms in accord with the CTG document.

61. 340-22-146(a) - The CTG document for open top vapor degreasers provides no exemptions yet this rule exempts all vapor degreasers of less than 10 square foot air interface.

ACTION REQUIRED: Justfication for the exemption must be clearly documented and contain VOC inventory from the entire degreasing industry in the non-attainment areas and the segment exempted.

62. 340-22-146(a)(i) - The rule does not specify that the cover be designed and operated in such a manner that it is easily opened and closed in a horizontal motion without disturbing the air/vapor interface. Attention should be given to the cover because it is the emission control device.

ACTION REQUIRED: Modify the rules to incorporate specifics of cover operation.

63. 340-22-146(a)(i) - The CTG document at page 3-35 (B.3) specifies three safety switches which must be installed to prevent excess release of VOC during abnormal equipment operation. The rule omits requirements for safety switch installation.

ACTION REQUIRED: Since safety switches are considered an integral part to emission control equipment the requirements of the CTG must be incorporated.

64. 340-22-146(a)(ii)(A) - The term freeboard ratio is not defined.

ACTION REQUIRED: Define the term (see comment # 60).

65. 340-22-146(d) and 340-22-147(d) - The CTG document specifies that waste solvent shall not be disposed or transferred to another party such that not greater than 20% of the waste will evaporate into the atmosphere. One third of the total VOC emissons from degreasing facilities is from disposal of waste solvent. Most of the waste is disposed of in such a manner that it can evaporate into the atmosphere. A large fraction is indiscriminately dumped into drains or onto the grounds surrounding the using facility. ACTION REQUIRED: Revise the rules to specify requirements governing waste solvent.

67. 340-22-146 - The CTG document specifies requirements governing exhaust ventilation at the degreaser. The rule does not address such requirements.

ACTION REQUIRED: Revise the rule to specify ventilation requirements.

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68. <u>General</u> - Definitions are spread throughout the various regulations.

RECOMMENDATION: Revise the rules to specify definitions in one section near the beginning of the regulation to eliminate confusion.

69. <u>Summary Comment</u> - The VOC rules in general do not conform to the requirements specified in the CTG documents. Accordingly, since the CTG defines RACT for applicable source categories EPA is at a loss to determine the effectiveness of the control strategy to either attain NAAQS or to satisfy the requirements necessary to qualify for a post 1983 attainment date.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Office of Air Quality Planning and Standards Research Triangle Park, North Carolina 27711

FEB 5 1979



Mr. Douglas B. Mitchell Executive Vice President National Oil Jobbers Council 1750 New York Avenue, N.W. Washington, D. C. 20006

Dear Mr. Mitchell:

Enclosed are draft regulations for the control of volatile organic compounds at petroleum marketing operations. As you are aware, Section 110(a) of the Clean Air Act requires States to prepare plans to attain the national ambient air quality standards for ozone. Section 110(c)(1) of the Clean Air Act further requires EPA to promptly prepare and publish regulations if a State fails to submit a plan or if the State submittal is deficient. It appears very possible, based on our analysis of State proposals, that this situation may occur. Since petroleum marketing operations are one of the larger source categories of volatile organic compounds and since it is also one which has been found to be deficient in a number of proposals, this office is proceeding with the preparation of these draft regulations.

Before finalizing these documents we are asking for your review. These regulations are preproposal drafts and have not been through the rulemaking process. Obviously, opportunity for formal comment will be provided should there be a need for Federal promulgation. However, in the interest of resolving any obvious issues prior to general distribution, we would appreciate any comments by March 1, 1979. Should there be any questions on this package, please call John Calcagni at 919/541-5365.

Sincerelx

Walter C. Barber Director Office of Air Quality Planning and Standards

Enclosures

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CONTROL OF EMISSIONS FROM TRANSFERS AT GASOLINE DISPENSING FACILITIES

(a) Definitions:

(1) "Gasoline" means a petroleum distillate having a Reid vapor pressure of 27.6 kPa (4 pounds) or greater which is used to fuel internal combustion engines.

(2) "Delivery vessel" means any tank truck or trailer used for the transport of gasoline from sources of supply to stationary storage tanks of gasoline dispensing facilities and the attached vapor recovery system.

(3) "Submerged fill pipe" means any fill pipe with a discharge opening which extends to within 6 inches of the bottom of the tank or is entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw any liquid.

(4) "Owner" means any person who has legal or equitable title to the gasoline storage tank at a facility.

(5) "Operator" means any person who leases, operates, . controls, or supervises a facility at which gasoline is dispensed.

(6) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.

(7) "Vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded. (b) This section is applicable in the counties of (list counties),(list state).

(c) No person may transfer or cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank unless:

(1) The tank is equipped with a submerged fill pipe.

(2) The displaced vapors from the tank are:

(i) Processed by a vapor control system that prevents release to the atmosphere of no less than 95 percent by weight of the vapors displaced.

(ii) Transferred to the delivery vessel by means of a vapor tight vapor balance system.

(iii) Processed by a system demonstrated to the satisfaction of the Regional Administrator to be of equivalent effectiveness to (i) and (ii) above.

(3) The gauge well is equipped with a drop tube which extends to within six inches of the tank bottom.

(4) The tank is equipped with a system to ensure that the vapor return line will be connected during transfer. Compliance with this provision shall be by means of:

(i) A restriction on the vent line to reduce the orifice to .75 inches inside diameter.

(ii) A pressure-vacuum relief valve set to open at.5 psi or greater pressure and .25 psi or greater vacuum.

(iii) A system demonstrated to ensure that the vapor return line will be connected during transfer which is equivalent to those in (i) and (ii) above and is approved by the Regional Administrator.

(5) The delivery vessel is designed and maintained to be vapor tight at all times.

(6) The vapor-laden delivery vessel is refilled only at:

(i) Bulk gasoline plants in compliance with \$52.XXXX.

(ii) Bulk gasoline terminals in compliance with \$52.XXXX.

(d) Each owner of an affected storage tank shall:

(1) Purchase and install all necessary control systems and make all necessary process modifications.

(2) Provide instructions to the operator of the gasoline dispensing facility describing necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunctions of the control system.

(3) Repair, replace or modify any worn out or malfunctioning component or element of design and keep records of the repair, replacement or modification of any component or element of design of the control system.

(4) Keep records indicating the last time the vapor collection system passed the test identified in paragraph (h)(1) below and identify points at which leakage exceeded the limits specified in paragraph (h)(1).

(e) Each operator of an affected gasoline dispensing facility shall:

(1) Maintain and operate the control system in accordance with the specifications and the operating and maintenance procedures specified by the owner.

(2) Promptly notify the owner of the control system of any scheduled maintenance or malfunction requiring replacement or repair of major components of the system;

(3) Maintain records of all maintenance performed by the operator and of all notifications to the owner of any scheduled maintenance or malfunction requiring replacement or repair of major components of the system and the action taken by the owner. Such records shall at a minimum include:

(i) The scheduled date for maintenance or the date a malfunction was detected.

(ii) The date the need for maintenance or malfunction of major system components was reported to the owner.

(iii) The date the maintenance was performed or the malfunction corrected by either the operator or the owner.

(4) Maintain gauges, meters, or other specified testing devices in proper working order.

(f) Exemptions. This section will not apply to:

(1) Transfers made to storage tanks of gasoline dispensing facilities equipped with floating roofs or their equivalent.

(2) Stationary gasoline storage containers of less than 2,085 liters (550 gallons) capacity used exclusively for the fueling of implements of husbandry, provided the containers are equipped with permanent submerged fill pipes.

(3) Stationary gasoline storage tanks located at a gasoline dispensing facility, with a capacity of less than 7,580 liters (2,000 gallons), which is in place before January 1, 1979, provided that the storage tanks are equipped with a permanent submerged fill pipe.

(4) Any stationary gasoline storage tank located at a gasoline dispensing facility, with a capacity of 948 liters (250 gallons) or less, which is installed after December 31, 1978.

(5) Any gasoline storage container subject to (list state or locality) rule (list identifying code).

(g) Compliance Schedules. The owner of an affected stationary storage tank.or gasoline dispensing facility shall comply with the increments of progress contained in the following schedule:

(1) Final control plans for emission control systems or process modifications must be submitted to the Regional Administrator by September 1, 1979.

(2) Contracts for emission control systems or process modifications must be awarded or orders must be issued for the purchase of component parts on or before January 1, 1980.

(3) Initiation of on-site construction or installation of emission control systems must begin on or before March 15, 1980.

(4) On-site construction or installation of emission control equipment or process modification must be completed prior to June 15, 1980.

(5) Final compliance shall be achieved by July 1, 1980. For gasoline dispensing facilities serviced by bulk gasoline plants or

bulk gasoline terminals with a final compliance date for the installation of emission control equipment or process modifications which is later than July 1, 1980, the final compliance date for paragraph (c)(6) of this section shall be the date of final compliance for the servicing bulk gasoline plant or bulk gasoline terminal.

(h) Test Procedures. Compliance with this provision shall be determined by the following procedures:

(1) A "vapor balance system" shall be designed in accordance with the specifications delineated in "Design Criteria for Stage I Vapor Control Systems Gasoline Service Stations," November 1975, U.S. Environmental Protection Agency. Said system shall be operated and maintained in a manner to ensure that there are no readings greater than or equal to 100 percent of the lower explosive limit (LEL, measured as propane) at 2.5 centimeters (1 inch) around the perimeter of a potential leak source as detected by a combustible gas detector using the test procedure described in Appendix B of "Control of Volatile Organic Compound Leaks for Gasoline Tank Trucks and Vapor Collection Sytems," December 1978, U.S. Environmental Protection Agency, EPA 450/2-78-051. Said system must be designed and operated in a manner to prevent gauge pressure in the delivery vessel from exceeding 4500 pascals (18 inches of water) and prevent vacuum from exceeding 1500 pascals (6 inches of water).

(2) Gasoline delivery vessels and their vapor collection systems shall be deemed "vapor tight" if they do not sustain a pressure change of more than 750 pascals (3 inches of water) in five minutes when

pressurized to 4500 pascals (18 inches of water) or evacuated to 1500 pascals (6 inches of water) using the test procedure in Appendix A of "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems," December 1978, U.S. Environmental Protection Agency, EPA-450/2-78-051.

(i) Monitoring. Gasoline delivery vessels and their vapor collection systems shall be certified by the owner as being "vapor tight" per paragraph (h)(2) at least annually and may be monitored as may be required by the Agency using the combustible gas detection procedure identified in paragraph (h)(1). No person shall transfer or allow the transfer of gasoline from a delivery vessel which has been found to have leaks equal to or greater than 100 percent of the LEL until the delivery vessel is repaired and passes the pressure and vacuum test identified in paragraph (h)(2).

(j) Recordkeeping. Each truck must have a sticker displayed on each tank indicating the identification number of the tank and the date each tank last passed the pressure and vacuum test identified in paragraph (h)(2). This sticker must be located near the Department of Transportation certification Plate (DOT, title 49, part 178.340-10b).

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\$52.XXXX BULK GASOLINE PLANTS.



(a) Definitions.

(1) "Delivery vessel" means any tank truck or trailer used for the transport of gasoline from sources of supply to stationary storage tanks of gasoline dispensing facilities and the attached vapor recovery system.

(2) "Bulk gasoline plant" means a gasoline storage and distribution facility which receives gasoline from bulk terminals by trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations.

(3) "Bulk gasoline terminal" means a gasoline storage facility which receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck.

(4) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 27.6 kPa (4 pounds) or greater which is used to fuel internal combustion engines.

(5) "Splash filling" means the filling of a delivery vessel or stationary storage tank through a pipe or hose whose discharge opening is above the surface level of the liquid in the tank being filled.

(6) "Submerged filling" means the filling of a delivery vessel or stationary tank through a pipe or hose whose discharge opening extends to within 6 inches of the bottom or is entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid. (7) "Vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.

(8) "Owner" means any person who has legal or equitable title to the gasoline storage tank at a facility.

(9) "Operator" means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.

(b) The provisions of this section are applicable in (list counties), (list state) and to any bulk plant servicing a gasoline dispensing facility affected by §52.XXXX in (list counties), (list state).

(c) No person shall transfer or allow the transfer of gasoline to or from a bulk gasoline plant unless:

(1) Each stationary storage tank is equipped with a submerged fill pipe or with a fill line whose discharge opening is flush with the bottom of the tank.

(2) The displaced vapors from filling each stationary gasoline storage tank are:

(i) Processed by a vapor control system thatprevents release to the atmosphere of no less than 95 percent byweight of the vapors displaced; or

(ii) Transferred to the delivery vessel by meansof a vapor tight balance system; or

(iii) Processed by a system demonstrated to the satisfaction of the Regional Administrator to be of equivalent effectiveness to (i) and (ii) above.

(3) All connections or fittings to vapor lines, connecting pipes or hoses on the storage tank or loading or unloading delivery vessels are vapor tight and will automatically and immediately close when disconnected.

(4) Each stationary gasoline storage tank and delivery vessel is equipped with pressure and vacuum relief valves set to release at no less than 4.8 kPa (.7 psi).

(5) Each delivery vessel loaded or unloaded at a bulk gasoline plant is equipped with submerged filling and a vapor tight vapor balance system.

(6) Each delivery vessel is loaded and unloaded in a manner that hatches are not opened at any time during loading or unloading except where necessary for the proper operation of the vapor recovery system.

(7) Gasoline is handled in a manner to prevent spillage, discarding into sewers, storage in open containers, or handled in any other manner that would result in evaporation.

(8) The vapor-laden delivery vessel is designed and maintained to be vapor tight at all times.

(9) The vapor-laden delivery vessel is refilled only at a bulk gasoline terminal in compliance with §52.XXXX.

(d) Each owner of an affected bulk gasoline plant shall:

(1) Purchase and install all necessary control systems and make all necessary process modifications.

(2) Provide instructions to the operator of the bulk gasoline plant describing necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunctions of the control system.

(3) Repair, replace or modify any worn out or malfunctioning component or element of design and keep records of the repair, replacement, or modification of any component or element of design of the control system.

(4) Keep records indicating the last time the vapor collection system determined to be vapor tight in accordance with the test identified in paragraph (h)(l) below and identify points at which leakage exceeded the limits specified in paragraph (h)(l).

(e) Each operator of an affected bulk gasoline plant shall:

(1) Maintain and operate the control system in accordance with the specifications and the operating and maintenance procedures specified by the owner.

(2) Promptly notify the owner of the control system of any scheduled maintenance or malfunction requiring replacement or repair of major components of the system.

(3) Maintain records of all maintenance performed by the operator and of all notifications to the owner of any scheduled maintenance or malfunction requiring replacement or repair of major components of the system and the action taken the owner. Such records shall at a minimum include:

(i) The scheduled date for maintenance or the date a malfunction was detected.

(ii) The date the need for maintenance or malfunction of major system components was reported to the owner.

(iii) The date the maintenance was performed or the malfunction corrected by either the operator or the owner.

(4) Maintain gauges, meters, or other specified testing devices in proper working order.

(5) Maintain records of total throughput for each calendar month for the previous two years.

(f) This section will not apply to:

(1) Bulk gasoline plants with a daily throughput (1/30 the total throughput for any calendar month) of less than 15,560 liters
 (4,000 gallons).

(2) Bulk gasoline plants subject to (list state or locality) rule (list identifying code).

(g) Compliance Schedules. The owner of an affected bulk gasoline plant shall comply with the increments of progress contained in the following schedule:

(1) Final control plans for emission control systems or process modifications must be submitted to the Regional Administrator by September 1, 1979.

(2) Contracts for emission control systems or process modifications must be awarded or orders must be issued for the purchase of component parts on or before January 1, 1980.

(3) Initiation of on-site construction or installation of control systems must begin on or before March 15, 1980.

(4) On-site construction or installation of emissioncontrol equipment or process modification must be completed prior toJune 15, 1980.

(5) Final compliance shall be achieved by July 1, 1980.

For bulk gasoline plants serviced by bulk gasoline terminals with a final compliance date for the installation of emission control equipment or process modifications which is later than July 1, 1980, the final compliance date for paragraph (c)(9) of this section shall be the date of final compliance for the servicing bulk gasoline terminal.

(h) Test Procedures. Compliance with this provision shall be determined by the following procedures:

(1) The vapor collection system shall be operated and maintained in a manner to ensure that there are no readings greater than or equal to 100 percent of the lower explosive limit (LEL, measured as propane) at 2.5 centimeters (1 inch) around the perimeter of a potential leak source as detected by a combustible gas detector using the test procedure described in Appendix B of "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems," December 1978, U.S. Environmental Protection Agency, EPA 450/2-78-051. Said system must be designed and operated in a manner to prevent gauge pressure in the delivery vessels from exceeding 4500 pascals (18 inches of water) and prevent vacuum from exceeding 1500 pascals (6 inches of water).

(2) Delivery vessels tank trucks and their vapor collection systems shall be deemed "vapor tight" if they do not sustain a pressure change of more than 750 pascals (3 inches of water) in five minutes when pressurized to 4500 pascals (18 inches of water) or evacuated to 1500 pascals (6 inches of water) using the test procedure in Appendix A of "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems," December 1978, U.S. Environmental Protection Agency, EPA-450/2-78-051.

(i) Monitoring. Gasoline delivery vessels and their vapor collection systems shall be certified as being "vapor tight" per paragraph (h)(2) at least annually and may be monitoried as may be required by the Agency using the combustible gas detection procedure identified in paragraph (h)(1). No person shall transfer or allow the transfer of gasoline from a delivery vessel which has been found to have leaks equal to or greater than 100 percent of the LEL until the delivery vessel is repaired and passes the pressure and vacuum test identified in paragraph (h)(2).

(j) Recordkeeping. Each truck must have a sticker displayed on each tank indicating the identification number of the tank and the date each tank last passed the pressure and vacuum test identified in paragraph (h)(2). This sticker must be located near the Department of Transportation Certification Plate (DOT, title 49, part 178.340-10b).



\$52.XXXX BULK GASOLINE TERMINALS

(a) Definitions

(1) "Bulk gasoline terminal" means a gasoline storage facility which receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck.

(2) "Gasoline" means a petroleum distillate having a Reid vapor pressure of 27.6 kPa (4 pounds) or greater which is used to fuel internal combustion engines.

(3) "Delivery vessel" means any tank truck or trailer used for the transport of gasoline from sources of supply to stationary storage tanks of gasoline dispensing facilities and the attached vapor recovery system.

(4) "Owner" means any person who has legal or equitable title to the bulk gasoline terminal.

(5) "Operator" means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.

(b) This section will apply to bulk gasoline terminals in (list counties), (list state) and to any bulk gasoline terminal servicing a bulk gasoline plant subject to \$52.XXXX or a gasoline dispensing facility subject to \$52.XXXX.

(c) No person may load gasoline into any delivery vessel from any bulk gasoline terminal unless:

(1) The bulk gasoline terminal is equipped with a properly installed and operated vapor control system which emits not in excess

of 80 milligrams of hydrocarbon per liter of gasoline loaded (4.7 grains/ gallon) when tested in accordance with the test procedure specified in Appendix A of "Control of Hydrocarbon from Tank Truck Gasoline Loading Terminals," October 1977, U.S. Environmental Protection Agency, EPA 450/2-77-026.

(2) All displaced vapors and gases during tank truck gasoline loading operations are vented only to the vapor control system.

(3) A means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.

(4) All loading and vapor lines are equipped with fittings which make vapor-tight connections and which close automatically and immediately when disconnected.

(5) Each vapor-laden delivery vessel is designed and operated to be vapor tight at all times.

(6) Gasoline is handled in a manner to prevent its being discarded in sewers or stored in open containers or handled in any manner that would result in evaporation.

(7) The vapor collection system is operated in a manner to prevent the pressure in the vapor collection system to exceed the tank truck or trailer pressure relief settings.

(d) No person may load any product (including fuel oil and kerosene) into any gasoline vapor-laden delivery vessel unless the transfer is in accordance with paragraph (c) above.

(e) Each owner of an affected bulk gasoline terminal shall:

(1) Purchase and install all necessary control systems and make all necessary process modifications.

(2) Provide instructions to the operator of the bulk gasoline terminal describing necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunctions of the control system.

(3) Repair, replace, or modify any worn out or malfunctioning component or element of design and keep records of the repair, replacement, or modification of any component or element of design of the control system.

(4) Keep records indicating the last time the vapor collection and control system was determined to be vapor tight and in compliance with the tests in paragraphs (h)(l) and (h)(2) below and identify points . at which leakage exceeded the limits specified in paragraph (h)(2).

(f) Each operator of an affected bulk gasoline terminal shall:

(1) Maintain and operate the control system in accordance with the specifications and the operating and maintenance procedures specified by the owner.

(2) Promptly notify the owner of the control system of any scheduled maintenance or malfunction requiring replacement or repair of major components of the system.

(3) Maintain record of all maintenance performed by the operator and of all notifications to the owner of any scheduled maintenance or malfunction requiring replacement or repair of major

components of the system and the action taken by the owner. Such records shall at a minimum include:

(i) The scheduled date for maintenance or the date a malfunction was detected.

(ii) The date the need for maintenance or malfunction of major system components was reported to the owner.

(iii) The date the maintenance was performed or the malfunction corrected by either the operator or the owner.

(4) Maintain gauges, meters, or other specified testing devices in proper working order.

(g) Compliance Schedules. The owner of an affected bulk gasoline terminal shall comply with the increments of progress contained in the following schedule:

(1) Final control plans must be submitted to the RegionalAdministrator by September 1, 1979.

(2) Contracts for emission control systems or process modification must be awarded or orders must be issued for the purchase of component parts by January 1, 1980.

(3) Initiation of on-site construction on installation of emission control systems must begin by June 1, 1980.

(4) On-site construction or installation of emission control systems or process modifications must be completed by March 1, 1981.

(5) Final compliance shall be achieved by April 1, 1981.

(h) Test Procedures. Compliance with this provision shall be determined by the following procedures:

(1) The vapor control system shall not emit in excess of 80 milligrams of hydrocarbon per liter of gasoline loaded (4.7 grains/ gallon) when tested in accordance with the test procedure specified in Appendix A of "Control of Hydrocarbon from Tank Truck Gasoline Loading Terminals," October 1977, U.S. Environmental Protection Agency, EPA 450/2-77-026.

(2) The vapor collection system shall be operated and maintained in a manner to ensure that there are no readings greater than or equql to 100 percent of the lower explosive limit (LEL, measured as propane at 2.5 centimeters (1 inch) around the perimeter of a potential leak source as detected by a combustible gas detector using the test procedure detailed in Appendix B of "Control of Volatile Organic Compound Leaks from Gasoline Tank Truck and Vapor Collection Systems," October 1978, U.S. Environmental Protection Agency, EPA 450/2-78-051. Said system must be designed and operated in a manner to prevent gauge pressure in the delivery vessel from exceeding 4500 pascals (18 inches of water) and prevent vacuum from exceeding 1500 pascals (6 inches of water).

(3) Gasoline delivery vessels and their vapor collection systems shall be deemed "vapor tight" if they do not sustain a pressure change of more than 750 pascals (3 inches of water) in five minutes when pressurized to 4500 pascals (18 inches of water) or evacuated to 1500 pascals (6 inches of water) using the test procedure in Appendix A of "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems," December 1978, U.S. Environmental Protection Agency, EPA 450/2-78-051.

(i) Monitoring.

(1) Gasoline delivery vessels and their vapor collection systems shall be certified by the owner as being "vapor tight" per paragraph (h)(3) at least annually and may be monitored as may be required by the Agency using the combustible gas detection procedure identified in paragraph (h)(2). No person shall transfer or allow the transfer of gasoline to a delivery vessel which has been found to have leaks equal to or greater than 100 percent of the LEL until the delivery vessel is repaired and passes the pressure and vacuum test identified in paragraph (h)(3).

(2) The vapor control system at the bulk gasoline terminal shall be certified by the owner as being in compliance at least annually by means of the compliance test in paragraph (h)(1).

(3) The vapor collection system at the bulk gasoline terminal shall be certified by the owner as being "vapor tight" per paragraph (h)(2) at least annually and may be monitored as may be required by the Agency using the compliance test identified in paragraph (h)(2). No person shall transfer or allow the transfer of gasoline from a bulk gasoline terminal which has been found to have leaks equal to or greater than 100 percent of the LEL until the bulk gasoline terminal is repaired and passes the compliance test in paragraph (h)(2).

(j) Recordkeeping. Each truck must have a sticker displayed on each tank indicating the identification number of the tank and the date each tank last passed the pressure and vacuum test identified in paragraph (h)(3). This sticker must be located near the Department of Transportation Certification Plate (DOT, title 49, part (78.340-10b).

Status of Action Items from March 2 DEQ Letter

Item

#### Action Requested

Medford TSP

1. Redesignate from nonattainment of secondary to non-attainment of primary and secondary standards.

Confirm that state has
 months from redesignation
 to develop and submit SIP.

3. Confirm that attainment date is 3 years from plan approval.

4. Confirm that EPA's offset rule applies until such time as the SIP is due to be approved (applies during periods of authorized extensions for SIP development). 1. Yes: FR package proposing approval is drafted; technical review being completed. Separate FR package drafted to approve rules adopted in May 1978.

Region 10 Status

2. Confirmed

3. Negative
\*(See footnote
below)

4. Confirmed for TSP secondary standard SIPs. For  $O_X$  plans demonstrating a need for post 1982 attainment dates, Section 173 requirements must met in the 1979 SIP submittal.

NSF

Eugene-Springfield

1. 0<sub>x</sub>

Redesignate from nonattainment to attainment Yes: FR package proposing approval is drafted; technical review is being completed.

\*Attainment date for primary TSP is December 31, 1982. Any non-attainment designation made under Section 107 of the CAA triggers Part D which in turn requires attainment by this date.



### U.S. ENVIRONMENTAL PROTECTION AGENCY



REGION X 1200 SIXTH AVENUE SEATTLE, WASHINGTON 98101

ATTN OF: M/S 625

## MAY 15 1979

Mr. John Kowalczyk Department of Environmental Quality P. O. Box 1760 Portland, OR 97207 Dear Mr. Kowalczyk:

The enclosed comments are being submitted pursuant to the agreement in Don Dubois' letter to Bill Young dated May 11, 1979.

#### Draft SIP

We acknowledge that our comments on your draft SIP revisions (Enclosure I) are not complete in all respects. They have not been reviewed and coordinated, but merely represent an accumulation of all input received from the reviews of your draft SIP. The issues addressed are not prioritized and thoroughly organized or indicative of possible conditions on approvability. There may even be conflicting or repetitious comments. Further, legal reviews for procedural and enforceable aspects have not been completed.

We apologize for this compromise in providing information per our May 11 agreement. Serious time constraints have prevented us from providing you with a comprehensive, well organized, prioritized set of comments at this time.

In recognition of the compromise in our submitted comments, I propose that members of both staffs discuss concerns you may have with these comments. As pointed out in my May 8 letter to you and Don Dubois' letter to Bill Young on May 11, the subjects of VOC rules, PSD, and new source review (NSR) were noted as problem areas. On May 14, we discussed in-depth our comments with your VOC rules and identified those discrepancies which could result in conditional approval. Similar discussions on PSD and NSR could be held if you wish.

#### Bill Young Requests from April 6 Letter

Our official response to questions raised on the Clean Air Act is the same as that provided in my May 8 letter to you. A copy that response is enclosed (Enclosure 2).

The proposal to approve an 18-month extension (until July 1, 1980) for submission of a secondary standard TSP attainment plan for Medford was submitted to the Federal Register on May 7.

#### Action Items from March 2 Letter

As identified in Don Dubois' April 16 letter to Bill Young, nine separate requests were identified in the subject letter. The enclosed table (Enclosure 3) provides an update on the status of those actions.

Please feel free to call me if you wish to discuss these subjects further.

Sincerely,

Michael J. Schultz SIP Coordinator

Enclosures (3)

cc: Tom Wilson Norm Edmisten



# Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

#### MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Response to Comments in Hearings Officer's Report of VOC Rule Hearing, May 8, 1979

Introduction This report responds to three sets of comments:

Cl through Cl8:	comments	from	Comme	erce	and	Industry
NCl through NCll:	comments	from	EPA,	Nort	:h Ca	irolina
Sl through S79:	comments	from	EPA,	Seat	tle	

The responses are given in the order that the comments were written up and assembled in the Hearing Officer's Report.

<u>C1</u> Dr. Walther requests no rules or he desires later immediate changes where EPA's rules and laws are being litigated.

Response Hopefully the Department's rules and Oregon law can stand on their own merits. Where our rules and laws are based on EPA's, then we will change them when EPA changes. Observe Oregon's treatment of the ozone standard change, from .08 ppm to .12 ppm.

C2 Dr. Walther proposes a "Bubble Concept" rule as follows:

Plantwide emission reduction plans are acceptable if the plant owner demonstrates to the Department that any emissions in excess of those allowed for a given facility (i.e., coating line) would be compensated elsewhere in the source (i.e., plant).

<u>Response</u> This rule does not address all of EPA's requirements published in the federal register, January 18, 1979, pages 3740 through 3744. See Issue 10 in the memorandum to which this report is attached.



<u>C3</u> Mr. Cornitius and Mr. Winkelman gave cost estimates and related information on VOC capture from gasoline marketing.

<u>Response</u> The rules, both the pure numeric and the version with equipment specifications, were changed to meet the concerns raised by this testimony.

<u>C4</u> Mr. Hawkins also gave testimony against the 12/15/78 and March 1979 VOC rules concerning gasoline marketing. See Response to C3 above, except that he raised additional concerns for safety and for VOC emissions at Crescent City, CA.

<u>Safety</u> A mixture of gasoline vapor and air can be classified into three categories, depending upon the ratio of these two constituents:

- A. Below the lower explosive level; if set off by a spark the mixture alone would not support combustion as it is short of fuel.
- B. Between the lower explosive level and the upper explosive level; if set off by a spark, this mixture burns so fast it is called explosive. The ratio of fuel to oxygen is correct for combustion.
- C. Above the upper explosive level; if set off by a spark, the mixture burns slowly and poorly as it is short of oxygen and fuel rich (inside the tank).

Mr. Hawkins and the Department do not know whether gasoline delivery vessels, now or later carrying the collected vapors, are in the safe category A and C above, or whether they are in the unsafe category B. On May 2, 1979, Peter B. Bosserman strongly urged the Medford gasoline industry to investigate this situation, as we do not know if the VOC rules will take their trucks from safe to unsafe (A. to B.), or from unsafe to safe (B. to C.). Peter B. Bosserman suspects both will happen but the Department has no available resources to investigate this safety problem.

#### Vapors to Crescent City or Eugene

The export of vapors from the Medford-Ashland AQMA to terminals at Crescent City, Eugene, or Coos Bay is going to happen. Those areas attain the .12 ppm ozone standard and will not have to capture VOC's being expelled when transport trucks returning from Medford are filled, according to rules and laws. Since the Department has no control over Crescent City rules and laws, we hope Mr. Hawkins will be informed should that terminal be faced with excessive costs from proposed VOC rules.

<u>C5, C6, and C7</u> Mr. Hudson, Mr. Carter, and Mr. Hays gave more information on gasoline marketing. See response to C3. Same.
<u>C8</u> Mr. Mick noted that smog is not just photochemical oxidant in the introduction to the rules. Subsequently, the Secretary-of-State's staff contacted Mr. Bosserman and indicated that the introduction would be assigned an OAR number in-spite-of Mr. Bosserman's objections.

1

- 3 -

<u>Response</u> This and several other small corrections were made the rule's introduction, sacrificing clarity for legal precision.

IN-

<u>C9</u> Mr. Mick asked that intermittent VOC control be allowed from April to October, according to the ambient ozone readings.

Response The Department was unsuccessful in even adding "and other VOC control equipment" to the exemption given "natural gas-fired afterburners" in 340-22-105. EPA disapproved this type of intermittent control, and appeared firmly against any kind, in their review of the VOC rules in the fall of 1978.

The Department would presently oppose this type of intermittent control because the Department does not presently have sufficient man-power or monitoring equipment to support the use of intermittent controls, but still provide a margin of safety between the .12 ppm standard and some level deemed okay, such as .06 ppm where VOC controls could be turned off.

<u>Cl0</u> Mr. Dougherty expressed several concerns over the rules concerning gasoline marketing, 340-22-110 to -120.

<u>Response</u> Rules -110 and -115 were completely re-written to respond to his and others concerns.

<u>Cll</u> Mr. Felker, Mr. Jones, Mr. Angst, Mr. Monroe, Mr. Solomon, and Mr. Fogelquist all gave facts and figures supporting alternative B of issue 1 in the memorandum to which this report is attached.

Response Alternative B is recommended.

<u>C12</u> Mr. Chaddock urged the Department to pass a "bubble concept" rule since it saves industry so much money.

Response See response to C2. Same.

<u>C13</u> Mr. Monroe deplored the loss of the vapor captured by rules -110 to -120, besides his other remarks (see C11).

<u>Response</u> Some vapor will be lost outside the areas affected by the VOC rules where the ozone produced will be tolerable. But the gasoline vapors captured inside the Portland AQMA will be recovered there and turned back into gasoline.

<u>Cl4</u> Mr. Lassiter of Lane Regional Air Pollution Authority and Jack Delay, chairman of the Eugene-Springfield AQMA Citizens Advisory Committee,

recommend exempting the Eugene area from the VOC rules.

- 4 -

<u>Response</u> Agreed. See issue 7 in the memorandum to which this report is attached.

<u>C15</u> Mr. Hopkins and Mr. Ganterbein, representing the Medford Chamber of Commerce, support the exemption of methyl chloroform and methylene chloride.

<u>Response</u> Agreed for methyl chloroform. See issue 4 in the memorandum to which this report is attached for methylene chloride.

<u>C16</u> Mr. Hopkins and Mr. Gantenbein recommend delay on imposing the gasoline marketing rules in Medford because:

1. At 6% of total VOC, they are too small a source.

2. There is too much uncertainty over their causing the oxidant problem. DEQ should wait until it is proved that Medford gasoline vapors cause the ozone being measured near Medford.

<u>Response</u> The technology available to control vapors from gasoline marketing is the best developed and the most cost effective for all sources of VOC. These vapors at 6% are no smaller than other sources being controlled by these rules or to be controlled in the future.

There is no uncertainty at DEQ and at EPA over imposing reasonably available control technology on gasoline marketing to reduce ozone readings in Medford. This is considered technology proven to get results, as it did in the Los Angeles area. To wait or delay is to needlessly expose Medford residents to higher levels of ozone and other oxidants.

 $\underline{C17}$  Mr. Solomon requested deletion of one of the two standards, 90% or 80 mg/liter, being imposed on gasoline terminals in the March 1979 version of 340-22-120.

Response Agreed and done. Only 80 mg/liter remains in rule -120.

<u>C18</u> Mr. Spencer and Dr. Farber of Dow Chemical, and B. J. Reilly of Dupont, besides Mr. Gantenbein, request exemption of methylene chloride and methyl chloroform from the VOC rules in 340-22-100(1).

Mr. Schlossberg of Detrex Chemical Industries strongly opposes the exemptions because these solvents may be toxic, carcinogenic, etc., and may degrade the earth's ozone layer. EPA reviewers also oppose, but some say they will approve the rules with them exempted. See comments NC2 and Sl following, and issue 4 of the memorandum to which this report is attached. <u>Response</u> Both solvents are toxic, but not in the concentrations released outside the plants where they are used. Their other bad qualities are contested by Dow. Therefore methyl chloroform is proposed for exemption, and methylene chloride may be if EPA Region X does not produce evidence of its photochemical reactivity by June 8, 1979.

#### EPA Comments

- 5 -

The federal Environmental Protection Agency (EPA) offered several sets of comments. The first set were mostly verbal and were received in an all day conference, May 2, 1979, which covered other topics also; Michael J. Shultz represented EPA at this conference, from the Department John F. Kowalczyk and Peter B. Bosserman. The second set of sixty-nine comments were written from Donald P. Dubois of EPA and received May 14, 1979 by the Department. The record for the May 8 hearing on these VOC rules closed May 8. EPA's request, that all the comments and its May 14 letter "be made a part of the record of your hearings," is hereby honored. The third set of comments included the first two and was received May 16, 1979 by the Department. Another set of comments may be sent from EPA's legal staff on "procedural and enforceable aspects" and from EPA's Support & Special Projects Section on "design values and the ozone modeling." These comments will be made part of the hearings record as EPA's Dubois, Shultz, Hofer all explained their inability to respond fully in the time since the S.I.P. was sent to them April 10, 1979.

EPA summarizes their comments as follows:

"Numerous technical deficiencies and potential problems have been identified with the VOC rules which would prevent EPA approval. Problems primarily revolve around a lack of enforceability, specificity, and applicability."

Mr. R. M. Schell of EPA's North Carolina headquarters made the following comment in his May 4, 1979 letter to EPA's Seattle office:

<u>NC 1</u> Emissions from bulk plants and degreasers are not listed for Portland and Salem. Emissions from "other solvent uses" or cutback asphalts are not listed for Salem.

Response These emissions were estimated and added.

Mr. W. Polglase and Mr. J. Calcagni of EPA's North Carolina headquarters made the following ten comments in their May 4, 1979 letter to EPA's Seattle office:

<u>NC 2</u> EPA notes the Department's exclusion of methylene chloride from the definition of VOC's in 340-22-100(1), making it exempt from controlling regulations. They repeat charges by Detrex Chemical Co. that methylene chloride has "been implicated or identified as being carcinogenic, mutagenic, or teratogenic and, as such, are not recommended for exclusion

from SIP regulations." But they write: "The exemption would, however, be approved but the <u>Federal Register</u> notice must cite the exemption and forewarn of possible adverse health effects and possible future regulation under Section 111(d)" (of the Clean Air Act).

<u>Response</u> See the summarized Departmental response in Issue 4 of the Agenda Item Memorandum and also comment S1 of this report.

 $\underline{NC 3}$  EPA requests that the state demonstrate that the ozone standard is not threatened during the 5 month winter period.

<u>Response</u> This was done by the Department's November 22, 1978 letter to EPA's M. J. Schultz, and subsequent correspondence.

NC 4 EPA requests test procedures for OAR 340-22-120 and 140.

<u>Response</u> The Department added references to the test procedures on file at the Department's Portland Office in both -120 and -140 rules in response to this comment and comments S2 and S9.

 $\underline{NC 5}$  EPA discusses safety values; their regulation and emission testing. See comment S18 which also covers this topic.

Response The Department added to the -115(1)(b) a sentence which responds to this comment NC5.

NC 6 EPA was confused by OAR 340-22-115.

Response They were not alone. It has been completely re-written.

NC 7 EPA states that the exemption of gasoline storage tanks, serviced by exempt bulk plants, should only apply to those storage tanks that are solely serviced by exempt bulk plants.

Response EPA implys that accounts serviced by bulk plants may have a second source of supply. The re-written rule covers EPA's concern: 340-22-115(1)(b) clearly applies to each individual tank.

<u>NC 8</u> EPA requests emission inventory data on use of cutback asphalt. EPA wants to know "what magnitude of emissions" the exemptions of 340-22-125 represent. They want to know if the exemptions are less than five precent of the whole category's emissions.

<u>Response</u> The Department desires to defend the exemptions from the standpoint of what is the lowest achievable emission rate and what is reasonable available control technology. While the Department has some emission inventory data on present use of all cutback asphalts, the amount emitted from the uses exempted is not known with any accuracy.

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Testimony and information received, mostly verbal, from the local office of the Asphalt Institute, from the Asphalt Pavement Association of Oregon, and from J. A. Broad and F. A. Skirvin of the Department staff, indicate that only irreplaceable uses of cutback asphalt were exempted. As an example, the wet, cold weather in Portland, Salem, and Medford dictates that cutback asphalts be used for patching mixes. Since emulsified asphalt is cheaper, there is sufficient incentive to use it whenever possible; but its water base makes it sufficiently incompatible with the western Oregon climate, so that, in some cases, cutback asphalt must be used.

 $\underline{NC 9}$  This EPA comment is as follows but also see related comments S48 and S49.

"This regulation in addition to the above exemption, as well as a seasonal exemption, allows the use of cutback asphalt when the temperature forecast during the 24-hour period following application is below  $10^{\circ}$  C ( $50^{\circ}$  F). The State should document how this regulation will be enforced, whose forecast and thermometer will be used, etc. The State should have in written form the procedures to be used. Seasonal exemptions are preferred over temperature exemptions because of ease of enforcement."

Response EPA requests the procedures by which 340-22-125, including its exemptions, will be enforced. The State of Oregon's procedures and policies for enforcing Oregon Administrative Rules are often not documented. The Department's 1/26/79 letter to the County engineers, etc., in charge of roads in Oregon, describes the Department's principal method of enforcing 340-22-125:

"The method for carrying out the rule is for altering specifications so that cutback asphalt will not be used. The Department requests the cooperation of government road departments and their contractors in carrying out this rule"

The Department added "National Weather Service" to rule 340-22-125(2)(c) to respond to part of the comment.

Violations of the ozone standard have never been recorded in Oregon when the outdoor temperature is below  $50^{\circ}$  F. On the contrary they are experienced in  $80^{\circ}$  F summer weather and above. The  $30^{\circ}$  temperature margin appears sufficient to the Department to allow the exemptions permitted by -125(2)(c).

<u>NC 10</u> This comment is very similar to comment S57. EPA comments: "This regulation exempts coating lines using less than 2000 gallons of coating per year or 10 gallons an hour. Unless the State clearly demonstrates attainment with this exemption, the State should document the exemption by showing the impact on emissions is less than five percent. (For guidance to application of the five percent rule, see Roger Strelow's memorandum to Regional Administrators dated December 9, 1976.)"

<u>Response</u> EPA requests emission inventory data on small coating operations exempted in 340-22-140. None exists. The Department knows of only a handful of large coating operations covered by this rule. Oregon collaborated with Washington State to invent an exemption point to exclude unknown, negligible source of VOC which perform coating operations.

As stated in the response to NC 1, EPA's 1978 survey, done by Pacific Environmental Services, was not adequate to quantify emissions from Surface Coating in Manufacturing in Portland.

If and when the Department identifies any small sources exempted by -140, the Department is confident that they will be less than five percent of two Portland sources (4,314 and 23 tons per year) covered by -140, and the one Medford source (4,200 tons per year). Finally, the exemption is being deleted. See Issue 6.

<u>NC 11</u> The last North Carolina comment is quoted verbatim: "The regulations include an emission limit of 4.7 lbs/gal (excluding water), calculated on a monthly average basis, for inert gas process paper coating. The State should document any unique characteristics of such facilities which would warrant a less stringent level of control than that required for other paper coating operations (2.9 lbs/gal excluding water). It would seem that any modification of the paper coating emission limit (2.9 lbs/gal, excluding water) should be made on a case-by-case basis where adequate technical justification exists, that it is not an achievable limit, and that the suggested limit is the maximum reasonable. We are also concerned with the use of a monthly average. Since ozone violations are essentially a short term phenomena rather than a long term phenomena, does this limit provide any practical control of a major emitting source? If not, does it serve any value as a generic regulatory provision or is it simply a regulation requiring no control?"

<u>Response</u> The first three sentences request documentation on the 4.7 lbs/gal limit in 340-22-140 for Inert Gas Process Paper Coating. Such documentation was mailed to EPA's Mr. Lepic of their Seattle Office on May 18, 1979, following several long distance phone calls with EPA. The documentation, provided to the Department in October 1978, shows how the 4.7 lb/gal rule, computed on a plant-site-basis, is 65 percent control, which is more stringent than EPA's 2.9 lb/gal rule, computed on a coating-line-basis for average solvents, which is 57 percent control.

The last three sentences raise concerns similar to comment S58. The 4.7 lb/gal rule is causing the affected plant to spend an estimated \$2,900,000 to reduce emissions 65 percent. Yet the remaining emissions are not amenable to hourly or daily monitoring and reporting. The 3-M Company has scheduled a May 30, 1979 meeting with EPA's Seattle office to explain the matter.

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The Department apologizes for not transmitting this data on the 4.7 rule, as only the 2.9 rule was sent to EPA on August 4, September 20, and December 8, 1978 for comment.

The Seattle EPA office, headquarters of EPA Region X, submitted 69 comments on May 14, 1979.

<u>S1</u> Delete methylene chloride from the list of VOC's exempt from the 340-22 rules unless "a complete demonstration must be made showing that it is not reactive with NO<sub>v</sub> in the presence of sunlight."

<u>Response</u> This is a reversal of comment NC 2, where, evidently, methylene chloride is conceded to be not reactive. All the testimony, including statements from EPA in North Carolina, has indicated that it is not reactive. The Seattle EPA office is well aware that Oregon has no research facilities for independently determining reactivity. The current source of reactivity data is research by EPA's Doctors Buffalini and Dimitriades in North Carolina.

EPA's Seattle office is checking with their headquarter on whether methylene chloride is photochemically reactive. The Department will play it safe and remove methylene chloride from the list of exempt compounds in 340-22-100(1). The Department may put it back on at the June 8, 1979 meeting if new evidence is provided.

<u>S2</u> EPA requests that the Department include the test procedures in the S.I.P., and submit them to EPA.

<u>Response</u> The Department respectfully declines to make the test procedures part of the S.I.P., but is forwarding them to EPA under separate cover. EPA policy and method of operation elevates test procedures to the status of rules with the force of law. Oregon does not, retaining flexibility and ease of change as mistakes in the test methods are discovered, peculiar field situations are encountered, etc. The Department's test methods are so well respected that Idaho adopted them intact, rather than develop their own or simply use EPA's which are difficult to change and not suitable to some sources common to the Pacific Northwest.

 $\underline{S3}$  EPA requests the Department to include five step compliance schedules for each industrial category into rule 340-22-108.

<u>Response</u> As a compromise, packages of every VOC industrial compliance schedule will be forwarded to EPA for audit by October 1, 1979, after DEQ has approved them.

The Department has received, as examples, the following compliance schedules:

The schedules are on file at the Department and are available to EPA for audit at any time.

S4 EPA wants a better title for 340-22-110. Agreed and done.

S5 EPA wants the -110 rule to cover emissions from tanks filled from pipelines, ships, rail cars, or barges.

Response The -115 rule was rewritten to be applicable to a Medford bulk plant filled from railroad tank cars. The Department knows of no service stations filled from pipelines, etc.

S6 EPA wants submerged fill defined. Agreed and done.

<u>S7</u> EPA wants equipment specifications in the rule besides the 90 percent standard. See also comments S8, S16, S40, S42. See Issue 2 in the agenda memorandum.

Response The Department desires the rules it administers to either be built on a numeric standard, like the 80 mg/l in 340-22-120, or an equipment specification standard like 340-22-146 because no numeric standard is practicable. The Department believes that all the extra equipment specifications demanded by EPA in these comments are redundent to the numeric standard. If any of these equipment specifications are not observed during the test to the numeric standard, the numeric standard will be violated. The problem with equipment specifications is that they do not allow innovative technology. The obsolete 3 chamber incinerator rules are a good example of this. The equipment specification standards are extremely lengthy, difficult to administer, labor intensive, and are not favored by regulatory agencies, except, apparently, by EPA's Region X. See also response to S34. However, because the Department wants EPA's approval of the SIP, a rule with all equipment specifications requested by EPA was drafted for consideration.

 $\underline{S8}$  EPA wants -110 to state that the vapor return hose be connected during gasoline transfer. See response to S7.

S9 EPA wants the test procedure cited for each rule.

<u>Response</u> See response to NC 4 and S2. As a compromise the Department has added cross references to the test procedures for -110, -115, -120, and 140. See Issue five in memorandum.

S10 EPA suggests floating roofs be added in -110. Declined.

Sll EPA wants -110 clarified. Agreed. Rule re-written.

S12 EPA wants LAER for 100 ton/yr sources in -110.

<u>Response</u> Accomplished by 340-22-104 and 340-20-192. There are no sources regulated by -110 which are over 100 tons per year.

<u>S13</u> EPA wants vapor balance by January 1980 for tanks in the -110 rule. See also comment S33.

Response The Department discussed the reason for the uniform compliance date of April 1, 1981 with Schultz and Lepic of EPA, Seattle, on May 14, 1979. The uniform April 1, 1981 date in -110, -115, and -120 was discussed. Vapor balance is a system of conveying gasoline vapors to the terminals for recapture. Compliance by January 1980 has no effect unless the trucks capture the vapor, transport it to the terminal, etc. Therefore the earlier suggested dates were not used. It would be very impractical to change now anyway.

S14 EPA wants terms defined.

<u>Response</u> Agreed for bulk gasoline plants and done. EPA definition of stations is rejected as it neither includes tanks at marinas nor at airports.

S15 EPA wants -115 title changed. Agreed. Done.

S16 EPA wants equipment specifications in -115.

Response Refused. See response to S7.

S17 EPA wants test procedures cited in -115. Done. See response to S2.

S18 EPA wants limit on safety valves. Agreed. Done. See -115(1).

S19 EPA wants universal submerged fill. Agreed. Done. See -115.

S20 EPA wants clarification of -115(2)(a). Section deleted in re-write.

S21 EPA wants clarification of -115(2)(c). Section deleted in re-write.

S22 EPA wants delivery vessel defined. Agreed. Done in -100(9).

<u>S23</u> EPA wants clarification of -115(3). Rewritten.

S24 EPA wants clarification of -115(4). Rewritten.

<u>S25</u> EPA wants loading facilities defined in -115(4). Rewritten out of rule.

<u>S26</u> EPA wants permanent submerged fill pipe in -115(4).

<u>Response</u> Refused. Discussed in conference call 5/16/79 how some tanks are bottom filled and others submerged fill by an extension on the gas nozzle spout. Rewrite of rule requires 100% submerged filling. Compromise agreed to by EPA.

<u>S27</u> EPA wants definitions and rewording in -115(4). Agreed. See re-write.

S28 EPA wants clarification in -115(4). See re-write of rule.

S29 EPA wants clarification in -115(4) paragraph 4.

Response Agreed. Rule re-written.

S30 Same as S29 for -115(4) paragraph 5. Same response.

<u>S31</u> EPA wants clarification for -115(4) paragraph 6. Agreed. See rewrite.

S32 EPA wants LAER for new bulk plants in -115(5)(a).

<u>Response</u> See response to S12. There are no bulk plants exceeding 100 tons/yr.

S33 EPA wants -115 done by July 1980.

Response Refused. See S13. Same.

<u>S34</u> EPA wants -110, -115, -120 to be cancelled and to substitute attached EPA draft regulations.

<u>Response</u> Oregon VOC rules were adopted before EPA draft regulations were available. Oregon rules are more understandable (as rewritten), more concise, and written in the style of other OAR. See if rewritten rules don't satisfy EPA's concerns of the rules being unwieldy and difficult to understand. However to receive SIP approval, the Department is drafting new rules like EPA's for consideration.

S35 EPA description of S36 to S44. No Comment.

<u>S36</u> EPA wants 76,000 liters, not 77,500 in -120. Agreed. Done.

S37 EPA wants test procedure cited in -120. Agreed. See S9. Same.

S38 EPA wants clarification in -120. Agreed. Done.

S39 EPA wants clarification in -120(a). Sections deleted.

<u>S40</u> EPA wants equipment specifications in -120.

Response See S7 response. Same.

S41 to S44 Paragraphs -120(a)(b)(c) deleted for clarification.

S45 EPA wants cutback asphalts defined in -125. Agreed. Done.

S46 EPA found typing error. Corrected.

S47 EPA wants -125(2)(b) to be for "slow curing" only.

<u>Response</u> Medium Curing inserted instead. Slow curing is not used in western Oregon as patching mix, as it fails to cure in our colder climate. Confirming letter received 5/18 from Asphalt Institute. Concurred to by EPA Region X in a conference call, May 25, 1979.

S48 EPA wants -125(2)(c) more specific.

<u>Response</u> DEQ will add "National Weather Service" before "forecast" DEQ explained that a  $30^{\circ}$  margin between  $50^{\circ}$  F (below which cutback is allowed) and  $80^{\circ}$  F where ozone surpasses standard is a sufficient margin. Pavers can't alter work as actual temperature is recorded; pavers have to plan ahead to do work. See also NC 8 and NC 9 with responses.

<u>S49</u> EPA wants specific temperature monitoring and recording requirements in the rule -125(2).

<u>Response</u> Rule -125 is promulgated and enforced through engineering specifications. Reports from contractors are too difficult to obtain, and little man-power is available to obtain them or read them. Cutback asphalt is being replaced by emulsified because of cost; reduction of VOC's from wide use of emulsified and slight use of cutback will happen because of specifications following -125 rule and cost advantage of emulsified asphalt. Exceptions where cutback must be used are necessary in wet western Oregon and no amount of reporting will alter these remaining uses. See also response to <u>NC9</u>.

S50 and S51 EPA wants changes in -130, concerning refineries.

<u>Response</u> There are no refineries (other than a asphalt refinery) in Oregon. DEQ requests EPA to send us the exact language of an approvable rule when Washington State (or others) have it approved by EPA. DEQ will then amend the -130 rule to suit EPA. Agreed to S50 now; deletion made of 340-22-130(3)(c).

S52 EPA wants effective date of July, 1980, or January, 1981, in -135.

<u>Response</u> Rule only affects five tanks in White City. Owners asked for July, 1981, and got it. Department saw that it was as expeditiously as practiable. The Portland terminals, the other place where this rule applies, are already covered by a 1972 rule, OAR 340-28-050, so are not affected by -135.

S53 and S54 EPA wants vapor pressure better defined in -135.

Response Agreed. Done.

S55 and S56 EPA notes incorrectly expressed references. Agreed. Done.

S57 EPA wants exemption justified in -140. See Issue 6 and NC 10.

S58 EPA wants test and record-keeping procedures cited.

<u>Response</u> Test procedures cited. See second half of response to NC 11. Same.

S59 EPA notes that numbering of -145, -146, -147 is inconsistent.

<u>Response</u> Secretary of State's office will correct numbering when the rule is codified per phone call 5/18/79.

S60 EPA wants 6 terms of -145 defined.

<u>Response</u> Defined freeboard ratio as suggested. The other 5 items are underfined in the guideline document and are quite clear in their meaning.

<u>S61</u> EPA wants 10 square feet exemption in -146(a) justified.

<u>Response</u> The 10 square feet size exemption point was a distortion of the second to the last sentences on page iv of the Preface to the guideline document EPA-450/2-77-022. That "open top vapor degreasers smaller than 1 m<sup>2</sup> of open area should be exempt from the application of refrigerated chillers or carbon adsorbers" is followed in 340-22-146(a) (ii) where a freeboard chiller is one of three options. Therefore the exemption in 340-22-146(a) is deleted as shows in the attached proposed rule.

S62 EPA wants -146(a)(i) to include cover operation.

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Response Agreed. Done.

S63 EPA wants 3 safety switches added to -146(a)(i). Agreed. Done.

S64 Same as S60.

 $\underline{S65}$  EPA wants waste solvent disposal sentence in -145 repeated in -146 and -147. Agreed. Done.

S66 Typist skipped a number. No comment needed.

S67 EPA wants ventilation addressed in -146. Agreed. See -146(f) added.

S68 EPA wants definitions at beginning. Agreed. Done.

The Seattle EPA office submitted 10 more comments on May 16, 1979 from George C. Hofer's section. Comments on the VOC rules were included with comments on other portions of the S.I.P. When Hofer noted "Action Required," he explained that it was an important matter. When Hofer noted "Recommendation," it was more of a suggestion.

<u>S69</u> (Hofer 23) EPA required petroleum refineries, petroleum storage, and degreasing operations, or zeros if applicable, to be listed in the Portland VOC emission inventory, Appendix  $4.3-1A_r-1B_r$ .

<u>Response</u> The Department will meet this request but only as follows. There are no petroleum refineries in Oregon. The one asphalt plant makes asphalt out of crude oil, then ships the remainder to California refineries. Its emissions are listed under another industrial category. The petroleum storage is also listed there. The degreasing operations were estimated 5-18-79 from data gathered on that day, and added as requested. The Department desires not to list zeros but use blanks to indicate that we have not found any of these categories in Oregon or we interpret the emissions as better listed in another category.

<u>S70</u> (Hofer 33) EPA required 340-22-104 be listed in the list of applicable rules in Section 4.5.3.2, paragraph 3.

Response Refused. 340-22-104 was adopted on December 15, 1978. After 340-20-190 to -195 is adopted on June 8, 1979, rule 340-22-104 becomes redundant and will be deleted. Therefore we did not list it in Section 4.5.3.2, paragraph 3.

S71 (Hofer 36) EPA recommends a step change in Figure 4.5.5-1.

<u>Response</u> A step change could imply more accuracy than is warranted. The cutback asphalt rule became effective April 1, 1979. The degreaser rules become effective April 1, 1980. The emission reduction from these rules is only an estimate. The major overall reduction from the substitution of new automobiles for old is continuous from about 1970.  $\underline{S72}$  (Hofer 37) EPA recommends that Oregon explain the basis for the VOC emission inventory and reference the pertinent studies.

Response The basis for the VOC emission inventory is the same basis as the whole emission inventory. Pertinent studies are the PES surveys, the CTG documents, AP-42, the annual reports received from major industries, and various interoffice memorandums including some of ten pages and more. An extensive and authoritative explanation could not be provided before the S.I.P.'s scheduled submittal date of July 1, 1979 and would divert the Department's manpower from higher priority tasks.

<u>S73</u> (Hofer 38) EPA required that Oregon explain the basis for the Medford VOC emission inventory and reference the pertinent studies. EPA noted changes from their NEDS inventory and from the May, 1977 PES Survey.

<u>Response</u> Same as response to S75. The Department suggests a phone call from the EPA reviewer to Dennis Belsky (229-6446) of the Department who did the Medford emission inventory. Belsky was formerly a DEQ field engineer in Medford. He recognized errors (or had a professional disagreement with the computations) in the PES survey and in our own offical Emission Inventory which makes inputs to NEDS.

S74 (Hofer 39) Same as Hofer 36 but for Section 4.8.5.1.

Response Same as response to S74.

<u>S75</u> (Hofer 40) EPA recommends that the projected VOC emissions be added as another line on Figure 4.8.5.1.

Response Agreed. Done.

<u>S76</u> (Hofer 49) ACTION REQUIRED: Clarify the SIP regarding the proposed increase in emissions at 3-M to include copies of applicable permits, etc. Indicate clearly wheather actual or allowable emissions are being used throughout the SIP, and if actual, discuss the effects that allowable increases in emissions would have on the attainment strategies.

<u>Response</u> See responses to NC 11. The data sent to EPA's Ken Lepic on May, 18, will confirm the situation commented on by S79 (Hofer 49). A perusal of of Air Contaminant Discharge Permit 15-0029 will also reveal no production limit or plant site emission limit on 3-M VOC emissions. When rule 340-20-196 is adopted June 8, 1979, it will add another regulatory tool to help the Department impose on 3-M Company a plant site emission limit that is consistent with the SIP and meets the limitations of the air shed.

Without this firm VOC emission limitation on 3-M Company, EPA can appreciate that the S.I.P. Strategy is speculation for the Medford oxidant problem.

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In defense of 3-M Company, over half their emissions are acetone, which is low in photochemical reactivity. They are rightly concerned about spending millions of dollars and seeing little reduction in the ozone violations.

<u>Conclusion</u> 3-M is unfinished business and the Department appreciates EPA's understanding and support.

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P. B. Bosserman:tf (229-6278)
May 30, 1979
A2354.1:F29

## General Emission Standards for Volatile Organic Compounds

These rules regulate sources of VOC which contribute to the formation of photochemical oxidant, [more-commonly-known-as-smog.] mainly ozone.

Since oxidant standards are not violated in Oregon from November through March (because of insufficient solar energy), these rules allow certain control devices to lay idle during the winter months. Since much of the state is considered in attainment with <code>[exident]</code> ozone standards, sources in "clean" areas are exempted from these rules.

Sources regulated by these rules are:

- New sources over 100 tons of VOC per year
- Gasoline Stations, underground tank filling
  - (customer vehicle tank filling to be regulated later)
- Bulk Gasoline Plants and Delivery Vessels
- Bulk Gasoline Terminal Loading
- Cutback Asphalt
- Petroleum Refineries
- [Petroleum ] VOC Liquid Storage
- Surface Coating including paper coating
- Degreasers
- Asphaltic and Coal Tar Pitch in Roofing

## Definitions

340-22-100 As used in these regulations, unless otherwise required by context:

- (1) "Volatile Organic Compound," (VOC), means any compound of carbon that has a vapor pressure greater than 0.1 mm of Hg at standard conditions (temperature 20°C, pressure 760 mm of Hg). Excluded from the category of Volatile Organic Compound are carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and those compounds which the U.S. Environmental Protection Agency classifies as being of negligible photochemical reactivity which are methane, ethane, <u>methyl chloroform</u>, and trichlorotrifluoroethane.
- (2) "Source" means any structure, building, facility, equipment installation, or operation (or combination thereof) which is located on one or more contiguous or adjacent properties, which is owned or operated by the same person (or by persons under common control), and which emits any VOC. "Source" does not include VOC pollution control equipment.
- (3) "Modified" means any physical change in, change in the method of operation of, or addition to a stationary source which increases the potential emission rate of any VOC regulated (including any not

previously emitted and taking into account all accumulated increases in potential emissions occurring at the source since regulations were adopted under this section, or since the time of the last construction approval issued for the source pursuant to such regulations approved under this section, whichever time is more recent, regardless of any emission reductions achieved elsewhere in the source).

- (i) A physical change shall not include routine maintenance, repair and replacement, unless there is an increase in emission.
- (ii) A change in the method of operation, unless previously limited by enforceable permit conditions, shall not include:
- (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 by reason of an order in effect under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), or by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act;
- (d) Use of an alternative fuel or raw material, if prior to January 6, 1975, the source was capable of accommodating such fuel or material, or
- (e) Use of an alternative fuel by reason of any order or rule under section 125 of the Federal Clean Air Act, 1977;
- (f) Change in ownership of the source.
- (4) "Potential to emit" means the capability at maximum capacity to emit a pollutant in the absence of air pollution control equipment. "Air pollution control equipment" includes control equipment which is not, aside from air pollution control laws and regulations, vital to production of the normal product of the source or to its normal operation. Annual potential shall be based on the maximum annual rated capability of the source, unless the source is subject to enforceable permit conditions which limit annual hours of operation. Enforceable permit conditions on the type or amount of materials combusted or processed may be used in determining the potential emission rate of a source.
- (5) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4.0 pounds [of] or greater which is used to fuel internal combustion engines.
- (6) "Submerged fill" means the filling of a delivery vessel or stationary tank through a pipe or hose whose discharge opening extends to within

<u>6 inches of the bottom or is entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid.</u>

- (7) "Bulk gasoline plant" means a gasoline storage and distribution facility which receives gasoline from bulk terminals by railroad car or trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations.
- (8) "Bulk gasoline terminal" means a gasoline storage facility which receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck.
- (9) "Delivery vessel" means any tank truck or trailer used for the transport of gasoline from sources of supply to stationary storage tanks of gasoline dispensing facilities and the attached vapor recovery system.
- (10) "Cutback asphalt" means a mixture of a base asphalt with a solvent such as gasoline, naphtha, or kerosene. Cutback asphalts can be rapid, medium, or slow curing (known as RC, MC, SC).
- (11) "Freeboard ratio" means the freeboard height divided by the width (not length) of the degreaser's air/solvent area.
- (12) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle, boat, or airplane gasoline tanks from stationary storage tanks.
- (13) "Operator" means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.
- (14) "Owner" means any person who has legal or equitable title to the gasoline storage tank at a facility.
- (15) "Splash filling" means the filling of a delivery vessel or stationary storage tank through a pipe or hose whose discharge opening is above the surface level of the liquid ;in the tank being filled.
- (16) "Vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.

## Lowest Achievable Emission Rate

OAR 340-22-104 in areas where these rules for VOC are applicable, all new or modified sources, with potential volatile organic compound emissions in excess of 90,720 kilograms (100 tons) per year, shall meet the Lowest Achievable Emission Rate (LAER).

Lowest Achievable Emission Rate or LAER means, [for-any-source,-that-rate of-emissions-which-reflects-the-most-stringent-emission-limitation-which is-achieved-by-such-class-or-category-of-source,-that-rate-of-emissions which-reflects-the-most-stringent-emission-limitation-which-is-achieved by-such-class-or-category-of-source-taking-into-consideration-the-pollutant which-must-be-controlled.--In-no-event-shall-the-proposed-new-or-modified source-emit-any-pollution-in-excess-of-the-amount-allowable-under applicable-new-source-performance-standards] the rate of emissions which reflects

- (A) the most stringent emission limitation which is contained in the implementation plan of any State for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable, or not maintainable for the proposed source of
- (B) the most stringent emission limitation which is achieved and maintained in practice by such class or category of source, whichever is more stringent.

In no event shall the application of LAER allow a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable new source standards of performance (OAR 340-25-525).

## Exemptions

OAR 340-22-105 Natural gas-fired afterburners installed for the purpose of complying with these rules shall be operated during the months of April, May, June, July, August, September and October. During other months, the afterburners may be turned off with prior written Departmental approval, provided that the operation of such devices is not required for purposes of occupational health or safety, or for the control of toxic substances, malodors, or other regulated pollutants, or for complying with visual air contaminant limitations.

OAR 340-22-106 Sources are exempted from the General Emission Standards for Volatile Organic Compounds if they are outside the following areas:

- 1) Portland-Vancouver Air Quality Maintenance Area
- 2) Medford-Ashland Air Quality Maintenance Area
- 3)--Eugene-Springfield-Air-Quality-Maintenance-Area
- 3) 4) Salem Gity-Limits-as-of-January-1,-1979 Area Transportation Study boundary

#### Testing

340-22-107 Construction approvals and proof of compliance will be based on Departmental evaluation of the source and controls. Applicants are encouraged to submit designs approved by the California Resources Board, the Bay Area Air Pollution Control District, the South Coast Air Quality Management District, and the San Diego County Air Pollution Control District, where VOC control equipment has been developed. Certification and Test Procedures are on file with the Department and are partly the certification and test procedures used by the California Air Resources Board as of August [8] 9, 1978.

<u>Compliance Schedules</u> 340-22-108 The person responsible for an existing emission source subject to 340-22-100 through 340-22-150 shall proceed promptly with a program to comply as soon as practicable with these rules. A proposed program and implementation plan including increments of progress shall be submitted to the Department for review no later than May 1, 1979, for each emission source required to comply with VOC rules adopted by the <u>Commission on December 15</u>, 1978 and for sources required to comply with the VOC rules amended by the Commission on June 8, 1979, shall be submitted no later than October 1, 1979. Compliance shall be demonstrated no later than the date specified in the individual sections of these rules. The Department shall within 45 days of receipt of a complete proposed program and implementation plan, complete an evaluation and advise the applicant of its approval or other findings.

# REWRITTEN; SEE FOLLOWING RULES 340-22-110 TO 340-22-122

## Transfer of Gasoline to Small Storage Tanks

340-	2-110	0	annuter the second s		
(1)		Ape	erson shall not transfer or permit the transfer of gasoline		
		fro	a any tank truck or trailer into any stationary storage		
		CON	container is equipped with a permanent submerged fill pipe		
		and	unless 90 percent by weight of the gasoline vapous displaced		
		dur	ng the filling of the stationary storage container are		
		pre	Anted from being released to the atmosphere.		
	(5)	The	providence of this Bulo shall not apply to		
	(5)	1116	provisions of this kure sharr not appry con-		
		(A)	The transfer of gasoline into any starionary storage		
			container having a capacity of 2000 gellons or less which		
			was installed prior to January 1, 1979, if such container		
			January 1, 1980.		
	•				
		(B)	The transfer of gasoline into any stationary storage		
			emissions at least as effectively as required by this		
			section.		
(2)	արերը հե				
(2)	) The owner, operator, or builder of any stationary storage contain which is subject to this Pule which is installed or construct				
	after	: Jar	nuary 1, 1979, shall comply with the provisions of this Rule		
	at th	ne ti	me of installation.		
(2)	////				
(3)	subje	wner oct t	or operator of any existing stationary storage container		
	Rule	by P	April 1, 1981		
340-2	2-111 	. Re	served for development in 1979 of rules to control VOC		
ents	TOUR	LION			
Trans	sfer d	of Ga	asoline at Bulk Storage Facilities		
240-1	00-116				
(1)	A per	, son.	anall not load gasoline into any truck cargo mank, or		
•	trail	er	from any loading facility unless 90 percent by weight of		
	the g	la sol	ine vapors displaced during the filling of the delivery		
	vehi	e's	are prevented from being released to the atmosphere.		
(2)	Lordi	r .ng s	shall be accomplished in such a manner that displaced mapor		

and air will be vented only to the vapor control system. Measures shall be taken to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.

## REWRITTEN; SEE FOLLOWING RULES 340-22-110 TO 340-22-122

The vapor disposal portion of the vapor control system shall consist of one of the following:

An adsorber, condensation, displacement or combination system which processes vapors and recovers at least 90 percent by weight of the gasoline vapors and gases from the equipment being controlled.

- (b) A vapor handling system which directs vapors to a fuel gas system.
- (c) Other equipment of equal efficiency, provided each equipment is submitted to and approved by the Department.
- (3) No person shall store gasoline in or otherwise use or operate any gasoline delivery versel unless such vessel is designed and maintained to retain returned vapors.
- (4) Loading facilities loading 77,500 liters (20,000 gallons) or less per day on an annual daily everage shall be exempted from sections 1, 2 and 3 of this Rule (OAR 340 22-115).

A person shall not load gasoline into any delivery vessel from any loading facility exempted under this section unless such delivery vessel is loaded through a submerger fill pipe.

Delivery trucks being filled as these exempt bulk plants may not deliver to stationary tanks equipped with a VOC control system which requires capture by the delivery truck and disposal at a vapor recovery system.

- (5) (a) The owner or operator of any stationary storage container or gasoline loading facility which is subject to this Rule and which is installed or constructed after January 1, 1979, shall comply with the provisions of this Rule at the time of installation.
  - (b) The owner of operator of any gasoline loading facility subject to this Rule which is operating prior to January 1, 1979, shall comply with the provisions of this Rule by April 1, 1981.

#### Delivery Vessel Bading at Bulk Gasoline Terminals

340-22-120 After April 1, 1981, no person shall cause volatile organic compounds (MCC) to be emitted into the atmosphere in excess of 80 milligrams of VOC per liter of gasoline loaded from the operation of loading truck tanks, and truck trailers at bulk gasoline terminals with daily throughputs of greater than 77,500 liters (20,000 gallons) per day of gasoline.

## Small Gasoline Storage Tanks (Under 40,000 Gallons Capacity)

340-22-110

(1) No person may transfer or cause or allow the transfer of gasoline from any delivery vessel which was filled at a Bulk Gasoline Terminal into any stationary storage tank unless:

(a) The tank is filled by submerged fill.

(b) The displaced vapors from the tank are:

(i) Processed by a vapor control system that prevents release to the atmosphere of no less than 90 percent by weight of the vapors displaced.

(ii) Transferred to the delivery vessel by means of a vapor tight vapor balance system.

(iii) Processed by a system demonstrated to the satisfaction of the Department to be of equivalent effectiveness to (i) and (ii) above.

(c) The gauge well is equipped with a drop tube which extends to within six inches of the tank bottom.

(d) The tank is equipped with a system to ensure that the vapor return line will be connected during transfer. Compliance with this provision shall be by means of:

(i) A restriction on the vent line to reduce the orifice to .75 inches inside diameter.

(ii) A pressure-vacuum relief valve set to open at .5 psi or greater pressure and .25 psi or greater vacuum.

(iii) A system demonstrated to ensure that the vapor returnline will be connected during transfer which is equivalent to those in(i) and (ii) above and is approved by the Department.

(e) The delivery vessel is designed and maintained to be vapor tight at all times.

(2) Exemptions. This section will not apply to:

(a) Transfers made to storage tanks of gasoline dispensing facilities equipped with floating roofs or their equivalent.

(b) Stationary gasoline storage containers of less than 2,085 liters (550 gallons) capacity used exclusively for the fueling of implements of husbandry, provided the containers use submerged fill.

(c) Stationary gasoline storage tanks located at a gasoline dispensing facility that are filled by a delivery vessel which was filled at a bulk gasoline plant; provided that the storage tanks use submerged fill.

(3) The owner, operator, or builder of any stationary storage container subject to 340-22-110 shall comply by April 1, 1981.

(4) Compliance with 340-22-110(1)(b) shall be determined by verification of use of equipment identical to equipment most recently approved and listed for such use by the Department or by testing in accordance with Method 30 on file with the Department. This method may be revised by the Department for improvement based upon experience and new data. However, no revision shall apply to a compliance test schedule prior to the making of the revision, unless the owner concurs.

#### BULK GASOLINE PLANTS AND DELIVERY VESSELS

340-22-115

(1) No person shall transfer or allow the transfer of gasoline to or from a bulk gasoline plant unless:

(a) Each stationary storage tank is equipped with a submerged fill pipe or with a fill line whose discharge opening is flush with the bottom of the tank.

(b) The displaced vapors from filling each stationary gasoline storage tank are:

(i) Processed by a vapor control system that prevents release to the atmosphere of no less than 90 percent by weight of the vapors displaced; or

(ii) Transferred to the delivery vessel by means of a vapor tight balance system; or

(iii) Processed by a system demonstrated to the satisfaction of the Department to be of equivalent effectiveness to (i) and (ii) above.

(c) All connections or fittings to vapor lines, connecting pipes or hoses on the storage tank or loading or unloading delivery vessel are vapor tight and will automatically and immediately close when disconnected.

(d) Each stationary gasoline storage tank and delivery vessel is equipped with pressure and vacuum relief valves set to release at no less than 4.8 kPa (.7 psi).

(e) Each delivery vessel loaded or unloaded at a bulk gasoline plant is equipped with submerged filling.

(f) Each delivery vessel is unloaded in a manner that hatches are not opened at any time during loading or unloading except where necessary for the proper operation of the vapor recovery system.

(g) Gasoline is handled in a manner to prevent spillage, discharging into sewers, storage in open containers, or handled in any other manner that would result in evaporation.

(h) The vapor-laden delivery vessel is designed and maintained to be vapor tight at all times.

(2) The owner or operator of any bulk gasoline plant or any delivery vessel subject to 340-22-115 shall comply with the provisions of this rule by April 1, 1981.

(3) Compliance with 340-22-115(1)(b) shall be determined by verification of use of equipment identical to equipment most recently approved and listed for such use by the Department or by testing in accordance with Method 31 on file with the Department. This method may be revised by the Department for improvement based upon experience and new data. However, no revision shall apply to a compliance test scheduled prior to the making of the revision, unless the owner concurs.

(4) Compliance with 340-22-115(1)(h) shall be determined by verification of use of equipment identical to equipment most recently approved and listed for such use by the Department or by testing in accordance with Method 32 on file with the Department. This method may be revised by the Department for improvement based upon experience and new data. However, no revision shall apply to a compliance test scheduled prior to the making of the revision, unless the owner concurs.

## Bulk Gasoline Terminals

#### 340-22-120

After April 1, 1981, no person shall cause volatile organic compounds (VOC) to be emitted into the atmosphere in excess of 80 milligrams of VOC per liter of gasoline loaded from the operation of loading truck tanks, and truck trailers at bulk gasoline terminals with daily throughputs of greater than 76,000 liters (200,000 gallons) per day of gasoline. The daily throughputs are the annual throughput divided by 365 days.

#### 340-22-121

Compliance with 340-22-120 shall be determined by testing in accordance with Method 33 on file with the Department or by demonstration that similar equipment has passed similar testing. This method may be revised by the Department for improvement based upon experience and new data. However, no revision shall apply to a compliance test scheduled prior to the making of the revision, unless the owner or operator concurs. 340-22-122 Bulk Gasoline terminals shall comply with the following:

(1) All displaced vapors and gases during tank truck gasoline loading operations are vented only to the vapor control system.

(2) A means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.

(3) All loading and vapor lines are equipped with fittings which make vapor-tight connections and which close automatically and immediately when disconnected.

(4) Each vapor-laden delivery vessel is designed and operated to be vapor tight at all times.

(5) Gasoline is handled in a manner to prevent its being discarded in sewers or stored in open containers or handled in any manner that would result in evaporation.

(6) The vapor collection system is operated in a manner to prevent the pressure in the vapor collection system to exceed the tank truck or trailer pressure relief settings.

(7) No person may load any product (including fuel oil and kerosene) into any gasoline vapor-laden delivery vessel unless the transfer is in accordance with 340-22-120.

## Cutback Asphalt

340-22-125

- After April 1, 1979, all uses and applications of cutback asphalts are prohibited during the months of April, May, June, July, August, September, and October, except as provided for in 340-22-125(2).
- (2) The following uses and applications of cutback asphalts shall be allowed during all months provided the cutback or blending petroleum distillate has a total vapor pressure (sum of the partial pressures of the constituents) less than 26 mm of Hg [pf] at 20<sup>o</sup>C:
  - (a) Solely as a penetrating prime coat for aggregate bases prior to paving;
  - (b) For the manufacture of <u>medium-curing</u> patching mixes to provide long-period storage stockpiles used exclusively for pavement maintenance;
  - (c) For all uses when the <u>National Weather Service</u> forecast of the high temperature during the 24-hour period following application is below  $10^{\circ}$ C ( $50^{\circ}$ F).

Petroleum Refineries

340-22-130 After April 1, 1979, these regulations shall apply to all petroleum refineries.

- (1) Vacuum Producing Systems
  - (a) Noncondensable VOC from vacuum producing systems shall be piped to an appropriate firebox, incinerator or to a closed refinery system.
  - (b) Hot wells associated with contact condensers shall be tightly covered and the collected VOC introduced into a closed refinery system.
- (2) Wastewater Separators
  - (a) Wastewater separators forebays shall incorporate a floating pontoon or fixed solid cover with all openings sealed totally enclosing the compartmented liquid contents, or a floating pontoon or double deck-type cover equipped with closure seals between the cover edge and compartment wall.
  - (b) Accesses for gauging and sampling shall be designed to minimize VOC emissions during actual use. All access points shall be closed with suitable covers when not in use.
- (3) Process Unit Turnaround
  - (a) The VOC contained in a process unit to be depressurized for turnaround shall be introduced to a closed refinery system, combusted by a flare, or vented to a disposal system.
  - (b) The pressure in a process unit following depressurization for turnaround shall be less than 5 psig before venting to the ambient air.
  - (c)--Venting-or-depressurization-to-the-ambient-air-of-a-process-unit for-turnaround-at-a-pressure-greater-than-5-psig-shall-be-allowed if-the-owner-demonstrates-the-actual-emission-of-VOC-to-the ambient-air-is-less-than-permitted-by-340-22-130(3)(b).
- (4) Maintenance and Operation of Emission Control Equipment

Equipment for the reduction, collection or disposal of VOC shall be maintained and operated in a manner commensurate with the level of maintenance and housekeeping of the overall plant.

## Liquid Storage

340-22-135 After April 1,  $[\underline{1980}]$  1981 all tanks storing methanol and <u>other</u> volatile organic compound liquids with a true vapor pressure <u>, as</u> <u>stored</u>, greater than 10.5 kPa (kilo Pascals) (1.52 psia), but less than 76.7 kPa (11.1 psia) and having a capacity greater than 150,000 liters (approximately 39,000 gallons) shall comply with one of the following:

- (1) Meet the equipment specifications and maintenance requirements of the federal standards of performance for new stationary sources -Storage Vessels for Petroleum Liquids, 40 CFR 60 [110] Subpart K, as amended by proposed rule change, <u>Federal Register</u>, May 18, 1978, pages 21616 through 21625.
- (2) Be retrofitted with a floating roof or internal floating cover using at least a nonmetallic resilient seal as the primary seal meeting the equipment specifications in the federal standards referred to in 340-22-135 (1) above, or its equivalent.
- (3) Is fitted with a floating roof or internal floating cover meeting the manufacturers equipment specificiations in effect when it was installed.

340-22-136

All seals used in 340-22-135(2) and (3) above are to be maintained in good operating condition and the seal fabric shall contain no visible holes, tears or other openings.

All openings, except stub drains and those related to safety, are to be sealed with suitable closures. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

## Surface Coating in Manufacturing

340-22-140 After December 31, 1982, the operation of a coating line [using more-than-2000-gallons-of-coating-a-year-or-10-gallons-an-hour] shall not emit into the atmosphere volatile organic compounds greater than following amounts per volume of coating excluding water as delivered to the coating applicators. The limitations shall be based on a 24 hour average during the months of April through October, and on a monthly average for the other months. Daily monitoring of emissions and annual reporting are required.

	Limitatio	Limitation	
Process	Grams/liter	<u>    1b/Ga1</u>	
Can Coating Sheet basecoat (exterior and interior and over-varnish; two-piece can exter (basecoat and over-varnish)	erior 340	2.8	
Two and three-piece can interior boo spray, two-piece can exterior end (spray or roll coat)	ly 510	4.2	
Three-piece can side-seam spray End sealing compound	660 440	5.5 3.7	
Coil Coating Fabric Coating Vinyl Coating Paper Coating or Inert Gas Process Paper Coating	310 350 450 350 567*	2.6 2.9 3.8 2.9 4.7*	

Auto & Light Duty Truck Coating		
Prime	230	1.9
Topcoat	340	2.8
Repair	580	4.8
Metal Furniture Coating	360	3.0
Magnet Wire Coating	200	1.7
Large Appliance Coating	340	2.8

\*Emission figured on a plant site basis, monthly average

340-22-141 Compliance with 340-22-140 shall be determined by testing in accordance with Method 18 or Method 34 (material balance method) on file with the Department. These methods may be revised by the Department for improvement based upon experience and new data. However, no revision shall apply to a compliance test scheduled prior to the making of the revision, unless the owner concurs.

Degreaser

340-22-145 Cold Cleaners

- (a) All cold cleaners shall comply with the following equipment specifications after April 1, 1980:
- (i) Be equipped with a cover that is readily opened and closed.
- (ii) Be equipped with a drain rack that returns the drained solvent to the solvent bath.
- (iii) Have a freeboard ratio of at least 0.5.
- (iv) Have a visible full time.
- (b) An owner or operator of a cold cleaner shall be responsible for following the required operating parameters and work practices. The owner shall post and maintain in the work area of each cold cleaner a pictograph or instructions clearly explaining the following work practices:
- (i) The solvent level shall not be above the fill line.
- (ii) The spraying of parts to be cleaned shall be performed only within the confines of the cold cleaner.
- (iii) The cover of the cold cleaner shall be closed when not in use or when parts are being soaked or cleaned by solvent agitation.
- (iv) Solvent-cleaned parts shall be rotated to drain cavities or blind holes and then set to drain until dripping has stopped.
- (v) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal.

(c) The owner or operator shall maintain cold cleaners in good working condition and free of solvent leaks.

340-22-146 Open Top Vapor Degreasers

- (a) All open top vapor degreasers with-a-vapor-air-interface-greater-than one-square-meter-(10-square-feet) shall comply with the following equipment specifications after April 1, 1980:
- (i) Be equipped with a cover that may be readily opened and closed. When a degreaser is equipped with a lip exhaust, the cover shall be located below the lip exhaust. <u>The cover shall move horizontally or slowly</u> so as not to agitate and spill the solvent vapor. The degreaser shall be equipped with at least the following three safety switches:
  - (a) Condenser flow switch and thermostat (shuts off sump heat if coolant is either not circulating or too warm).

- (ii) Have one of the following:
- (A) A freeboard ratio equal to or greater than 0.75.
- (B) A freeboard chiller.
- (C) A closed design such that the cover opens only when the part enters or exits the degreaser.
- (iii) Post a permanent and conspicuous pictograph or instructions clearly explaining the following work practices:
- (A) Do not degrease porous or absorbent materials such as cloth, leather, wood or rope.
- (B) The cover of the degreaser should be closed at all times except when processing workloads.
- (C) When the cover is open the lip of the degreaser should not be exposed to steady drafts greater than 15.3 meters per minute (50 feet/min).
- (D) Rack parts so as to facilitate solvent drainage from the parts.
- (E) Workloads should not occupy more than one-half of the vapor-air interface area.
- (F) When using a powered hoist, the vertical speed of parts in and out of the vapor zone should be less than 3.35 meters per minute (11 feet/min.)

 <sup>(</sup>b) Spray safety switch - (shuts off spray pump or conveyor if the vapor level drops excessively, e.g. greater than 10 cm (4 in.)).
 (c) Vapor level control thermostat - (shuts off sump heat when vapor level rises too high).

- (G) The vapor level should not drop more than ten centimeters (4 inches) when the workload enters the vapor zone.
- (H) Degrease the workload in the vapor zone until condensation ceases.
- (I) Spraying operations should be done within the vapor layer.
- (J) Hold parts in the degreaser until visually dry.
- (K) When equipped with a lip exhaust, the fan should be turned off when the cover is closed.
- (L) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater shall be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser.
- (M) Water shall not be visible in the solvent stream from the water separator.
- (b) A routine inspection and maintenance program shall be implemented for the purpose of preventing and correcting solvent losses, as for example, from dripping drain taps, cracked gaskets, and malfunctioning equipment. Leaks must be repaired immediately.
- (c) Sump drainage and transfer of hot or warm solvent shall be carried out using threaded or other leakproof couplings.
- (d) Still and sump bottoms shall be kept in closed containers.
- (e) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal.
- (f) Exhaust ventilation shall not exceed 20  $m^3/min$  per  $m^2$  (65 cfm per  $ft^2$ ) of degreaser open area, unless necessary to meet OSHA requirements. Ventilation fans shall not be used near the degreaser opening.
- 340-22-147 Conveyorized Degreasers
- (a) All conveyorized cold cleaners and conveyorized vapor degreasers shall comply with the following operating requirements after April 1, 1980:
- (i) Exhaust ventilation should not exceed 20 cubic meters per minute of square meter (65 cfm per ft<sup>2</sup>) of degreaser opening, unless necessary to meet OSHA requirements. Work place fans should not be used near the degreaser opening.
- (ii) Post in the immediate work area a permanent and conspicuous pictograph or instructions clearly explaining the following work practices;
- (A) Rack parts for best drainage.

- (B) Maintain vertical speek of conveyored parts to less than 3.35 meters per minute (11 feet/min.)
- (C) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater shall be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser.
- (b) A routine inspection and maintenance program shall be implemented for the purpose of preventing and correcting solvent losses, as for example, from dripping drain taps, cracked gaskets, and malfunctioning equipment. Leaks must be repaired immediately.
- (c) Sump drainage and transfer of hot or warm solvent shall be carried out using threaded or other leakproof couplings.
- (d) Still and sump bottoms shall be kept in closed containers.
- (e) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal.

## Asphaltic and Coal Tar Pitch Used for Roofing Coating

#### 340-22-150

A person shall not operate or use equipment after April 1, 1980, for melting, heating or holding asphalt or coal tar pitch for the on-site construction or repair of roofs unless the gas-entrained effluents from such equipment are contained by close fitting covers.

A person operating equipment subject to this rule shall maintain the temperature of the asphaltic or coal tar pitch below  $285^{\circ}C$  ( $550^{\circ}F$ ), or  $17^{\circ}C$  ( $30^{\circ}F$ ) below the flash point whichever is the lower temperature, as indicated by a continuous reading thermometer.

The provisions of this rule shall not apply to equipment having a capacity of 100 liters (26 gallons) or less; or to equipment having a capacity of 600 liters (159 gallons) or less provided it is equipped with a tightly fitted lid or cover.

PBB:tf 5/18/79 A6252.B1



## Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

#### MEMORANDUM

То:	Environmental Quality Commission
From:	Director
Subject:	Agenda Item No. D(5), March 30, 1979, EQC Meeting
	Authorization to Hold a Public Hearing on Amending the State Implementation Plan to Change VOC Rules

#### Background

Certain changes are needed in the Volatile Organic Compound (VOC) rules passed by the Commission on December 15, 1978. These rules restrict VOC emissions in order to reduce photochemical oxidant formation. The Federal oxidant standard is violated, or near violation, in the Medford AQMA, the Portland AQMA, and the Salem area. The Eugene area has a potential oxidant problem.

Statement of Need

See Attachment 2.

#### Evaluation

- 1. The Lowest Achievable Emission Rate (LAER) rule OAR 340-22-104 needs to be modified to correspond exactly to proposed OAR 340-20-192 which contains the LAER definition directly from the Clean Air Act.
- 2. Two compounds, methyl chloroform and methylene chloride, have again been requested to be added to the list of VOC's with negligible photochemical reactivity in OAR 340-22-100(1). These were previously in the proposed exempt list, but were removed because of verbal opinions from EPA. The Department has received further evidence to exempt them from Dow Chemical. EPA will be requested to provide testimony for the public hearing.



- 3. The Salem oxidant non-attainment area is being redefined in proposed OAR 340-20-192 from the Salem city limits, OAR 340-33-106(4), to the <u>Salem Area Transportation Study boundary</u>. The VOC rule 340-22-106(4) needs to be changed to be consistent. The impact of this change will be felt by the gas stations outside the city limits but inside the Study boundary. They will have to install VOC controls; they were formerly exempt. The Department is not aware of any other impacts. The Salem city limits are an irregular shape; as a special control area for air quality, the shape is arbitrary rather than reasonable. The Salem Area Transportation Study boundary conforms more to an airshed shape and is more reasonable as a special control area boundary.
- 4. Rule 340-22-111 and reference to it in the introduction are proposed to be deleted. <u>Stage II</u> vapor recovery at gas stations is not working well in California. In 1978 the staff was predicting EPA would issue a guideline document for capturing gasoline vapor from filling vehicle fuel tanks (Stage II) in late 1978. This did not happen. Therefore, this rule should be deleted, as the purpose for warning gas stations of a forthcoming rule is fading, as the rule or an equivalent rule may not be needed.
- 5. Rule 340-22-115(1) should have a sentence specifically <u>exempting</u> <u>pressure relief valves</u>, as this was intended to be done. Such devices are mandatory safety equipment and it is impracticable to measure these minimal emissions.
- 6. The description of acceptable <u>vapor control systems</u> in rule 340-22-115(2) is not needed there, but would be more useful in 340-22-120. Bulk plants generally install vapor balance systems or nothing if they are exempt. Therefore, the description of these systems more properly belongs under 340-22-120.
- 7. Two serious problems with 340-22-115 have come to light since its passage in 1978. Large gasoline terminals have generally refused to serve small accounts with tank size less than about 8,000 gallons. This business was left to independent truckers and to bulk plants. Rule 340-22-115 exempts all <u>bulk plants</u> from vapor control capture systems for their delivery trucks. Current federal gasoline marketing rules are believed to generally lock-in bulk plants and independent truckers with their customers. Rule 340-22-115 requires exempt bulk plants to cease delivering gasoline to stations with vapor return fittings.

Therefore, bulk plant customers with tanks over 2,000 gallons size or with new tanks would probably be unable to get legal deliveries of gasoline after April 1, 1981, the effective date of rules 340-22-110 and -115. When exempting bulk plants in the 2,375 gallon per day to 20,000 gallons per day size range from VOC rules on December 15, 1978, the Commission probably intended exempting them from 340-22-110 which requires gasoline storage tanks to have vapor capture systems for vapors generated when they are filled. This filling exemption is not explicit and if intended, needs to be stated.

These two problems are proposed to be solved in the following way:

- Bulk plants are to be bound by 340-22-110 and must fit their tanks with vapor return piping to the delivery trucks that fill them.
- (2) The smallest bulk plants (4,000 gal/day) and their existing customers will be exempted from installing vapor return fittings (except that new tanks at the customers' stations must have a submerged fill pipe and the vapor return lines roughed-in).

The VOC lost by exempting the smallest bulk plants and their customers from vapor balance systems involving the bulk plant trucks is less than the VOC captured by requiring the bulk plants to install vapor return systems on their own storage tanks. The reason for this is simple, above ground tanks generate more vapor upon filling than do underground tanks.

- 8. The <u>compliance date</u> of April 1, 1980 is changed to April 1, 1981 in 340-22-135. It was thought that the existing tanks covered by this rule were already covered in an equivalent way by rule 340-28-050 and equivalent Lane Regional Air Pollution Authority rule. But there are large, existing storage tanks with alcohol and other non-gasoline products that were not covered by these existing rules. Conversion to floating roof tanks by April 1, 1980 is impracticable, and a compliance date at the beginning of the 1981 oxidant season would be reasonable.
- 9. EPA and DEQ have an agreement for <u>paid advertisements</u> in newspapers for hearings for rules that are to be a part of a State Implementation Plan. The passage of the VOC rules in 1978 was done without paid newspaper advertisement. In order to insure conformance with this agreement the Department desires the Commission to re-adopt the VOC rules with the proposed amendments The Department is paying for advertising the May 8, 1979 hearing on the attached VOC rules.

#### Summation

- 1. Several minor changes are needed in the VOC rules to improve clarity and consistency with other rules.
- The Department has further evidence that methyl chloroform and methylene chloride should be considered for addition to the list of exempt VOC compounds.

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- 3. Customers of exempt bulk plants could be denied a legal supply of gasoline. The proposed rule revision exempts these customers, but requires bulk plants to put VOC controls on their own storage tanks and result in more than equivalent recovery of vapors. Also, the larger bulk plants (4,000 to 20,000 gal/day) would be required to add vapor balance for their trucks.
- 4. Another year is proposed to be allowed for large storage tanks to complete VOC controls.
- 5. Re-adoption of the total VOC rules as amended after paid advertisement in newspapers is thought prudent to avoid any legal challenge to proper public notice.

#### Director's Recommendation

Based upon the Summation, I recommend that the Commission authorize a public hearing for the attached proposed amended rules in Portland and consider the rules for adoption at the Commission's June, 1979 meeting.

#### WILLIAM H. YOUNG

P.B. Bosserman:kmm 229-6278 March 15, 1979 Attachments: (1) Proposed Rules OAR 340-22-100 to -150 (2) Statement of Need


# Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

## MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Amendment No. 1, Agenda Item No. A-3, June 8, 1979 EQC Meeting

Adoption of New Rules for Special Permit Requirements for Sources Locating in or Near Nonattainment Areas (Proposed OAR 340-20-190 through -197)

## Purpose of Amendment

The purpose of this amendment is to clarify and simplify the definition of "Proposed for Construction" in proposed OAR 340-20-191(8) and the intent of proposed OAR 340-20-193.

### Director's Recommendation

It is recommended that the rules proposed with the subject staff report be modified as follows:

- 1. On page 2, definition number 8 should read as follows:
  - 8) "Proposed for Construction" means that the owner or operator of a major stationary source or major modification has applied for a permit from the Department after July 1, 1979."
- 2. On page 3, line 2 of proposed 340-20-193, the word "would" should be inserted before "have allowable".

## WILLIAM H. YOUNG

MEZiolko:h 229-5775 June 7, 1979





# Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

#### MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. A3, June 8, 1979, EQC Meeting

Adoption of New Rules for Special Permit Requirements for Sources Locating In or Near Nonattainment Areas (Proposed OAR 340-20-190 through 197)

#### BACKGROUND AND PROBLEM STATEMENT

The Clean Air Act Amendments of 1977 require states to have an adequate permit program for new sources locating in ambient air standard non-attainment areas and for new sources in attainment areas whose emissions may significantly impact a nonattainment area. The basic requirement that must be contained in the permit program is that major new or modified sources locating in non-attainment areas having a potential to emit 100 tons/year of a specific air contaminant must meet the following:

- 1. Lowest achievable emission rate (LAER)
- 2. Demonstrate that all other facilities under the authority of the permit applicant are in compliance or are on a compliance schedule to meet state rules.
- 3. Demonstrate that a sufficient growth increment is available in the attainment plan or provide offsets.

The proposed rules OAR 340-20-190 through 192 (alternative site analysis, LAER, offsets) apply to sources locating in nonattainment areas. They were originally proposed to apply only in the Salem and Medford areas but due to comments received from the Environmental Protection Agency (EPA), they are now written to apply to all nonattainment areas in Oregon.



The proposed rules OAR 340-20-193 through 195 (delineating applicability of 340-20-190 through 192 to sources in attainment areas) were originally proposed as a state embellishment applying only to the attainment areas around Salem and Medford. Based on comments received from EPA they are now deemed necessary in all attainment areas where a source may locate and significantly impact a nonattainment area.

The plant site emission limit requirements of proposed OAR 340-20-196 and 197 are similar to the rule in operation in the Medford area since March 1978. Citizen's advisory committees in the Portland and Eugene areas specifically requested exemption from this requirement until further committee work could be done which would identify the final needs for control strategy development. The Department understands the committees' views but in light of existing offset requirements (including those which may result from any increased field burning emissions due to the legislature's recently authorized acreage increase for field burning), and due to proposed banking legislation, the Department believes it is necessary to clearly have the authority to set plant site emission limits statewide. Since the plant site emission limit rule is permissive, it would be the Department's intent to apply the rule only in cases of absolute necessity in the Portland and Eugene areas until such time as the advisory committees recommend a final control strategy for all existing sources.

OAR 340-20-198 regarding maintenance of pay was proposed to meet requirements of the Clean Air Act but is now deemed to be not necessary in Oregon. No sources exist to which the rule would have applied.

The "Statement of Need" for rulemaking is included as Attachment 1.

#### Alternatives and Evaluation

There are several alternatives as to a course of action on the proposed set of rules. The discussion will be separated into three parts based on the options available.

Proposed OAR 340-20-190 through 195 (offsets, alternative site analysis, Lowest Achievable Emission Rate):

There are two alternatives with regards to this rule; either adopt them as originally proposed or adopt them as they are presented here. If the rules were adopted as proposed, they would apply only to the Salem and Medford nonattainment areas. Some public testimony was in favor of this approach. The consequences of taking this approach would be disapproval of the rules by the Environmental Protection Agency as an adequate SIP revision. The result of the disapproval would be that mandatory no-growth sanctions would be applied in Oregon. Major sources (those with 100 tons/year potential emissions) could not be built even if offsets were provided.

If the rules are adopted as presented here they would be an approvable SIP revision in which case no-growth sanctions would not be applied as a result of inadequate permit rules.

Proposed OAR 340-20-196 and 197 (plant site emission limit):

Here, too, there are two alternatives for these rules; either adopt them as proposed or take no action. If no action is taken there would be a question as to whether the Department has an enforceable permit requirement as required by the Clean Air Act.

The preferred alternative, therefore, is to adopt the rule. The Attorney General's office felt such action would clearly establish the Department's authority to invoke these requirements even though the Department has issued permits with the types of limits specified in the rule.

Proposed OAR 340-20-198 (maintenance of pay):

The maintenance of pay requirements of the Clean Air Act are not required in Oregon since no sources exist which would require such regulation. They may be adopted if the Commission so desires, however, the recommended approach that was approved by EPA is to not adopt the rule until such time as a need exists. At that time statutory authority would probably have to be sought from the legislature.

The entire set of rules was reviewed by and developed with the assistance of citizen advisory committees in Portland and Eugene. Public notice on the rule hearing was published in newspapers and the Secretary of State's Bulletin. Notices of the hearing were also mailed to parties on the DEQ mailing list. The public hearing was held on May 8 in Portland.

Major comments received as a result of the hearing process are discussed below. The issues were resolved and necessary changes were incorporated into the proposed rule.

1. Issue: OAR 340-20-190 through 195 should apply to all non-attainment areas where primary standard attainment plans are being developed or have been developed.

Response: EPA originally informed the Department that the provisions of 190 through 195 would not apply to Carbon Monoxide and Ozone areas requesting extensions of the attainment date. They have since reversed their opinion and say it now applies to those areas. If the rules are not applied to those areas then no growth sanctions, as provided for in the Clean Air Act, will go into effect.

Resolution: The rules have been changed accordingly so they apply to all Carbon Monoxide and Ozone non-attainment areas in the state.

2. Issue: The rules do not appear to satisfy the requirements of Part D of the Clean Air Act or offsets in general because of problems with applicability and definitions and lack of specifics and procedures for handling the many different offset situations that will arise.

Response: The offsets interpretive ruling of 40 CFR 51, Appendix S will be used as a guideline in determining the procedures to use for the various situations that may arise. See also response #1.

Resolution: EPA interpretive ruling will be used as a guide in determining offset applications. See also Resolution #1.

3. Issue: The "bubble concept" is supported in establishing plant site emission limits. The approach should be adopted statewide.

Response: At present, the legislature is considering the issues of offsets and banking of emissions. The Department does not wish to establish either a banking policy or a "bubble concept" of emissions offsets until the legislature has taken a position.

Resolution: No action recommended.

4. Issue: Adoption of Special Permit Requirements for the Portland area at this time would be premature and inconsistent with previous agreements in the Portland area for developing a State Implementation Plan. It was understood that EPA's Emission Offset Rule would apply during the period that a plan was developed and that more stringent control requirements would not be necessary. The EQC should resist attempts by the EPA to reverse its opinion and require strict control requirements. Furthermore, there has been no evaluation of the economic impacts or benefits of OAR 340-20-192 and Portland has not had the opportunity to develop alternative strategies.

Response: EPA has reversed its opinion and now will require the stricter control requirements. EPA cites Section 172 of the Clean Air Act which states that all provisions in subsection (b), which pertains to these special permit requirements, must be adopted to avoid the non-discretionary penalty of no growth of major stationary sources after July 1, 1979. These requirements apply only to carbon monoxide and Volatile Organic Compound (VOC) sources in or near nonattainment areas for carbon monoxide and ozone.

There should be little economic impact as a result of these rules since carbon monoxide sources regulated here are not common and would not be likely to locate in or near the non-attainment area. New 100 ton VOC sources are also rare.

Resolution: The special permit requirements are retained in the proposed rule to meet Clean Air Act requirements and to avoid no-growth sanctions.

5. Issue: The need for alternative site evaluation or other restrictions for major sources of nitrogen oxides in the Portland airshed and the reduction in ozone which can be achieved as a result should be identified.

Response: Further review of the matter indicates that EPA intent is to regulate ozone problems with VOC emission control only. Therefore, Nitrogen Oxides although a precursor to ozone, need not be regulated.

Resolution: The nitrogen oxides references in the rule are deleted.

6. Issue: The rules are not interpreted to exclude particulates.

Response: The areas where the rule applies are identified on maps for each affected pollutant. Particulates are not identified.

Resolution: No action required.

7. Issue: The definition of "potential to emit" should be changed since it is under litigation or, at a minimum, the rule should include a provision to review and modify the definition once the litigation is resolved.

Response: Should the definition be changed in court and become less stringent the Commission has the option of reviewing the rule for possible changes.

Resolution: Definition stands.

8. Issue: The rules are being substantially changed and should be brought through the hearing process again before adoption.

Response: The rules are being changed because of the hearing process. The Commission may also accept comments at the time of adoption of the rule and take those comments into consideration prior to acting on the rule. The option of another hearing would delay SIP approval and result in automatic growth sanctions.

Resolution: No additional hearing is required.

9. Issue: There is concern that nitrogen oxides (NO<sub>x</sub>) or Sulfur Dioxide (SO<sub>2</sub>) controls will be required because of the definition of "major new or modified source."

Response: At present, the rule applies only to CO and VOC sources. The state is considered in attainment with  $NO_x$  and  $SO_2$  Air Quality Standards therefore, no special rules need apply to these sources.

Resolution: No action required.

10. Issue: The new concept of "emission offsets" is not defined and DEQ has offered no explanation of how they will administer the program.

Response/Resolution: Offsets will be developed using EPA's interpretive ruling as a guideline. See #2 also.

Several other comments were received as to the definitions in the rule and their consistency with Clean Air Act requirements and other Department rules. The conflicting definitions were changed as appropriate in the rules proposed here. The definition in 340-20-191(3) was changed to include the July 1, 1979 date since that is the time when the interpretive ruling is no longer in effect and a state growth management strategy must be developed.

Also, in 340-20-190, the termination statement was deleted as it automatically is not applicable if a nonattainment area does not exist.

The major elements of the proposed rules are as described below.

- 1. For carbon monoxide and volatile organic compound sources in carbon monoxide or ozone nonattainment areas (OAR 340-20-190 through 192):
  - A. The rule applies to major new or modified sources (100 tons/year potential emissions)
  - B. Lowest Achievable Emission Rate (LAER) is required.
  - C. A permit may be issued only if a growth increment is available or offsets are available. The EPA interpretive ruling is used as a guideline in determining offsets.
  - D. All sources owned or operated by the same person are in compliance or are on a compliance schedule.
  - E. Alternative site analyses are required for the sources.
- For carbon monoxide and volatile organic compound sources in attainment areas which may significantly impact carbon monoxide or ozone nonattainment areas (OAR 340-20-193 through 195):
  - A. Sources with allowable emissions greater than 50 tons/year are affected.

- B. Permits may be issued if emissions are modeled to have an impact less than significant levels identified. If the impacts are greater, then OAR 340-20-191 and 192 apply.
- C. Significance levels are based on 1/20 of the ambient air standard.
- 3. OAR 340-20-196 and 197 provide that the Department may limit the amount of air contaminants emitted by a source on a plant site basis including daily, monthly and yearly limits. The limits would be consistent with control strategy data bases or prevention of significant deterioration increments. The Rule would apply statewide.

#### SUMMATION

- 1. The Clean Air Act requires states to have an adequate permit program for major new or modified sources locating in or near primary standard nonattainment areas.
- 2. Proposed OAR 340-20-190 through 192 were originally worded so as to apply only in the Salem and Medford areas. Due to comments received from EPA, they have now been written to apply to all carbon monoxide and ozone nonattainment areas in Oregon.
- 3. Proposed OAR 340-20-193 through 195 were originally proposed as state embellishments to 190 through 192. Due to comments received from EPA, they have now been written to apply to all attainment areas where sources may significantly impact a carbon monoxide or ozone nonattainment area.
- 4. Authority to set plant site emission limits would be clearly established by rule.
- 5. All references to particulates, nitrogen oxides and sulfur dioxide are deleted to clarify that the rule is not intended to apply to sources of those contaminants.
- The proposed "Maintenance of Pay" rule is not necessary in Oregon since no applicable sources exist. The rule does not need to be adopted at this time.
- 7. Sources affected by these rules (carbon monoxide and volatile organic compound sources of 100 tons/year potential emissions in non-attainment areas and 50 tons/year actual emissions in attainment areas with significant impact in non-attainment areas) would have to be subject to:

- o The Lowest Achievable Emission Rate.
- o Staying within the reasonable further progress line or provide offsets (using EPA's interpretative ruling as a guideline)
- o Alternative site analysis.
- If the contents of OAR 340-20-190 through 195 are not adopted essentially as presented, mandatory no-growth sanctions may be applied in Oregon.
- 9. If OAR 340-20-196 and 197 are not adopted, the state may not have an enforceable permit program and may be subject to legal challenge.

#### DIRECTOR'S RECOMMENDATION

Based upon the Summation, it is recommended that the proposed revised rules pertaining to "Special Permit Requirements for Sources Locating In or Near Nonattainment Areas," (OAR 340-20-190 through 197) be adopted. Furthermore, the Commission should direct the Department to submit the rules to EPA as a revision to the State Implementation Plan.

RIN

WILLIAM H. YOUNG

MEZiolko:kmm 229-5775 May 26, 1979 Attachments: 1. S

- Attachments: 1. Statement of Need for Rulemaking
  - 2. Hearing Officer's Report
  - 3. Department's Response to Public Comment
  - 4. Proposed Rule OAR 340-20-190 through 197

A6265.4

May 24, 1979

## Attachment 1

Agenda Item A3, June 8, 1979, EQC Meeting

Statement of Need

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

- a. Legal Authority: ORS 468.020 and 468.295.
- b. Need for Rule:
  - 1. Clean Air Act amendments of 1977 require certain criteria to be contained in State permit programs.
  - Transport of pollutants from sources outside non-attainment areas into non-attainment areas needs special control,to prevent adverse impacts in non-attainment areas as proposed in OAR 340-20-193 through -195.
  - 3. Clearer authority to set plant site emission limits will insure that airshed carrying capacity will not be exceeded.
- c. Documents Principally relied Upon:
  - Federal Clean Air Act P.L. 95-95, Amendments of August 7, 1977, Part D, Sections 171, 172, 173, and Section 110(a)(6).
  - 2. Code of Federal Regulations 40 CFR 51, Appendix S, see January January 16, 1979 Federal Register, pp. 3274-99.
  - 3. Letter of May 8, 1979, Schultz of EPA to Kowalczyk of DEQ concerning special permit requirements.
  - 4. Letter of May 7, 1979, Dubois of EPA to Young of DEQ concerning Maintenance of Pay requirements.



## Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

#### MEMORANDUM

To: Environmental Quality Commission

From: Hearing Officer

Subject: Hearing Report for Hearing held May 8, 1979 Regarding Special Permit Requirements for Sources Subject to Control Strategies (proposed OAR 340-20-190 through 20-198)

#### Summary of Procedure

As advertised by public notice, a public hearing was convened in room 773 of the State Office Building in Portland at 12:30 p.m. The purpose was to receive testimony on proposed revisions to the State Implementation Plan regarding Special Permit Requirements for Sources Subject to Control Strategies. The hearing was conducted by Linda Zucker, hearing officer for the Environmental Quality Commission. Representing the Department of Environmental Quality were Peter B. Bosserman and Marianne E. Fitzgerald of the Air Quality Division staff.

Oral and written testimony was offered by Allan Mick, International Paper Company; Cynthia Kurtz, City of Portland; Dean McCargar, Associated Oregon Industries; and Dr. James E. Walther, Northwest Pulp and Paper Association. The Port of Portland was represented by Kenneth Johnsen, presenting oral testimony and Lloyd Anderson, submitting written testimony. Written testimony was submitted by R. E. Chaddock, Hercules, Incorporated.

#### Summary of Testimony

In an introductory oral statement, <u>Mr. Bosserman</u> outlined proposed changes to the rule. He said the U.S. Environmental Protection Agency determined that the Clean Air Act Amendments intend that Section 172 (alternative analysis) and Section 173 (Special Permit Conditions) apply to <u>all</u> carbon monoxide and photochemical oxidant non-attainment areas, whether an attainment strategy is proposed or whether an attainment date extension request is granted. He said if the State Implementation Plan does not contain this requirement then the SIP revision will not be approvable and no new or modified major sources greater than 100 tons per year potential emissions can be approved for construction even if offsets are provided.



Therefore, the DEQ will propose to the Environmental Quality Commission that proposed OAR 340-20-190 through 195 be modified to apply to all non-attainment areas for carbon monoxide and photochemical oxidant in the state.

<u>Allan Mick,</u> representing International Paper Company, testified on the Plant Site Emissions Limit rule. He said International Paper Company would like to include the following conditions in the rule, which they feel would assure an equitable and uniform enforcement of the rule:

- 1. Existing source emissions will be used to determine the total plant site emission limit.
- Once a plant emissions limit is established, individual source regulations will no longer apply.

In setting those limits, International Paper Co. supports a bubble concept, which provides an incentive and gives a company flexibility to develop emission offsets by applying innovative emission control technology for selected sources on a plant site. International Paper Co. feels the Plant Site Emissions Limit rule using the bubble concept approach has merit and should be adopted statewide, and not limited to non-attainment areas.

<u>R. E. Chaddock</u>, Director of Environmental Affairs for Hercules Incorporated, urges adoption of the EPA "bubble concept" in the State Implementation Plan because it allows industry to determine the most cost-efficient mix of air pollution control equipment at a plant site.

The Port of Portland was represented by <u>Kenneth Johnsen</u>, Planning Manager, submitting oral testimony and <u>Lloyd Anderson</u>, Executive Director, submitting written testimony. The Port of Portland feels that adoption of Special Permit Requirements for the Portland area at this time would be premature and inconsistent with previous agreements in the Portland area for developing a State Implementation Plan.

The Port of Portland testified that in November 1978, when the Citizens Advisory Committee was asked to approve a request for an extension of the date for submittal of the particulate attainment strategy, the extension request was approved with the understandings that EPA's Emissions Offset Rule would apply, that more stringent controls wouldn't be required, and that, according to EPA, new source rules wouldn't be required for sources of carbon monoxide and ozone. They said it now appears that EPA has reversed its interpretation of the requirements, and if so, Portland will be faced with stringent controls on industry without a chance to develop an alternative approach to the offset rule. The Port of Portland believes the Environmental Quality Commission should actively resist any attempts by the EPA to reverse its previous position.

The Port of Portland feels that the Citizens Advisory Committee assisting DEQ is the best mechanism for developing an overall attainment strategy tailored to the requirements of the Portland airshed. The Committee will

use three studies: first, the recently completed Portland Aerosol Characterization Study; second, strategies to be developed by the Metropolitan Service District for carbon monoxide and ozone control; and third, a study to be done by the City of Portland to analyze emission offsets and alternative growth management strategies. The Port of Portland recommends that action be deferred on these rules until such time that pertinent data be considered and commitments on the previously agreed upon mechanism for evaluating strategies and impacts be completed.

Specifically, the Port of Portland testified that:

- 1. Section 340-20-192 is substantially more stringent than the federal offset rule. There has been no evaluation of the economic impacts or benefits of this policy and Portland has not had the opportunity to develop alternative strategies.
- 2. Sections 340-20-193 to 195 are state proposals beyond the requirements of the Clean Air Act, and should be weighed and discussed in terms of the overall strategy for attainment of standards in Portland. No analysis has been presented of air quality benefits or economic impacts of the proposed rule.
- 3. The need for alternative evaluation or other restrictions for major sources of nitrogen oxides in the Portland airshed and the reduction in ozone which can be achieved as a result should be identified.
- 4. The provision for limitation of emissions on a plant site basis needs further work. For example, the definition of "source" does not refer to emissions at all, and limiting emissions to be consistent with "data bases" seems inappropriate.

Following the Port of Portland's testimony, Mr. Bosserman stated that the Special Permit Requirements for Sources Subject to Control Strategies addresses only the pollutants carbon monoxide and photochemical oxidants and the precursors of photochemical oxidants (VOC,  $NO_x$ ); requirements for particulates will be added at a later date. He also pointed out that if the State of Oregon doesn't pass this rule in the form EPA desires, then no new major sources could be built in Oregon after this time until an attainment strategy was perfected.

Cynthia Kurtz, City of Portland, recommended that the Portland-Vancouver AQMA operate under the existing EPA offset rule rather than adopt the proposed Special Permit Requirements for Sources Subject to Control Strategies. She said the city is embarking on a study that will allow the AQMA Advisory Committee to recommend a growth management system which is tailored to meet local needs. She felt the proposed rule which is significantly more stringent than EPA requirements, presupposes what the system will need to assure attainment of standards before an evaluation can be completed.

Dean McCargar, Environmental Manager, Oregon Steel Mills, submitted oral and written testimony for the Air Quality Committee of Associated Oregon Industries (AOI). Mr. McCargar feels the changes in the rule mentioned

by Mr. Bosserman are of such substance they should be brought back through the hearing process before rule adoption. He also said that he didn't interpret the regulation to exclude particulates.

AOI supports the idea that in a nonattainment area for a particular pollutant, the growth in emissions should be closely controlled for <u>all</u> classes of sources. Mr. McCargar mentioned an example of vehicle-related emissions which are not being controlled consistently.

The recently released Portland Aerosol Characterization Study indicates that in downtown Portland, on an annual basis, primary industrial emissions contribute less than five percent of the particulates collected on hi-volume samples, and perhaps one-third of that is from sources outside the Portland airshed. AOI feels the proposed regulation will have very little impact on air quality and the impact on industry will be unnecessarily severe.

AOI recognizes that most of the regulatory concepts of the proposed rule are mandated by the Clean Air Act, but made some suggestions as to how DEQ could better adapt the rule to Oregon:

- 1. The definition of "potential to emit" came from EPA and is presently being litigated in federal court. This definition is burdensome to industry because an insignificant growth in actual particulate emissions, even one-quarter of a pound per hour, could make this regulation applicable. AOI suggests that "potential to emit" be defined as maximum allowable emissions after control if control equipment is used, to prevent discrimination against the industrial particulate emission sources that have done the most to clean up the airshed since 1972. At a very minimum the rule should include a provision to review and modify the definition once the matter is resolved in federal court.
- 2. According to the definition of "new or modified sources," AOI is concerned that DEQ will require  $NO_x$  or  $SO_2$  controls on combustion equipment, even though there are no ambient air violations of  $NO_x$  or or  $SO_2$ . They feel the staff hasn't explained the likelihood of present or future violations of  $NO_x$  or  $SO_2$ , nor has the staff explained the relationship to ozone violations.
- 3. AOI found conflicts between the proposed regulation and the VOC rules, such as in the definition of "potential to emit." The proposed regulation does not contain a definition of "VOC," "source," or "modified," and the VOC regulation does not define "major new or modified source." AOI supports the definition of "modified" contained in the VOC rule and suggests that it be included in this rule. The definition of Lowest Achievable Emission Rate differs between the proposed rule and the VOC rule; AOI objects to both versions.

- 4. AOI has numerous concerns about exactly how the decision is to be made about what the Lowest Achievable Emission Rate, or (LAER, is). They said ORS 468.295 requires the following considerations be made in regards to the air cleaning devices that would be required by a proposed regulation:
  - 1) What is the availability?
  - 2) What is the economic feasibility?
  - 3) What is the effect on the efficiency of industrial operations?
  - 4) What is the effect on economic and industrial development?

AOI said DEQ did not provide information that indicates they have made these evaluations, and without such supporting data, the rule should not be adopted or, if adopted, the rule can and should be challenged.

AOI feels the proposed LAER review process, which lays the burden of proof on the permit applicant to prove that what the agency thinks is LAER is not achievable, not maintainable, or not legal under Oregon law, is not legal under Oregon law. They feel an individual source should not be without information upon which DEQ based its decision as to LAER. They would like DEQ to make a commitment as to what their burden of responsibility is in this process, and a commitment to periodically review the results of the LAER - offset program.

5. Regarding the new concept of "emission offsets," the term is not defined and the DEQ has offered no explanation of how they will administer the program. AOI is concerned that some DEQ staff members have expressed the opinion that DEQ could require 2 for 1 or even 3 for 1 offsets of present emissions for proposed emissions. AOI can accept the concept of 1 for 1 offsets, with the reservation that various regulatory processes will continue to shrink those existing emissions available for the offsets, but the DEQ has made no projection as to how rapidly this group of existing emissions will be displaced.

AOI is concerned that DEQ staff has not projected if  $NO_x$  and  $SO_2$  nonattainment problems may occur in the future, nor estimated the geographic areas within the airshed that could be affected in the future. They ask, what is LAER for combustion sources and where do you get an offset for  $NO_x$  and  $SO_2$ ? They ask, does the VOC regulation specify LAER for those VOC sources it covers, or is LAER something still more stringent? They wonder if it is even possible for industry to adhere to national energy programs under this rule. They suggest the LAER process be a collective process involving all permit holders in a source category, and not a strict one-on-one process.

Finally, Mr. McCargar asked the Department the following questions:

- 1. What rulings and guidance has EPA provided for  $NO_x$  air quality?
- 2. What is the historic and projected trend in  $NO_x$  ambient levels in the Portland AQMA, and what is the basis for this analysis?

3. What is the likelihood that combustion sources, specifically industrial sources, will be likely required to control NO<sub>x</sub> in the future?

Dr. James E. Walther of Crown-Zellerbach Corporation in Camas, Washington, submitted submitted testimony for the Northwest Pulp and Paper Association (NWPPA). NWPPA had general comments regarding litigation in progress pertaining to federal regulations. NWPPA recommends that DEQ adopt a policy to ensure that if changes are made to federal regulations, appropriate changes will be made to Oregon's regulations to reflect these changes, and that the state regulations will be re opened for comment.

NWPPA feels that requirements to determine the appropriate plant site emission limits should not be a general and flexible policy, but should be specified. NWPPA also suggests that provisions be made to ensure that present facilities be allowed to operate under the terms of existing permits.

NWPPA said the present wording of OAR 340-20-196/197 appears to be a halfway approach to the "bubble concept" recently adopted in an EPA policy statement, and NWPPA recommends expansion of this section to fully implement the bubble concept. NWPPA recommends that sources to be averaged under the application of the bubble concept be identified together in the permitting process.

#### Recommendation

Your Hearing Officer makes no recommendation on this matter.

Respectfully submitted TIMA Linda Zucker

Hearing Officer

MEF:jl 229-5353

#### Attachment 3

Response to Hearing Testimony for Proposed OAR 340-20-190 Through 198

1. Issue: In OAR 340-20-193, does the 50 ton/year limitation refer to potential, allowable or actual emissions?

Response: Allowable.

Resolution: Wording was changed to specifically state the meaning.

2. Issue: The definition of "source" in OAR 340-20-196 should be made consistent with the definition in PSD rules.

Response/Resolution: Definition was corrected.

3. Issue: The "Maintenance of Pay" requirement must apply statewide.

Response: EPA has now stated that the requirement is not needed at all in Oregon as long as there are no sources that would be affected.

Resolution: OAR 340-20-198 is deleted from consideration.

4. Issue: The wording "proposed for construction" in 340-20-191(3) is not defined and its use is inconsistent with EPA definitions.

Response: It was suggested that the wording be defined or use the definition of "commenced construction" as stated in PSD.

Resolution: "Proposed for construction" will be defined as in the meaning of "commenced construction" as provided in PSD.

5. Issue: OAR 340-20-190 through 195 should apply to all non-attainment areas where primary standard plans are being developed or have been developed.

Response: EPA originally informed the Department that the provisions of 190 through 195 would not apply to CO and  $PO_X$  areas requesting extensions of the attainment date. They have since reversed their opinion and say it now applies to those areas. If the rules are not applied to those areas then no growth sanctions, as provided for in the Clean Air Act, will go into effect.

Resolution: The rules have been changed accordingly so they apply to all CO and  $PO_{\rm Y}$  non-attainment areas in the state.

6. Issue: The rules do not appear to satisfy the requirements of Part D of the Clean Air Act of offsets in general because of problems with, applicability and definitions and lack of specifics and procedures for handling the many different offset situations that will arise. Response: The offsets interpretive ruling of 40 CFR 51, Appendix S will be used as a guideline in determining the procedures to use for the various situations that may arise. See also response #5.

Resolution: EPA interpretive ruling will be used as a guide in determining offset applications. See also Resolution #5.

7. Issue: The "bubble concept" is supported in establishing plant site emission limits. The aproach should be adopted statewide.

Response: At present the legislature is considering the issues of offsets and banking of emissions. The Department does not wish to establish either a banking policy or a "bubble concept" of emissions offsets until the legislature has taken a position.

Resolution: No action recommended.

8. Issue: Adoption of Special Permit Requirements for the Portland area at this time would be premature and inconsistent with previous agreements in the Portland area for developing a State Implementation Plan. It was understood that EPA's Emission Offset Rule would apply during the period that a plan was developed and that more stringent control requirements would not be necessary. The EQC should resist attempts by the EPA to reverse its opinion and require strict control requirements. Furthermore, there has been no evaluation of the economic impacts or benefits of OAR 340-20-192 and Portland has not had the opportunity to develop alternative strategies.

Response: EPA has reversed its opinion and now will require the stricter control requirements. EPA cites Section 172 of the Clean Air Act which states that all provisions in subsection (b), which pertains to these special permit requirements, must be adopted to avoid the non-discretionary penalty of no growth of major stationary sources after July 1, 1979. These requirements apply only to carbon monoxide and Volatile Organic Compound sources in or near non-attainment areas for carbon monoxide and ozone.

There should be little economic impact as a result of these rules since carbon monoxide sources regulated here are not common and would not be likely to locate in or near the non-attainment area.

Resolution: The special permit requirements are retained in the proposed rule to meet Clean Air Act requirements and to avoid no-growth sanctions.

9. Issue: OAR 340-20-192 is substantially more stringent than the federal offset rule, and the Meford offset rule.

Response: The rule is that required by the Clean Air Act. It may or may not be more stringent than the federal offset rule depending on the circumstances. Resolution: No action required.

10. Issue: OAR 340-20-193 through 195 are proposals beyond the requirements of the Clean Air Act.

Response: Originally, this was thought to be the case. Now, however, with EPA's change in position, these sections are deemed to be required by the Act.

Resolution: The rules are required

11. Issue: The need for alternative evaluation or other restrictions for major souces of nitrogen oxides in the Portland airshed and the reduction in ozone which can be achieved as a result should be identified.

Response: Further review of the matter indicates that EPA intent is to regulate ozone problems with VOC emission control only. Therefore, NO, although a precursor to ozone need not be regulated.

Resolution: The Nitrogen Oxides reference in the rule is deleted.

12. Issue: The rules are not interpreted to exclude particulates.

Response: The areas where the rule applies are identified on maps for each affected pollutant. Particulates are not identified.

Resolution: No action required.

13. Issue: The definition of "potential to emit" should be changed since it is under litigation or, at a minimum, the rule should include a provision to review and modify the definition once the litigation is resolved.

Response: Should the definition be changed in court and become less stringent the Commission has the option of reviewing the rule for possible changes.

Resolution: Definition stands.

14. Issue: The rules are being substantially changed and should be brought through the hearing process again before adoption.

Response: The rules are being changed because of the hearing process. The Commission may also accept comments at the time of adoption of the rule and take those comments into consideration prior to acting on the rule. The option of another hearing would delay SIP approval and result in automatic growth sanctions.

Resolution: No additional hearing is required.

15. Issue: The proposed rule will have very little impact on air quality based on the recent Portland particulate study and the impact on industry will be unnecessarily severe.

Response: The rule applies only to CO and VOC sources, not particulate sources.

Resolution: No action required.

16. Issue: There is concern that Nitrogen Oxides or Sulphur Dioxide controls will be required because of the definition of "major new or modified source."

Response: At present, the rule applies only to CO and VOC sources. The state is considered in attainment with NO<sub>x</sub> and SO<sub>2</sub> Air Quality Standards therefore, no special rules need apply to these sources.

Resolution: No action required.

17. Issue: There are conflicts between definitions in the proposed rules and the VOC rules.

Response: Differences do exist.

Resolution: The conflicting definitions are brought into line as proposed in this regulation.

18. Issue: There are concerns as to how the decision is to be made regarding what LAER is. ORS 468.295 requires certain considerations be made in regards to air cleaning devices and DEQ did not make these evaluations. Without the evaluations the rule should not be adopted or if it is adopted it can and should be challenged.

Response: The necessary evaluations would be done on a case-by-case basis to determine LAER when a source applies for a permit. This is the specific intent of the Clean Air Act.

Resolution: No action required.

19. Issue: The proposed LAER review process which lays the burden of proof on the permit applicant to prove that what DEQ thinks is LAER is not achievable, not maintainable or not legal, is in itself not legal under Oregon law.

Response: The burden of proof in all air quality regulations is with the applicant whether it pertains to a variance request, compliance demonstration etc. This concept is considered legal.

Resolution: No change.

20. Issue: The new concept of "emission offsets" is not defined and DEQ has offered no explanation of how they will administer the program.

Response/Resolution: Offsets will be developed using EPA's interpretive ruling as a guideline. See #6 also.

21. Issue: What is LAER for combustion sources and where do you get an offset for  $NO_X$  and  $SO_2$ ?

Response:  $NO_X$  and  $SO_2$  sources are not affected by this rule. Offsets would apply to these sources ony if the  $NO_2$  or  $SO_2$  standard was violated.

Specific questions regarding  $NO_x$ ,  $SO_2$  and particulates are irrevelant to the present rulemaking.

Resolution: No action required.

22. Issue: Does the recently adopted VOC regualtion specify LAER for those various sources it covers, or is LAER something still more stringent?

Response: LAER is to be determined on a case by case basis in specific response to the correction of the Clean Air Act.

Resolution: No action required.

A6259.4

May 24, 1979

## Attachment 4

## Special Permit Requirements for Sources Locating in or Near Non-Attainment Areas

In the following rule:

- 1) Those words underlined have been added to the previous draft
- Those words in brackets [] have been deleted from the previous draft.

#### Attachment 4

## Special Permit Requirements for Sources [Subject to Control Strategies] Locating in or Near Non-Attainment Areas

340-20-190

#### Applicability in Non-Attainment Areas

OAR 340-20-190 to 330-20-192 shall apply to proposed major new or modified <u>carbon monoxide (CO) or Volatile Organic Compounds (VOC)</u> sources in nonattainment areas. [that emit air pollutants for which a SIP attainment strategy exists. These rule requirements shall be terminated by rule making after redesignation of an area by EPA to attainment status.]

340-20-191

#### Definitions

As used in OAR 340-20-190 to 340-20-192, unless otherwise required by context:

- "Alternative Analysis" means an analysis conducted by the proposed source which considers alternative sites, sizes, production processes and environmental control techniques and which demonstrates that benefits of the proposed source significantly outweigh the environmental and social cost imposed as a result of the project.
- 2) "LAER" means the rate of emissions which reflects -
  - (A) the most stringent emission limitation which is contained in the implementation plan of any State for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable, or not maintainable for the proposed source or
  - (B) the most stringent emission limitation which is achieved and maintained in practice by such class or category of source, whichever is more stringent.

In no event shall the application of LAER allow a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable new source standards of performance (OAR 340-25-535).

3) "Major New or Modified Source" means any stationary source which emits or has the potential to emit one hundred tons per year or more of <u>CO</u> or <u>VOC</u> [any criteria air pollutant] and is proposed for construction <u>after July 1, 1979.</u> [the date the applicable SIP attainment strategy has been approved by EPA.] The term "modified" means any single or cumulative physical

> change or change in the method of operation which increases the potential to emit emissions of any criteria air pollutant one hundred tons per year or more over previously permitted limits.

- 4) "Nonattainment Area" means, for any air pollutant the actual area, as shown in Figures 1 through [3] 7, in which such pollutant exceeds any national ambient air quality standard.
- 5) "Potential to emit" means the maximum capacity to emit a pollutant absent air pollution control equipment which is not intrinsically vital to the production or operation of the source.
- 6) "Reasonable Further Progress" means annual incremental reductions in emission of the applicable air pollutant identified in the SIP which are sufficient to provide for attainment of the applicable national ambient air quality standard by the date required in the SIP.
- 7) "SIP" means the Oregon State Implementation Plan submitted to and approved most recently by the EPA pursuant to the Clean Air Act.
- 8) "Proposed for Construction" means that the owner or operator of a major stationary source or major modification has all necessary preconstruction approvals or permits and either has:
  - a) Begun, or caused to begin, a continuous program of physical on-site construction of the source, to be completed within a reasonable time; or
  - b) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed within a reasonable time.

340-20-192

#### Requirements

A construction and operating permit may be issued to a major new or modified source proposing to locate in a non-attainment area only if the following requirements are met:

- There is a sufficient emission growth increment available which is identified in the adopted state plan or an emission offset is provided such that the reasonable further progress commitment in the SIP is still met. <u>The EPA Offset Ruling of January 16, 1979, (40 CFR</u> <u>Part 51 Appendix S) will be used as a guide in identifying specific</u> offset requirements.
- 2) The proposed source is required to comply with the LAER. Only the increments of change above the 100 ton/year potential increase of the modified source are required to comply with LAER.

- 3) The owner or operator has demonstrated that all major stationary sources owned or operated by such person in the State of Oregon are in compliance or on a compliance schedule with applicable requirements of the adopted state plan.
- 4) An alternative analysis is made for major new or modified sources of carbon monoxide <u>or</u> volatile organic compounds. [or nitrogen oxides proposing to locate in a non-attainment area which has an attainment date in the SIP extending beyond December 31, 1982.]

#### 340-20-193

#### Applicability in Attainment Areas

OAR 340-20-193 to 340-20-195 shall apply as noted to proposed major new or modified sources located in attainment areas that [emit] <u>have allowable</u> <u>emissions</u> greater than 50 tons/year of <u>CO or VOC</u> [any air pollutant for which a SIP attainment strategy exists and] which may impact a non-attainment area. [This rule requirement shall be terminated by rule making after redesignation of an area by EPA to attainment status.] (It should be noted that for sources emitting less than 50 tons/year of an air pollutant that OAR 340-20-001 still requires application of highest and best practicable treatment and control and OAR 340-31-010 provides for denial of construction should such a source prevent or interfere with attainment or maintenance of ambient air quality standards.)

340-20-194

#### Definitions

As used in OAR 340-20-193 to 340-20-195, unless otherwise required by context:

- 1. "Major New or Modified Source" means any stationary source which [actually emits or is proposed to emit more] <u>has allowable emission</u> <u>greater</u> than fifty tons per year of [any criteria] <u>CO or VOC</u> [air pollutant] and is proposed for construction after [the date the applicable SIP attainment strategy has been approved by EPA.] <u>July 1, 1979.</u> The term "modified" means any single or cumulative physical change or change in the method of operation which increases the emissions of any criteria air pollutant more than fifty tons per year over previously permitted limits.
- "Alternative Analysis", "LAER", "Non-attainment Area", "Reasonable Further Progress", and "SIP" have the same meanings as provided in OAR 340-20-191.

#### 340-20-195

#### Requirements

A construction and operating permit may be issued to a major new or modified source proposing to locate in an attainment area only if <u>one of</u> the following requirements are met:

- The emissions from the proposed source are modeled to have an impact on [all] non-attainment areas equal to or less than the significance levels listed in the table in 340-20-195(3), [and] or
- 2) The requirements of 340-20-192 are met if the emissions from the proposed source are modeled to have an impact on the non-attainment area greater than the significance levels of the table in 340-20-195(3).

Averaging Time

340-20-195(3) Table of Significance Levels

	Annual	24-hour	8-hour	<u>3-hour</u>	<u>l-hour</u>
[so <sub>x</sub>	l.0 ug/m <sup>3</sup>	5.0 ug/m <sup>3</sup>	-	25 ug/m <sup>3</sup>	-]
[TSP	1.0 ug/m <sup>3</sup>	5.0 ug/m <sup>3</sup>	-	-	-3
[NOX	l.0 ug/m <sup>3</sup>		-	-	-]
со	· _	-	0.50 mg/m <sup>3</sup>		2.0 mg/m <sup>3</sup>
[POx] Ozone	~	-		- [8.0]	<u>12.0</u> ug/m <sup>3</sup>

#### 340-20-196

Pollutant

#### Emission Limitations on a Plant Site Basis

The purpose of OAR 340-20-196 to 340-20-197 is to insure that emissions from sources located anywhere in the state are limited to levels consistent with State Implementation Plan data bases, control strategies, overall airshed carrying capacity, and programs to prevent significant deterioration.

[This Section shall not apply in the Portland non-attainment areas until such time as a SIP Attainment strategy exists.]

#### DEFINITIONS

As used in OAR 340-20-196 to 340-20-197, unless otherwise required by context:

- "Facility" means an identifiable piece of process equipment. A source may be comprised of one or more pollutant-emitting facilities.
- 2) "Source" means any [new, modified, or existing stationary or portable] structure, building, facility, equipment, installation or operation, or combination thereof, which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person, or by persons under common control.

#### 340-20-197

For the purposes set forth in OAR 340-20-196, the Department may limit by permit condition the amount of air contaminants emitted from a source. This emission limitation shall take the form of limiting emissions on a mass per unit time basis including an annual kilograms per year limit and may also include a monthly and daily limit.

[340-20-198

#### Maintenance of Pay

The owner or operators of any source shall not temporarily reduce the pay of an employee by reason of the use of supplemental or intermittent or other dispersion-dependent control systems for the purpose of meeting the requirements of orders under Section 113(d) of the Clean Air Act, as amended, 1977.

This Section shall not apply in the Portland AQMA until such time as a SIP Attainment Strategy exists.]

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Portland-Vancouver Interstate Air Quality Maintenance Area.

Figure

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ACTUAL OXIDANT NON-ATTAINMENT AREA IN SALEM IN 1977

1970 Urbanized area

Salem Area Transportation Study

Valley Council of Governments

١.

FIGURE 5

ACTUAL CO NON-ATTAINMENT AREA IN THE EUGENE-SPRINGFIELD AREA IN 1977

1'' = 2000'





## FIGURE 7

## ACTUAL MEDFORD OXIDANT NON-ATTAINMENT AREA





# Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

#### MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. A4, June 8, 1979, EQC Meeting

Adoption of New Rules to Prevent Significant Deterioration of Air Quality (proposed OAR 340-31-100)

#### Background and Problem Statement

The program to prevent significant deterioration of air quality currently in effect in Oregon is administered by the U.S. Environmental Protection Agency. To meet the requirements of the 1977 Clean Air Act Amendments (CAAA), the state must adopt rules which would allow it to take over the administration of this program. The adopted rules must be at least as stringent as the requirements of the CAAA.

The Department had proposed adopting the Federal Prevention of Significant Deterioration Rule by reference with no significant changes. Some additions are proposed to clarify the rule. The additions did not alter the intent or requirements of the federal rule or CAAA.

The "Statement of Need" for rulemaking is included as Attachment 1.

#### Alternatives and Evaluation

There are basically two alternatives regarding the Prevention of Significant Deterioration Rule. Either a rule is adopted or rejected. If a rule is adopted that meets Environmental Protection Agency requirements, then Oregon will be meeting the requirements of federal law and the Department can take over the permit program now administered by the federal agency. If an acceptable rule is not adopted then Oregon will be in violation of federal law and certain federal funding may be jeopardized. Furthermore, the Environmental Protection Agency will continue to administer the program for the state.



As part of the rule development process the proposed rule was sent to the A-95 Clearinghouse and the Land Conservation and Development Commission for their review. Public notices were mailed to those parties on the Department mailing lists. The notices were also published in newspapers around the state.

The public hearing was held on May 8, 1979, in Portland. The hearing officer's report is included as Attachment 2. Public hearing comments and Department response are listed below.

1. Issue: The Department should make provisions in the rule so it will be changed if the Environmental Protection Agency's rule is changed due to either current court challenges or future policies of that agency. The Department should also delete some definitions pending court actions.

Response: The Department and the Environmental Quality Commission are not restricted to the Environmental Protection Agency's rule other than having to have requirements at least as strict as that agency's. If the federal rule is changed and should conditions warrant, the Commission may modify the rule as appropriate.

2. Issue: For computer modeling purposes, all particles larger than five microns should be deleted from the emissions inventory since the models do not accurately simulate the large particles in the atmosphere. The Environmental Protection Agency has allowed this discounting of large particles in determining increment consumption in several cases.

Response: Due to Clean Air Act requirements, the Environmental Protection Agency retains the authority, even after state adoption of a Prevention of Significant Deterioration rule, for approving the use of air quality models other than those specified in guidelines provided by the Agency. In cases where an alternative model would be used by the source for prevention of significant deterioration increment determinations allowances may be made for particle size on a case-by-case basis if the source provides accurate, detailed emissions particle size information. The Environmental Protection Agency would make a decision as to model adequacy based on information submitted.

3. Issue: The Environmental Protection Agency has informed the Department that adoption of the federal rule by reference is unacceptable. This is due to the way the federal rule is written and the uncertainty of the separation of authority between state and federal governments that would arise from the many references to the Agency and its administrator in the federal rule.
Environmental Quality Commission June 8, 1979 Page 3

Response: Upon advice of the Attorney General's office, the Department has rewritten the proposed rule in state rule format to more clearly portray the separation of state and federal authority.

As stated previously, there are basically two alternatives in this rule consideration; adopt or reject a rule. There are two choices for adoption, the first being the rule presented at the March 30, 1979, Commission meeting and the second being adopting the revised proposed rule presented in Attachment 3.

Based upon Environmental Protection Agency comments, adopting the originally proposed rule has essentially the same effects as rejecting any rule or not taking action. The effects would be violation of federal law and placing federal funding in jeopardy.

Adoption of the revised rule proposed today appears to meet Clean air Act and Environmental Protection Agency requirements and would not appear to place funding in jeopardy.

Major elements of the recommended proposed rule include:

- 1. Allowing the Prevention of Significant Deterioration permit review program to be administered by the state.
- 2. Review requirements are identified.
- 3. Sources subject to review are identified.
- 4. Class I areas in Oregon are identified.
- 5. Increments of degradation in Class I, II and III areas are established.
- 6. Procedures for reclassification of areas are established.

The primary impact of the rule on sources regulated would be that there would be an elimination of the need for the sources to go through a preliminary permit review by the Department and final review by the Environmental Protection Agency. After adoption of the rule and approval by the Environmental Protection Agency, only the Department would review source applications for permits, thereby reducing the review time of applications.

#### Summation

- 1. The Clean Air Act requires states to adopt rules to administer a Prevention of Significant Deterioration program.
- 2. Failure to adopt a rule acceptable to the Environmental Protection Agency would violate federal law and jeopardize federal funding.

Environmental Quality Commission June 8, 1979 Page 4

- 3. A PSD rule was drafted which incorporated the federal rule by reference. A public hearing was held on this rule on May 8, 1979. Very little testimony was received.
- 4. Due to Environmental Protection Agency comments, the rule proposed March 30, was rewritten into a state rule format to clarify the separation of state and federal authority.
- 5. The revised proposed rule (Attachment 3) appears to meet Environmental Protection Agency minimum requirements.
- 6. The revised proposed rule would 1) give the permit review program to the state upon EPA approval; 2) identify sources subject to review;
  3) identify Class I areas in Oregon; 4) establish increments of degradation; 5) establish procedures for area reclassification.
- 7. Adoption of the revised proposed rule and approval of the rule by the Environmental Protection Agency would mean sources would have only one reviewing authority which would reduce the review time on applications.

#### Directors Recommendation

Based upon the Summation, it is recommended that the Commission adopt the revised proposed rule (OAR 340-31-100) and direct the Department to submit it to EPA as a revision to the State Implementation Plan.

#### WILLIAM H. YOUNG

MEZiolko:jl 229-5775 May 22, 1979 Attachments: 1) Statement of Need for Rulemaking 2) Hearing Officer's Report

3) Proposed Rule OAR 340-31-100

Agenda Item A4, June 8, 1979, EQC Meeting

#### STATEMENT OF NEED FOR RULEMAKING

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

#### 1) Legal Authority

ORS 468.020 and 468.295

- 2) Need for the Rule
  - a. This rule is needed to allow the Department to meet requirements of federal law and to assume the Prevention of Significant Deterioration Review Program from the Environmental Protection Agency.
  - b. After the Department takes over the review program, applicants will no longer have to submit applications and undergo review by both the Department and the Environmental Protection Agency.
- 3) Principal Documents Relied Upon in This Rulemaking
  - a. Federal Clean Air Act, Public Law 95-95; Amendments of August 7, 1977, Part C, Sections 160 through 169.
  - b. Code of Federal Regulations, 40 CFR 51.24 and 40 CFR 52.21 as published in the June 19, 1978, Federal Register, pages 26380 through 26410.

MEZ:jl 229-5775



# Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

#### MEMORANDUM

To: Environmental Quality Commission

From: Hearing Officer

Subject: Hearing Report on May 8, 1979 Hearing Re: Prevention of Significant Deterioration Rules

#### Summary of Procedure

Pursuant to public notice a public hearing was convened in the State Office Building, Room 773 in Portland at 3:07 p.m. on May 8, 1979. The purpose was to receive testimony regarding the adoption of a Prevention of Significant Deterioration (PSD) Rule.

Five people were present at the hearing but only one person offered testimony. In addition, written testimony was received by a concerned industry and Department of Environmental Quality staff introduced a statement for the record.

#### Summary of Testimony

<u>Mike Ziolko of the Department of Environmental Quality staff</u> introduced a statement into the record regarding changes that are required in the proposed rule due to informal comments received from the Environmental Protection Agency.

The following statement was entered into the record:

"The Environmental Protection Agency (EPA) has informed the Department that adoption of the EPA PSD rule by reference is unacceptable. The reason for this is the uncertainty of authority between state and federal governments that would arise from the many references to EPA and its administrator in the federal rule.

Because of this comment and upon advice of the attorney general's office, the Department will propose a state rewrite of the Federal PSD rule to the Environmental Quality Commission for adoption. This rule will be rewritten in the same format as all other Department rules. The rewrite will not change the intent or requirements of



Environmental Quality Commission May 8, 1979 Page 2

> the PSD rule proposed today but will more clearly portray the separation of state and federal authority in the PSD program as specified in the Clean Air Act Amendments of 1977."

Written testimony was presented by <u>Mr. R.W. Bogan, GATX Terminals</u> <u>Corporation.</u> He said that, in the opinion of some states and several industries, EPA failed to properly follow the direction of Congress in promulgating regulations and providing guidance to the States for PSD regulations. Furthermore, the PSD regulations are the subject of a suit in the United States Court of Appeals in Washington, D.C. He suggested that provision should be made in Oregon's rule for the revision of the rule should the Court determine that the existing federal rule is not consistent with the intent of Congress.

He particularly suggested the definitions for "major modification" and "potential to emit" as detailed in 340-31-100 (b) (2) and (3) be omitted since they are subject to court determination.

Written and oral testimony was presented by <u>Mr. Allan Mick, International</u> <u>Paper Company.</u> He described technical aspects of atmospheric particle size distributions and the resulting consequences of computer modeling on ambient air increments, (proposed OAR 340-31-100-C). He stated that large particles, size greater than 5 micrometers, do not have zero fallout as modeled in the PSD review procedures and that large particles fall out closer to the source than fine particles. He also said models used for PSD review were originally used for gaseous diffusion, not particulates, and are imperfect for large particles.

He went on to say that, including the emissions of large particles in the modeling, the modeled concentrations are increased and thus the allowable increments are used up faster. Mr. Mick said that in cases in North Carolina, Mississippi and Iowa, EPA allowed the discounting of larger particles when determining the increment that was used by a source.

Mr. Mick stated that the proposed regulation does not allow for discounting of large particles when determining increment consumption and recommended that all particles larger than 5 micrometers should be deleted from the emission inventory when performing PSD modeling.

As a final recommendation, Mr. Mick suggested that "as future modifications are adopted in federal PSD review procedures, a provision should be incorporated into the State Implementation Plan that would allow these modifications to be automatically incorporated into the state regulation." Environmental Quality Commission May 8, 1979 Page 3

## Recommendations

The Hearing Officer has no recommendation.

Respectfully submitted,

104 11 -

Linda Zucker Hearing Officer

MEZ:kmm 229-5775 May 9, 1979 A6239.1

#### Attachment 3

## Proposed Rules for the Prevention of Significant Deterioration

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Following are proposed rules for the Prevention of Significant Deterioration (PSD). Words in brackets [] are those which are to be deleted from the Federal PSD Rule. Underlined words are those added by the Department to clarify the rule and establish the Department's authority over the PSD program.

#### ATTACHMENT 3

#### PREVENTION OF SIGNIFICANT DETERIORATION

[(a) Plan disapproval. The provisions of this section are applicable to any State implementation plan which has been disapproved with respect to prevention of significant deterioration of air quality in any portion of any State where the existing air quality is better than the national ambient air quality standards. Specific disapprovals are listed where applicable, in subparts B through DDD of this part. The provisions of this section 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 section is so incorporated, the provisions shall also be applicable to all lands owned by the Federal Government and Indian Reservations located in such State. 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 portions of plans approved or promulgated under this part.]

### 340-31-100

## (a) General.

(1) The purpose of this rule is to implement a program to prevent significant deterioration of air quality in the State of Oregon as required by the Federal Clean Air Act Amendments of 1977.

-1-

(2) The Department will review the adequacy of the State Implementation Plan on a periodic basis and within 60 days of such time as information becomes available that an applicable increment is being violated. Any Plan revision resulting from the reviews will be subject to the opportunity for public hearing in accordance with procedures established in the Plan.

- (b) Definitions. For the purposes of this section:
  - (1) "Major stationary source" means--

(i) Any of the following stationary sources of air pollutants which emit, or have the potential to emit, 100 tons per year or more of any air pollutant [regulated under the Clean Air Act (the "Act")]: Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British

-2-

thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300 thousand barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants; and

(ii) Notwithstanding the source sizes specified in paragraph
(b)(1)(i) of this section, any source which emits, or has the potential to emit, 250 tons per year or more of any pollutant.
[regulated under the Act.]

(2) "Major modification" means any physical change in, change in the method of operation of, or addition to a stationary source which increases the potential emission rate of any air pollutant [regulated under the act] (including any not previously emitted and taking into account all accumulated increases in potential emissions occurring at the source since August 7, 1977, or since the time of the last construction approval issued for the source pursuant to this section, whichever time is more recent, regardless of any emission reductions achieved elsewhere in the source) by either 100 tons per year or more for any source category identified in paragraph (b)(1)(i) of this section, or by 250 tons per year or more for any stationary source.

(i) A physical change shall not include routine maintenance, repair and replacement.

(ii) A change in the method of operation, unless previously limited by enforceable permit conditions, shall not include:

-3-

(A) An increase in the production rate, if such increasedoes 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 by reason of an order in effect under Sections 2 (a) and (b) of the <u>federal</u> Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), or by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act;

(D) Use of an alternative fuel or raw material, if priorto January 6, 1975, the source was capable of accommodatingsuch fuel or material; or

(E) Use of an alternative fuel by reason of [an] <u>a federal</u> order or rule under Seciton 125 of the <u>federal Clean</u> <u>Air</u> Act;

(F) Change in ownership of the source.

(3) "Potential to emit" means the capability at maximum capacity to emit a pollutant in the absence of air pollution control equipment. "Air pollution control equipment" includes control equipment which is not, aside from air pollution control laws and regulations, vital to production of the normal product of the source or to its normal

-4-

operation. Annual potential shall be based on the maximum annual rated capacity of the source, unless the source is subject to enforceable permit conditions which limit the annual hours of operation. Enforceable permit conditions on the type or amount of materials combusted or processed may be used in determining the potential emission rate of a source.

(4) "Source" means any structure, building, facility, equipment, installation, or operation (or combination thereof) which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person (or by persons under common control).

(5) "Facility" means an identifiable piece of process equipment. A source is composed of one or more pollutant-emitting facilities.

(6) "Fugitive dust" means particulate matter composed of soil which is uncontaminated by pollutants resulting from industrial activity. Fugitive dust may include emissions from haul roads, wind erosion of exposed soil surfaces and soil storage piles and other activities in which soil is either removed, stored, transported, or redistributed.

(7) "Construction" means fabrication, erection, installation, or modification of a source.

(8) "Commence" as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:

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(i) Begun, or caused to begin, a continuous program of physical on-site construction of the source, to be completed within a reasonable time; or

(ii) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed within a reasonable time.

(9) "Necessary preconstruction approvals or permits" means those permits or approvals required under Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the [applicable] State Implementation Plan.

(10) "Best available control technology" means an emission limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant [subject to regulation under the act] which would be emitted from any proposed major stationary source or major modification which the [Administrator] <u>Department</u>, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR

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part 60 and part 61. If the [Administrator] Department 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, a design, equipment, work practice or operational standard, or combination thereof, may be prescribed instead to require the application of best available control technology. Such standard shall, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(11) "Baseline concentration" means that ambient concentration level reflecting actual air quality as of August 7, 1977, minus any contribution from major stationary sources and major modifications on which construction commenced on or after January 6, 1975. The baseline concentration shall include contributions from:

(i) The actual emissions of other sources in existence on August
7, 1977, except that contributions from facilities within such
existing sources for which a <u>P</u>lan revision proposing less
restrictive requirements was submitted on or before August 7,
1977, and was pending action by the <u>EPA</u> Administrator on that
date shall be determined from the allowable emissions of such
facilities under the Plan as revised; and

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(ii) The allowable emissions of major stationary sources and major modifications which commenced construction before January6, 1975, but were not in operation by August 7, 1977.

(12) "Federal Land Manager" means, with respect to any lands in the United States, the Secretary of the <u>federal</u> department with authority over such lands.

(13) "High terrain" means any area having an elevation 900 feet or more above the base of the stack of a facility.

(14) "Low terrain" means any area other than high terrain.

(15) "Indian reservation" means any Federally-recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.

(16) "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.

(17) "Reconstruction" will be presumed to have taken place where the fixed capital cost of the new components exceed 50 percent of the fixed capital cost of a comparable entirely new facility or source. However, any final decision as to whether reconstruction has occurred shall be based on:

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(i) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility.

(ii) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility.

(iii) The extent to which the components being replaced cause or contribute to the emissions from the facility.

A reconstructed source will be treated as a new source for purposes of this section, except that use of an alternative fuel or raw material by reason of an order in effect under sections 2 (a) and (b) of the <u>federal</u> Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act, or by reason of an order or rule under section 125 of the <u>federal Clean</u> <u>Air Act</u>, shall not be considered reconstruction. In determining best available control technology for a reconstructed source, the following provision shall be taken into account in assessing whether a standard of performance under 40 CFR part 60 is applicable to such source:

(i) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.

(18) "Fixed capital cost" means the capital needed to provide all of the depreciable components.

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(19) "Allowable emissions" means the emission rate calculated using the maximum rated capacity of the source (unless the source is subject to enforceable permit conditions which limit the operating rate, or hours of operation, or both) and the most stringent of the following:

(i) Applicable standards as set forth in 40 CFR part 60 and part61.

(ii) The [applicable] State Implementation Plan emission limitation, or

(iii) The emission rate specified as a permit condition.

(20) "State Implementation Plan" or "Plan" means the Clean Air Act Implementation Plan for Oregon as approved by the Environmental Quality Commission.

(21) "40 CFR" means Title 40 of the Code of Federal Regulations.

(22) "Air pollutant" means an air contaminant under Oregon statutes for which a state or national ambient air quality standard exists.

(c) Ambient <u>Air Increments. This paragraph defines significant</u> <u>deterioration.</u> In areas designated as class I, II or III, emissions from new or modified sources shall be limited such that increases in pollutant concentration over the baseline concentration shall be limited to the following:

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## MAXIMUM ALLOWABLE INCREASE

Micrograms per cubic meter

## CLASS I

POLITANT	
Particulate matter:	
Annual geometric mean	5
24-hr maximum	10
Sulfur dioxide:	
Annual arithmetic mean	2
24-hr maximum	5
3-hr maximum	25

## CLASS II

Particulate matter:	
Annual geometric mean	19
24-hr maximum	37
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	12

# CLASS III

Particulate matter:
Annual geometric mean 37
24-hr maximum
Sulfur dioxide:
Annual arithmetic mean 40
24-hr maximum
3-hr maximum

For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

(d) Ambient <u>Air Ceilings</u>. No concentration of a pollutant shall exceed:

(1) The concentration permitted under the national secondary ambient air quality standard, or

(2) The concentration permitted under the national primary ambient air quality standard, <u>or</u> [whichever concentration is lowest for the pollutant for a period of exposure.]

(3) The concentration permitted under the State ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

(e) Restrictions on Area Classifications.

(1) All of the following areas which were in existence on August7, 1977, shall be Class I areas and may not be redesignated:

(i) International parks,

[(ii) National wilderness areas which exceed 5,000 acres in size,]

[(iii) National memorial parks which exceed 5,000 acres in size, and]

(iv) National parks which exceed 6,000 acres in size.

Mt. Hood Wilderness

Eagle Cap Wilderness

Hells Canyon Wilderness

Mt. Jefferson Wilderness

Mt. Washington Wilderness

Three Sisters Wilderness

Strawberry Mountain Wilderness

Diamond Peak Wilderness

Crater Lake National Park

Kalmiopsis Wilderness

Mountain Lake Wilderness

Gearhart Mountain Wilderness

[(2) Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this section.]

[(3)] (2) [Any] All other areas, [unless otherwise specified in the legislation creating such an area, is] in Oregon are initially designated Class II, but may be redesignated as provided in this section.

 $\lfloor (4) \rfloor$  (3) The following areas may be redesignated only as Class I or II:

(i) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and

(ii) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

(f) Exclusions from Increment Consumption.

(1) [Upon written request of the Governor, made] <u>After notice and</u> opportunity for at least one public hearing [to be] held in accordance with procedures established in [51.4 of this chapter] <u>the Plan</u>, the [Administrator shall] <u>Department may</u> exclude the following concentrations in determining compliance with a maximum allowable increase:

(i) Concentrations attributable to the increase in emissions from sources which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under Sections 2 (a) and (b) of the <u>federal</u> Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) over the emissions from such sources before the effective date of such order;

(ii) Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to

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the Federal Power Act over the emissions from such sources before the effective date of such plan;

(iii) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary activities; and

(iv) The increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration.

(2) No exclusion under paragraph (f)(1) (i) or (ii) of this section shall apply more than five years after the effective date of the order to which paragraph (f)(1)(i) refers or the plan to which paragraph (f)(1)(ii) refers, whichever is applicable. If both such order and plan are applicable, no such exclusion shall apply more than five years after the later of such effective dates.

[(3) No exclusion under paragraph (f) of this section shall occur after March 19, 1979, if a State implementation plan revision meeting the requirements of 40 CFR 51.24 has not been submitted to the Administrator by that time.]

(g) Redesignation.

(1) All areas <u>in Oregon</u> (except as otherwise provided under paragraph
(e) of this section) are designated Class II as of December 5, 1974.

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Redesignation (except as otherwise precluded by paragraph (e) of this section) may be proposed by the [respective States] <u>Department</u> or Indian Governing Bodies, as provided below, subject to approval by the <u>EPA</u> Administrator as a revision to the [applicable] State <u>Implementation Plan</u>.

(2) The [State] <u>Department</u> may submit to the <u>EPA</u> Administrator a proposal to redesignate areas of the State Class I or Class II provided that:

(i) At least one public hearing has been held in accordance with procedures established in [Section 51.4 of this chapter] the Plan;

(ii) Other States, Indian Governing Bodies, and Federal Land
 Managers whose lands may be affected by the proposed
 redesignation were notified at least 30 days prior to the public
 hearing;

(iii) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;

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(iv) Prior to the issuance of notice respecting the redesignation of an area that includes any Federal lands, the [State] <u>Department</u> has provided written notice to the appropriate Federal land Manager and afforded adequate opportunity (not in excess of 60 days) to confer with the [State] <u>Department</u> respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, the [State] <u>Department</u> shall have published a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the Federal Land Manager); and

(v) The [State] <u>Department</u> has proposed the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

(3) Any area other than an area to which paragraph (e) of this Section refers may be redesignated as Class III if--

(i) The redesignation would meet the requirements of paragraph (g)(2) of this section;

(ii) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor [of the State], after consultation with the appropriate

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committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session (unless State law provides that the redesignation must be specifically approved by State legislation) and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation or pass resolutions concurring in the redesignation;

(iii) The redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard; and

(iv) Any permit application for any major stationary source or major modification, subject to review under paragraph (1) of this section, which could receive a permit under this section only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.

(4) Lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. The appropriate Indian Governing Body may submit to the <u>EPA</u> Administrator a proposal to redesignate areas Class I, Class II, or Class III: Provided, That:

(i) The Indian Governing Body has followed procedures equivalent

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to those required of [a State] the Department under paragraphs (g)(2), (g)(3)(iii), and (g)(3)(iv) of this section; and

(ii) Such redesignation is proposed after consultation with the State(s) in which the Indian Reservation is located and which border the Indian Reservation.

(5) The <u>EPA</u> Administrator shall disapprove, within 90 days of submission, a proposed redesignation of any area only if he finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this paragraph or is inconsistent with paragraph (e) of this section. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.

(6) If the <u>EPA</u> Administrator disapproves any proposed redesignation, the [State] <u>Department</u> or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the <u>EPA</u> Administrator.

(h) Stack Heights.

(1) The degree of emission limitation required for control of any air pollutant under this section shall not be affected in any manner by-

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(i) So much of the stack height of any source as exceeds good engineering practice, (see OAR 340-31-110, 111, 112) or

(ii) Any other dispersion technique.

(2) Paragraph (h)(1) of this section shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

(i) Review of <u>Major Stationary Sources</u> and <u>Major Modifications</u> - Source Applicability and <u>General Exemptions</u>.

(1) No major stationary source or major modification shall be constructed unless the requirements of paragraphs (j) through (r) of this section, as applicable, have been met. The requirements of paragraphs (j) through (r) shall apply to a proposed source or modification only with respect to those pollutants for which it would be a major stationary source or major modification.

(2) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification that was subject to the review requirements of 40 CFR 52.21(d)(1) for the prevention of significant deterioration as in effect before March 1, 1978, if the owner or operator--

(i) Obtained under 40 CFR 52.21 a final approval effective beforeMarch 1, 1978;

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(ii) Commenced construction before March 19, 1979; and

(iii) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time.

(3) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification that was not subject to 40 CFR 52.21 as in effect before March 1, 1978, if the owner or operator--

 (i) Obtained all final Federal, State and local preconstruction permits necessary under the [applicable] State Implementation
 Plan before March 1, 1978;

(ii) Commenced construction before March 19, 1979; and

(iii) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time.

(4) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification that was subject to 40 CFR 52.21 as in effect before March 1, 1978, if review of an application for approval for the source of modification under 40 CFR 52.21 would have been completed by March 1, 1978, but for an extension of the public comment period pursuant to a request for such an extension. In such a case, the application shall continue to be processed, and granted or denied, under 40 CFR 52.21 as in effect prior to March 1, 1978.

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(5) The requirements of paragraphs (j),(1),(n) and (p) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that--

(i) As to that pollutant, the source or modification is subject to the <u>federal</u> emission offset ruling (41 FR 55524), as it may be amended, or to regulations approved or promulgated pursuant to Section 173 of the Act; and

(ii) The source or modification would impact no area attaining the national ambient air quality standards (either internal or external to areas designated as nonattainment under Section 107 of the Act).

(6) The requirements of paragraphs (j) through (r) of this section shall not apply, upon written request to EPA [of] by the Governor [of a State,] to a nonprofit health or education institution to be located in [that State] Oregon.

(7) A portable facility which has previously received construction approval under the requirements of this section as applicable may relocate without again being subject to those requirements if--

(i) Emissions from the facility would not exceed allowable emissions;

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(ii) Emissions from the facility would impact no Class I area and no area where an applicable increment is known to be violated; and

(iii) Notice is given to the [Administrator] <u>Department</u> at least 30 days prior to such relocation identifying the proposed new location and the probable duration of operation at such location.

(j) Control Technology <u>Review</u>.

(1) A major stationary source or major modification shall meet all applicable emissions limitations under the State <u>Implementation Plan</u> and all applicable emission standards and standards of performance under 40 CFR Part 60 and Part 61.

(2) A major stationary source or major modification shall apply best available control technology for each applicable pollutant, unless the increase in allowable emissions of that pollutant from the source or modification would be less than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, whichever is most restrictive.

(i) The preceding hourly and daily rates shall apply only with respect to a pollutant for which an increment, or national ambient air quality standard, for a period less than 24 hours or for a 24 hour period, as appropriate, has been established.

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(ii) In determining whether and to what extent a modification would increase allowable emissions, there shall be taken into account no emission reductions achieved elsewhere at the source at which the modification would occur.

(3) In the case of a modification, the requirement for best available control technology shall apply only to each new or modified facility which would increase the allowable emissions of an applicable pollutant.

(4) Where a facility within a source would be modified but not reconstructed, the requirements for best available control technology notwithstanding paragraph (j)(2) of this section, shall not apply to such facility if no net increase in emissions of an applicable pollutant would occur at the source, taking into account all emission increases and decreases at the source which would accompany the modification, and no adverse air guality impact would occur.

(5) For phased construction projects the determination of best available control technology shall be reviewed, and modified as appropriate, at the latest reasonable time prior to commencement of construction of each independent phase of the proposed source or modification.

(6) In the case of a major stationary source or major modification which the owner or operator proposes to construct in a Class III area, emissions from which would cause or contribute to air quality exceeding the maximum allowable increase that would be applicable

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if the area were a Class II area and where no standard under 40 CFR Part 60 has been promulgated for the source category, the Department shall determine the best available control technology.

(k) Exemptions from Impact Analyses.

(1) The requirements of paragraphs (1), (n), and (p) shall not apply to a major stationary source or major modification with respect to a particular pollutant, if--

(i) The increase in allowable emissions of that pollutant from the source or modification would impact no Class I area and no area where an applicable increment is known to be violated; and

(ii) The increase in allowable emissions of that pollutant from the source or modification would be less than 50 tons per year,1,000 pounds per day, or 100 pounds per hour, whichever is more restrictive; or

(iii) The emissions of the pollutant are of a temporary nature including but not limited to those from a pilot plant, a portable facility, construction, or exploration; or

(iv) A source is modified, but no increase in the net amount emissions for any pollutant subject to a national ambient air quality standard and no adverse air quality impact would occur.

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(2) The hourly and daily rates set in paragraph (k)(l)(ii) of this section shall apply only with respect to a pollutant for which an increment, or <u>state or</u> national ambient air quality standard, for a period of less than 24 hours or for a 24-hour period, as appropriate, has been established.

(3) In determining for the purpose of paragraph (k)(1)(ii) of this section whether and to what extent the modification would increase allowable emissions, there shall be taken into account no emission reduction achieved elsewhere at the source at which the modification would occur.

(4) In determining for the purpose of paragraph (k)(l)(iv) of this section whether and to what extent there would be an increase in the net amount of emissions for any pollutant subject to a <u>state or</u> national ambient air quality standard from the source which is modified, there shall be taken into account all emission increases and decreases occurring at the source since August 7, 1977.

(5) The requirements of paragraphs (1), (n), and (p) of this section shall not apply to a major stationary source or to a major modification with respect to emissions from it which the owner or operator has shown to be fugitive dust.

(1) Air Quality <u>Review</u>. The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable

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emissions increases or reductions, would not cause or contribute to air polution in violation of:

- Any <u>State or</u> national ambient air quality standard in any air quality control region; or
- (2) Any applicable maximum allowable increase over the baseline concentration in any area.
- (m) Air Quality Models.

(1) All estimates of ambient concentrations required under [this section] <u>paragraph(1)</u> shall be based on the applicable air quality models, data bases, and other requirements specified in the "Guideline on Air Quality Models" (OAQPS 1.2-080, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, April 1978). [This document is incorporated by reference. On April 27, 1978, the Office of the Federal Register approved this document for incorporation by reference. A copy of the guideline is on file in the Federal Register library.]

(2) Where an air quality impact model specified in the "Guideline on Air Quality Models" is inappropriate, the model may be modified or another model substituted. Such a change must be subject to notice and opportunity for public comment under paragraph (r) of this section. Written approval of the <u>EPA</u> Administrator must be obtained for any modification or substitution. Methods like those outlined in the "Workbook for the Comparison of Air Quality Models"

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(U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, May 1978) should be used to determine the comparability of air quality models.

(3) The documents referenced in this paragraph are available for public inspection at [EPA's Public Information Reference Unit and at the libraries of each of the ten EPA Regional Offices. Copies are available as supplies permit from the Library Service Office (MD-35), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711. Also, copies may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.] the Department of Environmental Quality's Air Quality Control Division headquarters office.

(n) Monitoring.

(1) The owner or operator of a proposed source or modification shall, after construction of the source or modification, conduct such ambient air quality monitoring as the [Administrator] <u>Department</u> determines may be necessary to establish the effect which emissions from the source or modification of a pollutant for which a <u>state or</u> national ambient air quality standard exists (other than non-methane hydrocarbons) may have, or is having, on air quality in any area which such emissions would affect.

(2) As necessary to determine whether emissions from the proposed source or modification would cause or contribute to a violation of a state or national ambient air quality standard, any permit

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application submitted after August 7, 1978, shall include an analysis of continuous air quality monitoring data for any pollutant emitted by the source or modification for which a <u>state or</u> national ambient air quality standard exists, except non-methane hydrocarbons. Such data shall relate to, and shall have been gathered over, the year preceding receipt of the complete application, unless the owner or operator demonstrates to the [Administrator's] <u>Department's</u> satisfaction that such data gathered over a portion or portions of that year or another representative year would be adequate to determine that the source or modification would not cause or contribute to a violation of a <u>state or</u> national ambient air quality standard.

(o) Source <u>Information</u>. The owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under this section.

(1) With respect to a source or modification to which paragraphs (j),
(1), (n), and (p) of this section apply, such information shall include:

 (i) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

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(ii) A detailed schedule for construction of the source or modification;

(iii) A detailed description as to what system of continuous emission reduction is planned for the source or modification, emission estimates, and any other information necessary to determine that best available control technology would be applied.

(2) Upon request of the [Administrator] <u>Department</u>, the owner or operator shall also provide information on:

 (i) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and

(ii) The air quality impacts, and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification would affect.

(p) Additional Impact Analyses.

(1) The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth assocated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

(2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

(q) Sources Impacting Federal Class I Areas--Additional Requirements.--

[(1) Notice to Federal Land Managers. The Administrator shall provide notice of any permit application for a proposed major stationary source or major modification the emissions from which would affect a Class I area to the Federal Land Manager, and the Federal official charged with direct responsibility for management, of any lands within any such area. The Administrator shall provide such notice promptly after receiving the application. The Administrator shall also provide the Federal Land Manager and such Federal officials with a copy of the preliminary determination required under paragraph (r) of this section, and shall make available to them any materials used in making that determination, promptly after the Administrator makes it.]

(1) Notice to EPA. The Department shall transmit to the EPA Administrator a copy of each permit application relating to a major stationary source or major modification and provide notice to the Administrator of every action related to the consideration of such permit.

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(2) Federal Land Manager. The Federal Land Manager and the Federal official charged with direct responsibility for management of [such] <u>Class I</u> lands have an affirmative responsibility to protect the air quality related values (including visibility) of such lands and to consider, in consultation with the <u>EPA</u> Administrator, whether a proposed source or modification will have an adverse impact on such values.

(3) Denial--impact on air quality related values. The Federal Land Manager of any such <u>Class I</u> lands may <u>present a</u> [demonstrate] <u>demonstration</u> to the [Administrator] <u>Department</u> that the emissions from a proposed source or modification would have an adverse impact on the air quality-related values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the [Administrator] <u>Department</u> concurs with such demonstration, then [he] <u>it</u> shall not issue the permit.

(4) Class I variances. The owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source or modification would have no adverse impact on the air quality related values of [any such] the Class I lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the

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maximum allowable increases for a Class I area. If the Federal Land Manager concurs with such demonstration and he so certifies, the [State] <u>Department</u> may, [authorize the Administrator;] provided, that the applicable requirements of this section are otherwise met, [to] issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide and particulate matter would not exceed the following maximum allowable increases over baseline concentration for such pollutants:

	Maximum allowable increase (micrograms per cubic meter)
Particulate matter:	
Annual geometric mean	. 19
24-hr maximum	. 37
Sulfur dioxide:	
Annual arithmetic mean	. 20
24-hr maximum	. 91
3-hr maximum	. 325

(5) Sulfur dioxide variance by Governor with Federal Land Manager's concurrence. The owner or operator of a proposed source or modification which cannot be approved under paragraph (q)(4) of this section may demonstrate to the Governor that the source <u>or</u> <u>modification</u> cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for a period of twenty-four hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility). The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may, after notice and public hearing, grant a variance from such

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maximum allowable increase. If such variance is granted, the [Administrator shall] Department may issue a permit to such source or modification pursuant to the requirements of paragraph (q)(7) of this section: Provided, That the applicable requirements of this section are otherwise met.

(6) Variance by the Governor with the President's concurrence. In any case where the Governor recommends a variance in which the Federal Land Manager does not concur, the recommendations of the Governor and the Federal Land Manager shall be transmitted to the President. The President may approve the Governor's recommendation if he finds that the variance is in the national interest. If the variance is approved, the [Administrator shall] <u>Department may</u> issue a permit pursuant to the requirements of paragraph (q)(7) of this section: Provided, That the applicable requirements of this section are otherwise met.

(7) Emission limitations for Presidential or gubernatorial variance. In the case of a permit issued pursuant to paragraph (q)(5) or (6) of this section the source or modification shall comply with such emission limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable

-34-

maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

# Maximum Allowable Increase

(Micrograms per cubic meter)

																						<u>Terrain</u> Low	areas High
24-hr maximum 3-hr maximum	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	36 130	62 221

(r) Public Participation.

(1) Within 30 days after receipt of an application to construct, or any addition to such application, the [Administrator] <u>Department</u> shall advise the applicant of any deficiency in the application or in the information submitted. In the event of such a deficiency, the date of receipt of the application shall be, for the purpose of this section, the date on which the [Administrator] <u>Department</u> received all required information.

(2) Within <u>one (1)</u> year after receipt of a complete application, the [Administrator] <u>Department</u> shall make a final determination on the application. This involves performing the following actions in a timely manner.

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

-35-

(ii) Make available in at least one location in each region , in which the proposed source or modification would be constructed a copy of all materials the applicant submitted, a copy of the preliminary determination and a copy or summary of other materials, if any, considered in making the preliminary determination.

(iii) Notify the public, by advertisement in a newspaper of general circulation in each region in which the proposed source or modification would be constructed, of the application, the preliminary determination, the degree of increment consumption that is expected from the source or modification, and the opportunity for comment at a public hearing as well as written public comment.

(iv) Send a copy of the notice of public comment to the applicant and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: [State and] local air pollution control agencies, the chief executives of the city and county where the source or modification would be located, any comprehensive regional land use planning agency and any State, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the source or modification.

-36-

(v) Provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source or modification, alternatives to the source or modification, the control technology required, and other appropriate considerations.

(vi) Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing(s) in making a final decision on the approvability of the application. No later than 10 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] <u>Department</u> shall consider the applicant's response in making a final decision. The [Administrator] <u>Department</u> shall comments available for public inspection in the same locations where the [Administrator] <u>Department</u> made available preconstruction information relating to the proposed source or modification.

(vii) Make a final determination whether construction should be approved, approved with conditions, or disapproved pursuant to this section.

(viii) Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the [Administrator]

-37-

<u>Department</u> made available preconstruction information and public comments relating to the source or modification.

(3) The requirements of paragraph (r) of this section shall not apply to any major stationary source or major modification which paragraph (k) would exempt from the requirements of paragraphs (l), (n) and (p), but only to the extent that, with respect to each of the criteria for construction approval under the [applicable] State <u>Implementation Plan</u> and for exemption under paragraph (k), requirements providing the public with at least as much participation in each material determination as those of paragraph (r) have been met in the granting of such construction approval.

(s) Source <u>Obligation</u>.

(1) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this section or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this section who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

(2) Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or

-38-

if construction is not completed within a reasonable time. The [Administrator] <u>Department</u> may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

(3) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State <u>Implementation Plan</u> and any other requirements under local, State, or Federal law.

(t) Environmental impact statements. Whenever any proposed source or modification is subject to action by a Federal Agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321), review by the Administrator conducted pursuant to this section shall be coordinated with the broad environmental reviews under that Act and under Section 309 of the Clean Air Act to the maximum extent feasible and reasonable.

 (u) Disputed permits or redesignations. If any State affected by the redesignation of an area by an Indian Governing Body, or any Indian
Governing Body of a tribe affected by the redesignation of an area by a State, disagrees with such redesignation, or if a permit is proposed to

-39-

be issued for any major stationary source or major modification proposed for construction in any State which the Governor of an affected State or Indian Governing Body of an affected tribe determines will cause or contribute to a cumulative change in air quality in excess of that allowed in this part within the affected State or Indian Reservation, the Governor or Indian Governing Body may request the Administrator to enter into negotiations with the parties involved to resolve such dispute. If requested by any State or Indian Governing Body involved, the Administrator shall make a recommendation to resolve the dispute and protect the air quality related values of the lands involved. If the parties involved do not reach agreement, the Administrator shall resolve the dispute and his determination, or the results of agreements reached through other means, shall become part of the applicable State implementation plan and shall be enforceable as part of such plan. In resolving such disputes relating to area redesignation, the Administrator shall consider the extent to which the lands involved are of sufficient size to allow effective air quality management or have air quality related values of such an area.

(v) Delegation of authority. (1) The Administrator shall have the authority to delegate his responsibility for conducting source review pursuant to this section, in accordance with paragraphs (v)(2) and (3) of this section.

(2) Where the Administrator delegates the responsibility for conducting source review under this section to any agency other than a Regional Office of the Environmental Protection Agency, the following provisions shall apply:

-40-

(i) Where the delegate agency is not an air pollution control agency, it shall consult with the appropriate State and local air pollution control agency prior to making any determination under this section. Similarly, where the delegate agency does not have continuing responsibility for managing land use, it shall consult with the appropriate State and local agency primarily responsible for managing land use prior to making any determination under this section.

(ii) The delegate agency shall send a copy of any public comment notice required under public comment notice required under paragraph (r) of this section to the Administrator through the appropriate Regional Office.

(3) The Administrator's authority for reviewing a source or modification located on an Indian Reservation shall not be redelegated other than to a Regional Office of the Environmental Protection Agency, except where the State has assumed jurisdiction over such land under other laws. Where the State has assumed such jurisdiction, the Administrator may delegate his authority to the States in accordance with paragraph (v)(2) of this section.

(4) In the case of a source or modification which proposes to construct in a class III area, emissions from which would cause

-41-

or contribute to air quality exceeding ther maximum allowable increase applicable if the area were designated a class II area, and where no standard under section 111 of the act has been promulgated for such source category, the Administrator must approve the determination of best available control technology as set forth in the permit.]



# Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

## MEMORANDUM

To:Environmental Quality CommissionFrom:DirectorSubject:Agenda Item No. A5, June 8, 1979, EQC Meeting

## Background and Problem Statement

Stack height limitations were first published as a guideline by EPA on February 18, 1976. The Clean Air Act Amendments of August 7, 1977, in Section 123, changed EPA's guideline. EPA amended the guideline on January 12, 1979, Federal Register pages 2608 to 2614. The law and rule prohibit excessive stack height or other dispersion techniques to avoid violating federal ambient air quality standards; they forbid the use of excessive stack height only in computations in modeling, but do not prevent the building of high stacks or use of other methods of dispersing air pollutants as a supplemental mitigator of impacts. Oregon has no excessively high stacks or dispersion techniques (which were given approval for construction or use since 1970), so the proposed Oregon stack height rule will have only future applications.

Adoption of Stack Height Rule (OAR 340-31-110 to 112)

The Statement of Need prepared pursuant to ORS 183.333(7) and 183.335(1) is attached.

## Alternatives and Evaluation

EPA has consistently requested industry to lessen air pollution by capturing pollutants rather than using tall stacks or other means to disperse air pollution. Congress subsequently included Section 123 in the Clean Air Act in 1977.

The proposed rule, OAR 340-31-110 to 112 is an exact equivalent of the federal law and rule but was rephrased to make it more understandable. Testimony on the rule was received from three sources. The first source was EPA who asked that the rule be applicable to all air pollutants under



Environmental Quality Commission June 8, 1979 Page 2

the Clean Air Act. To accomplish this, the first sentence in the rule was revised to show that the rule was applicable "for any air pollutant or air contaminant". A second comment came from the DEQ staff. The staff noted that the exemption, given by the act for sources such as tall stacks or other dispersion techniques in existence before December 31, 1970, had not been included in the rule. This exemption from the rule is included as the second sentence at the beginning of the rule in Section 340-31-110. The third comment was presented by Dr. Walter of Crown-Zellerbach and included a seven page statement on stack heights from Dr. John Pinkerton. The essence of these comments is that the federal rule and law are not specific enough and seem to outlaw certain forms of dispersion techniques. The Department takes this critique under advisement but declines to expand the rule to include all the "what ifs" included in this testimony from Mr. Pinkerton. Considering the rare use of this rule the staff is of the opinion that it is already lengthy enough and that it is prudent to not include considerable detail and added paragraphs and definitions desired by Dr. Pinkerton. Should any of these situations arise, we will refer to the seven page explanation given by Dr. Pinkerton as part of the Department's file on what constitutes dispersion technique and good engineering practice with regard to stack height.

This rule will assure EPA that the Department will not give credit to excessive stack heights when modeling is used to show compliance with Prevention of Significant Deterioration rules or non-attainment area control strategies.

#### Summation

The Oregon stack height rule is required by the Clean Air Act Amendments to prevent using tall stacks or other dispersion methods to meet ambient air quality standards.

#### Directors Recommendation

Based upon the summation, it is recommended that the Commission adopt the revised proposed rule (OAR 340-31-110 to -112) and direct the Department to submit it to EPA as a revision to the State Implementation Plan.

Bill

WILLIAM H. YOUNG

#### Statement of Need

The Environmental Quality Commission intends to adopt a Stack Height Rule, OAR 340-31-110 through 112.

a. Legal Authority: ORS 468.020 and 468.295

b. Need for Rule:

A State "stack height" rule is needed to meet requirements of the Clean Air Act Amendments so that tall stacks or other dispersion techniques are not used to meet ambient air standard requirements. The Rule would not prevent construction of tall stack or use of dispersion techniques as an added benefit to the actual prevention or capture of emissions.

c. Documents Principally Relied Upon:

- Federal Clean Air Act P.L. 95-95, Amendments of August 7, 1977, Section 123.
- 2. Code of Federal Regulations 40 CFR 51.1, 51.12(j), and 51.18(j), see Federal Register January 12, 1979, pp 2608-2614.



Recycled Materials

# Environmental Quality Commission

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

### MEMORANDUM

То:	Environmental Quality Commission	Date:	May 17, 1979
From:	Hearing Officer		
Subject:	Hearing Report for Hearing Held May 8, . To Limit Stack Heights in Air Quality Mo 340-31-110 through 31-112)	1979 Reg odeling	arding Rules (Proposed OAR

#### Summary of Procedure.

As advertised by public notice, a public hearing was convened in Room 773 of the State Office Building in Portland at 9:00 a.m. The purpose was to receive testimony on proposed revisions to the State Implementation Plan regarding Rules To Limit Stack Heights in Air Quality Modeling. Representing the Department of Environmental Quality were Linda Zucker, Hearings Officer, and Peter B. Bosserman and Marianne E. Fitzgerald of the Air Quality staff.

## Summary of Testimony

Oral and written testimony was offered by <u>Dr. James E. Walther</u> of Crown-Zellerbach Corporation in Camas, Washington, representing the Northwest Pulp and Paper Association (NWPPA).

Dr. Walther said as general testimony that if current litigation results in changes to federal regulations, NWPPA recommends that DEQ adopt a policy to ensure that the present proposed regulations, if adopted, will be reopened for comment and that appropriate changes will be made to bring these regulations in conformance with changes in federal requirements.

NWPPA is specifically concerned that, as presently worded in the Stack Height Rules, the prohibition of the use of "any other dispersion technique" could be construed to prohibit a valuable method of mitigating plume downwash, stack tip downwash. Therefore, "dispersion technique" should be made more specific so as to not include items which pertain to manipulation of source process parameters. Dr. Walther attached comments of Dr. John E. Pinkerton, Research Meteorologist for the National Council for the Paper Industry for Air and Stream Improvement, to the Environmental Protection Agency regarding stack height increase guidelines published in the Federal Register, to support his testimony. Environmental Quality Commission May 17, 1979 Page 2

Written testimony was submitted by the <u>U.S. Environmental Protection</u> <u>Agency</u>. EPA said the phrase "to attain or maintain compliance with national ambient air quality standards" in OAR 340-31-110 is too restrictive and should be expanded to include all pollutants, as contained in Section 123 of the Clean Air Act.

No other witnesses offered testimony on this matter.

## Recommendation

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Your hearing officer makes no recommendation on this matter.

Respectfully submitted,

Linda Zucker

Hearing Officer

MEF:sb

#### Stack Heights

340-31-110 The degree of emission limitation required for any air pollutant or air contaminant shall not be affected in any manner by:

- the use of a stack height that exceeds good engineering practice, or,
- 2) the use of any other dispersion technique.

The preceding sentence shall not apply with respect to stack heights in existence before December 31, 1970, or dispersion techniques implemented before that date.

340-31-111 The Department shall give public notice about stack heights that exceed good engineering practice prior to issuing an air contaminant discharge permit.

340-31-112 Definitions. As used in OAR 340-31-110 to 340-31-112, unless otherwise required by context:

- "Dispersion technique" means any control of air pollutants varying with atmospheric conditions including but not limited to supplementary or intermittent control systems and excessive use of enhanced plume rise.
- 2) "Good engineering practice stack height" means that stack height necessary to ensure that emissions from the stack do not result in excessive concentrations of any air pollutant in the immediate vicinity of the source as a result of atmospheric downwash, eddies, and wakes which may be created by the source itself, nearby structures or nearby terrain obstacles and shall not exceed any of the following as appropriate:
  - (a) 30 meters, for stacks influenced by structures or terrain;
  - (b) H<sub>G</sub> = H + 1.5 L where H<sub>G</sub> = good engineering practice stack height H = height of structure or nearby structure L = lesser dimension (height or width) of the structure or nearby structure; for stacks influenced by structures;
  - (c) such height as an owner or operator of a source demonstrates is necessary through the use of field studies or fluid models after notice and opportunity for public hearing.

PPB:jl A6264.A



Non-

# Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

# MEMORANDUM

- To: Environmental Quality Commission
- From: Director
- Subject: Amendment No. 1, Agenda Items No. B-1, B-2, B-3 and B-4, June 8, 1979 EQC Meeting

# Further Public Comments on the Proposed State Implementation Plan Revisions

# Purpose of Amendment

Comments on the State Implementation Plan from other government agencies, solicited through the A-95 Review process, were received too late to be included in the above mentioned staff reports. It is necessary to include these comments in the State Implementation Plan (Attachment 1),

The Department felt that only the comments from the Department of Land Conservation and Development regarding Section 4.2.3.3 of the State Implementation Plan needed a response. This response is included in this amendment as Attachment 2. The revised pages of the State Implementation Plan are included as Attachment 3.

# Director's Recommendation

It is recommended that the proposed State Implementation Plan control strategies with the subject staff reports be modified to include the comments of Attachment 1 to the following:

Agenda Item B-1, Attachment 8, Appendix 4.2-4 and Appendix 4.3-3;

Agenda Item B-2, Attachment 5, Appendix 4.4-9;

Agenda Item B-3, Attachment 3, Appendix 4.7-7;

Agenda Item B-4, Attachment 6, Appendix 4.8-9 and Appendix 4.9-8.



It is also recommended that the proposed State Implementation Plan control strategies for carbon monoxide and ozone in the Portland-Vancouver Interstate Air Quality Maintenance Area with the subject staff report be modified to include the Department's response of Attachment 2 and 3 to the following:

Attachment 2 Agenda Item B-1, Attachment 8, Appendix 4.2-4, page 1 A and Appendix 4.3-3, page 1 A.

Attachment 3 Agenda Item B-1, Attachment 8, Section 4.2 (Carbon Monoxide State Implementation Plan Revision), page 30 and Section 4.3 (Ozone State Implementation Plan Revision), page 21.

WILLIAM H. YOUNG

MEFitzgerald 229-5353 June 7, 1979 Attachments:

- (1) Comments received through A-95 Review
- (2) Department's Response to Department of Land Conservation and Development's comments for the Portland-Vancouver Interstate AQMA
- (3) Amended pages of the State Implementation Plan, Section 4.2 page 30 and Section 4.3, page 21

# STATINGSEGI TACITICATION AND REVIEW SIDIEM

NOTIFICATION OF INTENT TO APPLY FOR FEDERAL AID

ATTACHMENT 1

	For Internal I-8] Use Only PNRS #						Page One				
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	ADDITIONAL INFORMATION-ALL A	PPLICANTS
1, *	A. Is the project consistent with the city or county comprehensive plan, zoning and subdivision ordinance?	No 🗍 Yes 🕅
1.	B. Is the proposal consistent with statewide land use goals?	No 🗌 Yes 🕅
1.	C. Is the proposal consistent with state and regional plans?	No 🗌 Yes 🕅
H.	Will the project have an impact on a neighboring jurisdiction?	No X Yes T
;	If so, is the project consistent with the comprehensive plan for that jurisdiction?	No 🕅 Yes 🗍
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<u>IV.</u>	Federal Catalog number (or Public Law no. and title) p. 1. 95-95 (	Clean Air Act
. <b>V.</b>	Has funding agency been notified? N/A	No 📋 Yes 🔲 Date:
VI.	If project includes state funds (12C), identify agency $N/\Delta$	
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Form PNRS-1 Page 2



OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

# STATE CLEARINGHOUSE

Intergovernmental Relations Division Room 306, State Library Building Salem, OR. 97310, Phone: 378-3732

# PROJECT ACKNOWLEDGEMENT

APPLICANT: DEO	
PROJECT TITLE:	Revised Clean Air Act Implementation Plan
DATE RECEIVED:	April 18, 1979
PNRS #:	7904 6 780

Your project has been assigned the file title and number that appear above. Use this reference in all future correspondence regarding this project.

Initial 30-day State Clearinghouse review of your Notice of Intent began on the above date.

The 30-day State Clearinghouse review of your final application began on the above date.



Initial 30-day State Clearinghouse review of this HUD Housing project began on the above date.



Initial 30-day State Clearinghouse review of your Direct Federal Development project began on the above date.



The 30-day State Clearinghouse review of your final Environmental Impact Statement began on the above date.



Initial 45-day State Clearinghouse review of your draft Environmental Impact Statement began on the above date.



The 45-day State Clearinghouse review of your State Plan/ Amendment began on the above date.

Your project must also be submitted to the affected areawide clearinghouses for review.

If you have questions or need assistance, contact the State Clearinghouse at the above address and telephone number.

ł



VICTOR ATIYEH

OFFICE OF THE GOVERNOR STATE CAPITOL SALEM. OREGON 97310 May 29, 1979

Marianne E. Fitzgerald State of Oregon Department of Environmental Quality P.O. Box 1760 522 S.W. Fifth Avenue Portland, OR. 97207

Dear Ms. Fitzgerald:

RE: Revised Clean Air Act Implementation PNRS 7904 6 780

Thank you for the opportunity to review your state plan.

This plan has been circulated for review among the appropriate state agencies. Comments made by the Department of Energy and Fish and Wildlife are enclosed for your information.

I am pleased to add my endorsement as required by OMB Circular A-95, Part III.

Sincerely, Victor Atiyéh,

Governor

VA:wb

Enclosures

State of Oregon DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY CONTROL

21 -27

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

# STATE CLEARINGHOUSE

LECEIVED

/FR 20 779

Intergovernmental Relations Division STATE LIBRARY BLDG, Salem, Oregon 97310 I FPT. OF ENERGY Phone: 378-3732 QOM 306,

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Return Date: MAY 2.5 1979

Project #

To Agency Addressed: The attached State Plan/Amendment has been submitted in conjunction with a request for the Governor's approval. It is provided for your information and to solicit comments for the advice and counsel of the Governor. Your comments, if any, must be received by the above date in order to receive consideration.

# COMMENTS

The Department of Energy recommends that DEQ consider inclusion of a general discussion relating to the potential air quality impacts of various energy options in the 1979 revisions to the <u>State of Oregon Clean Air Act Implementation Plan</u>. Future coal fired electric generating plants and development of alternate energy sources, especially geothermal and decentralized wood burning, could have significant impacts on implementation of clean air requirements. As these energy options are developed in the next few years, additional detailed revisions to this implementation plan may be required.

The Department of Energy requests a continued involvement in the development of this plan.

Agency



# OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

# STATE CLEARINGHOUSE

Intergovernmental Relations Division STATE LIBRARY BLDG, Salem, Oregon ROOM 306 Phone: 3

Salem, Oregon 97310 Phone: 378-3732 MAY 25 1879 Reside

Project # 7904 6 79 Return Date:

To Agency Addressed: The attached State Plan/Amendment has been submitted in conjunction with a request for the Governor's approval. It is provided for your information and to solicit comments for the advice and counsel of the Governor. Your comments, if any, must be received by the above date in order to receive consideration.

## COMMENTS

It is known that poor air quality will adversely affect human health. Studies on the effect of air quality on wildlife are limited, but it can be assumed that the impacts will be similar. Consequently, if the proposed revisions to Oregon's Clean Air Act Implementation Plan, which reduce existing standards, negatively impact humans, then Oregon's wildlife populations may also be affected.

Agenc

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# MID WILLAMETTE VALLEY COUNCIL OF GOVERNMENTS

400 SENATOR BUILDING \* 220 HIGH ST. N.E., SALEM, OREGON 97301TELEPHONE (503) 588-6177ALAN H. HERSHEY, Director

May 11, 1979

Ms. Marianne E, Fitzgerald Air Quality Division Department of Environmental Quality P.O. Box 1760 Portland, OR 97207 PROJECT TITLE; REVISIONS TO THE CLEAN AIR ACT IMPLEMENTATION PLAN

APPLICANT: DEQ

SUBJECT: A-95 Review

Dear Ms. Fitzgerald:

The Clearinghouse staff of the Council of Governments has completed its review of the subject project.

Your Notice of Intent was referred to appropriate local agencies for review. The comments from Polk County Board of Commissioners, City of Salem Community Development and COG's Transportation Coordinator are attached for your consideration. A complete list of those who received a copy of your Notice is also attached.

The comments we received indicate that the project is consistent with comprehensive planning and local plans, programs and objectives and no significant conflicts have been identified.

A copy of this letter and the attached comments should be included with your application to the Federal Agency as evidence of compliance with OMB Circular A-95.

Very truly yours,

Jockin

Jahes R. Hockin Clearinghouse Officer

JRH/g cc: Martin Loring, State Clearinghouse Coordinator Attachments



#### MEMBER AGENCIES:

State of Oregon. COUNTIES: Marion, Polk, Yamhill. CITIES: Amity, Aumsville, Aurora, Carlton, Dallas, Dayton, Detroit, Falls City, Gervais, Hubbard, Idanha, Independence, Jefferson, Lafayette, McMinnville, Monmouth, Mt. Angel, Newberg, Salem, Sheridan, Silverton, Stayton, Sublimity, Turner, Willamina, Woodburn. SPECIAL DISTRICTS: Chemeketa Community College, Marion County Fire District #1, Marion County Intermediate Education District, Yamhill County Intermediate Education District, Marion, Polk and Yamhill Soil & Water Conservation Districts, Salem School District 24J.



# POLK COUNTY BOARD OF COMMISSIONERS

HENRYA (HANK) DOUGHERTY LYN HARDY CHAIRMAN COMMISSIONER

TELEPHONE: 623-6171, EXTENSION 221

MISSIONER

BENJ F. MAGILL COMMISSIONER

COUNTY COURTHOUSE DALLAS, OREGON 97338

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MID WILLAMETTE VALLEY COUNCIL of GOVERNMENTS

May 7, 1979

James R. Hockin, Clearinghouse Officer Mid-Willamette Valley Council of Governments 400 Senator Building 220 High Street NE Salem, Oregon 97301

Dear Mr. Hockin:

In response to your letter received April 20, 1979, and "Notice of Intent" concerning the following project, the Polk County Board of Commissioners has no comments, negative or positive, to the application of this grant.

1. Revisions to the Oregon State Clean Air Act Implementation Act

Yours truly,

POLK COUNTY BOARD OF COMMISSIONERS

Henry A (Hank HAD: 17





COMMUNITY DEVELOPMENT Telephone (503) 588-6011

May 4, 1979



Mr. James R. Hockin, Clearinghouse Officer Mid Willamette Valley Council of Governments 400 Senator Building 220 High Street, NE Salem, OR 97301 MID WILLAMETTE VALLEY COUNCIL of GOVERNMENTS

Dear Mr. Hockin:

# SUBJECT: REVISIONS TO OREGON STATE CLEAN AIR ACT IMPLEMENTATION ACT - DEQ

The continued activities of the Oregon Department of Environmental Quality in the development of control strategies for the maintenance of air quality in Salem and the identification/monitoring of air quality are important elements for maintaining a high quality of life in Salem.

The City of Salem continues to support the Oregon Department of Environmental Quality's efforts in meeting and maintaining air quality in Salem.

Sincerely,

Robert Briscoe Ass't City Mgr./Com. Dev.

RB:mlc

# <u>M E M O R A N D U M</u>



TO: Jim Hockin, Clearinghouse Officer

MID WILLAMETTE VALLEY COUNCIL of GOVERNMENTS

FROM: Dick Knowles, Transportation Coordinator Council of Governments

SUBJECT: Revisions to the Oregon State Clean Air Act Implementation Act

DATE: April 25, 1979

Although I do not feel it is appropriate that COG comment on those sections that do not pertain to the Salem area, COG does support air quality planning and the concept of the SIP revisions.

The SIP should provide the frame work for obtaining Federal Air Quality Standards as rapidly as economically possible.

The Mid Willamette Valley Council of Governments (COG) was responsible for coordinating the development of the transportation related portions of SIP sections 4.4 and 4.5. Although COG was not actively involved in the stationary source controls, we do support those control strategies pertaining to the Salem non-attainment area Sections 5.4 and 5.5 as well.

MEADOWS/cah

Notice of Intent was sent to the following:

Marion County Board of Commissioners Polk County Board of Commissioners Yamhill County Board of Commissioners Ralph Hanley, Salem City Manager Dick Knowles, Transportation, COG John Sewell, COG Community Services Division

# CLEARINGHOUSE REPORT

To be used by all Clearinghouses, Committees, and agencies. Please try to complete and send to addressee within one week.

1.	RE:	Notice of Intent PNRS Identifier #7904 6 780
		Environmental Impact Statement Date Reviewed 5/17/79
	X	Other Implementation Plan (Revised)
2.	PROJECT:	Name Oregon's State Clean Air Act Implementation Plan (Revised)
		Location_Statewide
		Applicant Agency Oregon DEQ
		Contact Marianne Fitzgerald Telephone 229-5353
3.	THIS REPO	RT IS: (Please check one)
1	From	County Clearinghouse
,	To E Post	ast Central Oregon Association of Counties Office Box 339, Pendleton, OR 97801
	X From	East Central Oregon Association of Counties
	To A	pplicant Agency
4.	COMMENTS:	
	( )	Project has no effect in this area and we have no comment.
	( X)	Project has no adverse effect.
	( )	Project has adverse effects. (See explanation below)
·	( )	We require additional information (See below) See below) State of Oregon USPARIMENT OF ENVIRONMENTAL JUALITY SPARIMENT OF ENVIRONMENTAL JUALITY MAY 211979
		AIR QUALITY CONTROL
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5.	SIGNED:	<u>Authorized Agent</u>	Date 5/18/79
	For:	Fast Central Oregon Association of Counties	
		Clearinghouse, Committee, or Agency	
	1	P. O. Box 1207, Pendleton, OR 97801	Phone 276-6732
	·	Address	

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Rev. 2/78



# Department of Environmental Quality

522 SOUTHWEST 5TH AVE. PORTLAND, OREGON

MAILING ADDRESS: P.O. BOX 1760, PORTLAND, OREGON 97207

April 10, 1979

 Charles Polityka Office of the Secretary, Rish & Wildlife. 500 NE Multnomah, Suite 1650 Portland, OR 97232

> Re: Revisions to the Oregon State Clean Air Act Implementation Plan

Gentlemen:

Enclosed is a copy of the background material and proposed regulations for Revisions to the Oregon State Implementation Plan.

The proposed regulations are being submitted to you for a 45-day review process as per the Environmental Protection Agency's proposed rule, 40 CFR Part 51 published in the Federal Register Volume 43, Number 97 on May 18, 1978.

Please forward all comments to:

Marianne E. Fitzgerald Department of Environmental Quality Air Quality Division PO Box 1760 Portland, OR 97207

If you have any questions regarding these regulations, please contact us at 229-5353.

> Sincerely, Marian & Fitzy have

Marianne E. Fitzgerald Air Quality Division



Room 310, Counthouse Telephone 503/672-3311 Ext. 21523/ 2055 E 738 Reports Roseburg, Oregon 97470

# JMPQUA REGIONAL COUNCIL OF GOVERNMENTS

May<sup>.</sup>8, 1979

State of Oregon DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR CUALITY CONTROL

Marianne E. Fitzgerald Department of Environmental Quality Air Quality Division P. O. Box 1760 Portland, OR 97207

> re: A-95 Review, Oregon State Clean Air Implementation Plan PNRS # 7904-6-780

Dear Ms. Fitzgerald:

The above-mentioned plan was reviewed by the Executive Committee of the Umpqua Regional Council of Governments according to OMB Circular A-95 on May 3, 1979. Since the implementation plan strategies are directed to areas outside District 6's concern, there was no comment.

Sincerely, Carolyn Cook

Carolyn Cook, A-95 Coordinator Umpqua Regional Council of Governments

CC:rs

ODUGLAS COUNTY, OREGON DISTRICT

No. 4

cc: State Clearinghouse


## Department of Land Conservation and Development

1175 COURT STREET N.E., SALEM, OREGON 97310 PHONE (503) 378-4926

## MEMORANDUM

May 30, 1979

T0:



AIR QUALITY CONTROL

FROM: Jim Claypool, State Agency Coordinator

Marianne E. Fitzgerald, DEQ

SUBJECT: REVISIONS TO THE OREGON STATE CLEAN AIR ACT IMPLEMENTATION PLAN

We have reviewed pertinent sections of Oregon's State Clean Air Act Implementation Plan and offer the following comments related to Oregon's Land Use Planning Program.

The DEQ has identified in its Program for Coordination with the DLCD that local assistance in the preparation of city and county comprehensive plans is available on request, but on a limited basis because of insufficient staff resources. Nevertheless, we do feel that the Implementation Plan should recognize the agency's responsibility to coordinate where possible with local governments. Section 4.2.3.3, for example, ought to list existing and proposed land uses as a factor considered when determining optimum strategy for county problems. Identifying this factor should recognize the interrelationship between local comprehensive plans and the Implementation Plan, particularly for the Portland area where this coordination includes DEQ, MSD and local governments.

Similarily, the issue of population projections needs coordination attention. Sections 4.4.8.6 and Appendix 4.4-2 contradict each other in this regard, suggesting that population projections are consistent for water quality and 701 planning in one section but not the other. Although we recognize that this Implementation Plan relates to Air Quality, population projections used by jurisdictions in comprehensive planning must be consistent with those outlined in state or other agency plans or programs. This is a coordination responsibility of state agencies whose programs and actions affect land use.

Thank you for this opportunity to comment.

JHC:cf

cc: Kay Wilcox, Intergovernmental Relations Division Bob Jackman, DEQ Claire Puchy, DLCD

## INTERGOVERNMENTAL REVIEW

Copies of the complete State Implementation Plan were sent to the State A-95 Clearinghouse, fourteen areawide clearinghouses, and various federal and state agencies which might be affected by the Plan.

In response to the Department of Land Conservation and Development (DLCD) comment that "Section 4.2.3.3 . . . ought to list existing and proposed land use as a factor considered when determining the optimum strategy for county problems," the Department has amended page 30 of the <u>Carbon Monoxide SIP Revision</u> (Attachment 3) and page 21 of the <u>Ozone SIP Revision</u> by adding "land use impacts" to the list of non-air quality evaluation factors.

In response to DLCD's comment regarding the department's responsibility to coordinate with local governments, it is the Department's opinion that this issue is already adequately addressed in Sections 4.2.3.3, 4.2.8.3, 4.2.8.4, 4.3.7.2 and 4.3.8.4 of the Carbon Monoxide and Ozone Revisions.

A2590:F58

standards in 1982. These measures will be analyzed in subsequent State Implementation Plan revision work in order to determine the most effective means of eliminating the region's ozone problem. A list of the control measures can be found in Table 4.3.3-1. Initial evaluation efforts will be devoted to those measures assigned high priority. If these measures are insufficient, then those measures with a lower priority will be analyzed. The selection of a strategy to eliminate the problem will not be based solely on air quality considerations. Other factors that will be considered in determining an optimum strategy are the following:

- Non-air quality environmental impacts
- . Energy consumption
- . Community impact
- . Financial practicality
- . Economic feasibility
- . Economic impacts
- Travel impacts
- . Political feasibility
- . Institutional feasibility
- . Social, health and welfare considerations
- . Policy implications
- . Land Use Impacts

The analysis to determine a package of control measures that will bring the region into compliance with the ozone standard as expeditiously as possible but not later than December 31, 1987 will be completed by June 30, 1980. A commitment to implement these

- Non-air quality environmental impacts
- . Energy consumption
- . Community impacts
- . Financial practicality
- . Economic feasibility
- Economic impacts
- . Travel impacts
- . Political feasibility
- . Institutional feasibility
- . Social, health and welfare considerations
- Policy implications
- . Land Use Impacts

In the case of the City of Portland, efforts are underway to develop a parking and circulation plan in the affected area. Thus, strategy selection will be performed in cooperation with all affected municipalities in order to eliminate duplication of efforts.

The analysis to determine a package of control measures that eliminate the carbon monoxide problem will be completed by June 30, 1980. A commitment to implement these measures will be a future revision to this State Implementation Plan. This document will be submitted as soon as possible after July, 1980 and no later than July 30, 1982. Statement by Dean McCargar, Environmental Manager, Oregon Steel Mills, representing the Air Quality Committee of Associated Oregon Industries.

Presented at the June 8, 1979 special meeting of the Oregon Environmental Quality Commission.

I would like to offer comments on the most recent changes made to the proposed rules for special permit requirements in non-attainment areas and attainment areas and emission limitations on a plant-site basis. I did previously offer comments on these rules at the public hearing on May 8.

Significant changes have been made in these rules (OAR 340-20-190 through 197) since the May 8 hearing and we in industry question whether the issues involved have been given adequate deliberation. We would like to suggest a continuation of this hearing for a short time, for at least one week, to allow time for adequate public input.

I would like to raise some of these issues for your consideration today. I don't believe any of these points require further changes in the rule today if your discussion can provide clarification of these very vague portions of the rule. These are the issues I see in the rule:

1. Do the existing time limits in the notice of construction rule (OAR 340-20-030) and permit rule apply to this new rule? Timely processing of permits is critical to industry.

2. How will the alternative analysis requirement in 340-20-191(1) be administered? The staff has not even hinted at what will be an acceptable analysis. Will a good faith effort similar to an environmental impact Statement by Dean McCargar, page two

statement be acceptable? Something should be put into the record regarding this issue before the Commission considers adoption of this rule. 3. How will LAER as defined in 340-20-191(2) be determined? It is simplistic to think that this new process will be as easy or as free of controversy and disagreement as the determination of "highest and best practicable control technology has been since 1972. Very little discussion of this concept has occurred.

4.Do you intend that the proposed designations of non-attainment areas in 340-20-191(4) will be permanent, "for all time", or that redesignation will occur at some point? We would suggest that you need a process for evaluating each year's ambient air sampling data (such as the new method for ozone) to determine attainment or non-attainment and still another process, more conservatively based, to eventually redesignate areas when they reach attainment.

5. How will the staff determine potential emissions as defined in 340-20-191(5)? Although in many industrial processes it may be possible to determine this type of emission in other plants "potential" emissions exist only as a figment of bureaucratic imagination. This concept can be used to magnify a miniscule problem (very small actual emissions) to enormous proportions ("potential" emissions before control).

6. How will the staff administer the concept of plant site emission limits as outlined so vaguely in 340-20-196 and 197? The staff is asking you for a Statement by Dean McCargar, page three

very large amount of authority yet that have proposed no detailed program for which they need the rule. The disclaimers in the staff report are not enough. We suggest that if the Commission chooses to adopt this rule today that you also limit the use of the rule until detailed programs are put out for public review and comment. This rule could, for example, be used immediately as the basis for rewriting all permits for particulate emissions. The staff staff will be able to reduce particulate emissions to amy level they choose, with little recourse for the owner or operator who disagrees with their judgement.

7. This raises the question of whether the Commission feels that this regulatory framework could be applied to particulate emissions in the future? If you do, then you should consider inviting testimony on this possibility. The staff, on the other hand, opened the public hearing on May 8 by discouraging such testimony.

Thank you for the opportunity to appear before you today.

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Box 3529 Portland, OR 97208 503/231-5000 TWX:910-464-6151 Offices also in Hong Kong, Manila, Seoul, Singapore, Taipei, Tokyo, Sydney, Chicago, Pasco, Washington D.C.

June 7, 1979

Joe B. Richards, Chairman Grace S. Phinney, Vice Chairman Jacklyn S. Hallock Ronald M. Somers Albert H. Densmore

Environmental Quality Commission P.O. Box 1760 Portland, OR 97207

PROPOSED RULES FOR SPECIAL PERMIT REQUIREMENTS

The Port of Portland requests a two-week continuation by the EQC of the Commission adopting the proposed rules for special permit requirements. This would allow the Port and others impacted by the rule to work further with DEQ in developing the rules to be submitted to the U.S. Environmental Protection Agency.

The rule before you has been revised substantially since the public hearing. A major policy change related to the Plant Site Emission Limits did not occur until last Thursday, May 31. Since then the scheduled June 5 meeting of the Portland AQMA Advisory Committee has been postponed until June 12 at the request of the DEQ staff, eliminating one avenue for review and comment on the rule.

Preliminary review of the proposed rule indicates two specific areas of concern; the plant site specific rule and the basis for rule making.

o Plant Site Emission Limits

The Port of Portland is opposed to the adoption of plantsite emissions limits (proposed OAR 340-20-196) for Portland AQMA at this time. This portion of the rule should be analyzed as part of the strategy to attain air quality standards in Portland. We believe the Department's intent to provide offsets for increased field from Portland industry through this rule is inappropriate. We also believe this is not necessary to meet the U.S. EPA's requirements. Your Portland and Eugene advisory committees recommended against adoption of this rule. Environmental Quality Commission Page 2 June 7, 1979

> We are opposed to the Department requiring offsets from Portland sources for field burning. No attempt has been made to understand the economic impacts and trade-offs associated with taking offsets. before the need to obtain offsets from Portland could even be considered. Our understanding is that DEQ staff will be considering these questions over the coming year and reporting to you in early 1980. It does not seem appropriate to adopt rules for this purpose now.

Over the next year, the Portland AQMA Advisory Committee will also be reviewing in depth control strategies for attainment of standards. The need for a plant site rule should be considered in that context. Thus, we request that the EQC, at a minimum delete sections OAR 340-20-196 to 197 from the rule.

o EPA's Determination of the Need for Rulemaking

We feel the entire package of proposed rules for special permit requirements do not fall under the mandatory provisions of the Clean Air Act because no plan is being submitted for attainment of standards in Portland as part of the current SIP revisions. We urge the EQC further question the U.S. Environmental Protection Agency's (EPA) statement that these rules are mandatory.

We would be willing to support the EQC in requesting further clarification from the EPA Administrator on the requirement for adoption of special permit requirements for Portland at this time.

The EPA previously supported the Department's position that the rules were not required for Portland. The reversal of the EPA's position in early May has meant that these rules are before you without full evaluation of their air quality benefits or economic impacts and without review by your Advisory Committees as part of an overall control strategy. While we have no desire to see a prohibition of new permits or "mandatory no-growth sanctions" for Oregon, we find section 172 of the Clean Air Act, referenced by EPA to be ambiguous on this point. EPA's reversal supports this contention. Environmental Quality Commission Page 3 June 7, 1979

We would request a number of revisions to the proposed rules as identified in Attachment A.

4

\*

Lloyd Anderson Executive Director

Attachment

PL17F-R

## ATTACHMENT A

Specific comments on proposed rules for special permit requirements

- We agree with the staff revisions to eliminate all references to particulates, nitrous oxides and sulfur dioxide from the rule.
- Section 340-20-191 and 340-20-194 define "Major New or Modified Source" differently. We would suggest that the two definitions be made identical and that Section 340-20-195 be revised to reflect the cut-off point of fifty-tons per year allowable emissions.
- o The definition of "non-attainment area" in Section 340-20-191 should be revised to indicate a need for updating of the maps in 1982 and 1987 which are the dates for attainment of standards in the Clean Air Act.
- o The rule uses but does not define the term "allowable emissions." This should be defined or alternatively the phrase "allowed under an existing permit or would be allowed under a proposed permit" be used.
- o The term "actual emissions" in the rule should be defined. A map entitled "Actual Ozone Non-Attainment Area in the Portland AQMA in 1977." The boundaries are the same as the Portland-Vancouver Air Quality Maintenance Area. We recognize that this has been designated as the non-attainment area but available data shows that ozone standards are actually violated in only a portion of the AQMA.

PL17F-R